Journal of Economics and Business

The online version of this article can be found at:
https://www.asianinstituteofresearch.org/

The Asian Institute of Research *Journal of Economics and Business* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Economics and Business, which includes, but not limited to, Business Economics (Micro and Macro), Finance, Management, Marketing, Business Law, Entrepreneurship, Behavioral and Health Economics, Government Taxation and Regulations, Financial Markets, International Economics, Investment, and Economic Development. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Journal of Economics and Business* aims to facilitate scholarly work on recent theoretical and practical aspects of Economics and Business.

Study on the Influence of Error Management Culture on Star Hotel Employee Turnover Intention – Taking Food and Beverage Department Employee for Example*

Hengfa Zhang[1], Peng Li[2], Yiqing Lv[3]

[1] Shenzhen Tourism College of Jinan University, Shenzhen, China
[2] Shenzhen Tourism College of Jinan University, Shenzhen, China
[3] Shenzhen Tourism College of Jinan University, Shenzhen, China

Corresponding Author: Yiqing Lv, Shenzen Tourism College of Jinan University, Shenzhen, China. Email: lv_yq@sz.jnu.edu.cn

Abstract

Taking error management theory as the entry point, the paper probes into the determinants of star hotel employee turnover intention through the study on the correlation among star hotel organization error management culture, employee job satisfaction and turnover intention. The mediating effects of employee job satisfaction on error management culture and turnover intention verify the influence of corporate management culture on employee job-hunting intention. The empirical results show that there exists a positive correlation between error management culture and employee job satisfaction. Employee job intention would reduce individual turnover intention, and job satisfaction exerts certain mediating effects in this process; positive error management culture as an important variable could effectively manage employee turnover intention. Companies should realize the importance of building a system which could give timely response and communication to any erroneous actions of employees in accordance with error management theory and prevent the re-occurrence of the same error by sharing experience and knowledge so as to incorporate "erroneous system management" into corporate culture as an indispensable component.

Keywords: Error Management Culture, Job satisfaction, Turnover Intention, Hotel Employee, Star Hotel

1. Introduction

Along with the advent of consumption individualization era, primitive star hotel hardware facilities could no longer satisfy the increasingly mature consumption demands. Nowadays, competition among star hotels mainly focuses on centralized in the soft power under identical hardware conditions. On account of an identical hardware level, one of the important indicators for consumers to choose hotels is service quality. High-quality

service is able to improve consumers' satisfaction and loyalty, thereby attracting new consumers, retaining old consumers and ensuring the stable development of the hotel. As a result, hotel pertains to the service industry and employee constitutes one of the foremost competitive forces, the competition among hotels is the competition of employee quality in nature.

For seeking sustained development, the hotel must build an excellent and stable employees team. Extraordinary corporate management culture could more highlight corporate core competitiveness and create more powerful market competitive advantages and higher market shares for companies. However, human resources in the Chinese hotel industry confront not only external short supply crisis, but also internal management problems such as low job satisfaction, high employee turnover rate and low corporate organization efficiency. Employee turnover will result in the instability of hotel service quality and even consumer loss, which in turn weakens the competitiveness of the hotel. As indicated by the investigation results of American Marriott Hotel, if employee turnover rate reduces by 10%, the corresponding consumer loss rate will reduce by 1%-3%, and business turnover will increase by 5%-15%. Under such circumstances, sparing expenses nearly exceed gross profits and hotel service quality also obtains assurance. Whereas, most hotel companies in China ignore the influence of corporate culture on operation and management and overlook personnel management fundamentally. This is the reason why employee turnover rate in the hotel industry always remains at a high level.

Employee turnover intention is subject to multiple factors. Most scholars consider that the variable of job satisfaction would produce a negative influence on employee turnover intention and they tend to view organization efficiency as the second foremost influential factor in job satisfaction. However, organization efficiency is actually up to corporate managers' management and culture. Scholars also fully agree with the connection between management culture and turnover intention. In recent years, the research topic on management scope has aroused more and more attention from numerous scholars, in particular, error management culture. The hotel industry is the representative of the service industry, and hotel service reflects more personalized demands. Therefore, it is extremely difficult to proceed systematic quantitative control of this research topic. Error management is an important means to ensure quality control and improve service quality (Guchait, 2012). In the hotel industry, production and consumption take place concurrently. The inevitable occurrence of errors during the service process emphasizes the necessity to conduct error management culture study on the hotel industry. Hotel industry quality control provides effective referential standards and improves employee work attitudes. As pointed out by Dyck et al. (2005), error management culture not only helped the company obtain positive employee response (such as higher productivity, more complete service and stronger adaptability) and consolidate employment relationship but also created certain culture and environment which could give timely early warning and take actions for errors. Guchait et al. (2014) held the opinion that in the service environment, error management culture was able to shape more effective error response-ability. Under error management culture atmosphere, the support from managers and colleagues reassured the mindset of employees and allowed the company to more efficiently deal with accidents and quickly recover service quality even in case of any errors.

Therefore, this paper takes error management culture as the entry point and lists star hotels in Shenzhen City as the research object to discuss the correlation among corporate error management culture, employee job satisfaction and turnover intention and provides a new research orientation and perspective for high-end hotel human resource management.

2. Literature Review

2.1 Error Management Culture

2.1.1 Concept of Error Management Culture
In 1994, Klein proposed that error management culture would be more efficient at the organization layer than the individual layer. Van Dyck et al (2005) defined error management culture as a kind of culture where organization members mutually communicated, shared and corrected errors and then analyzed and processed

errors with formal organization procedures and practice. Xie Yangqun started from the perspective of erroneous information to explore error management culture and considered error management culture indicative of organization attitudes towards work as one of the key components in organization culture. Organizations could efficiently prevent the re-occurrence of errors as long as they encouraged error report actions institutionally. As pointed out by Bakker et al (2004), error management culture provided "work support" for organization members so that organization members were able to freely consult or help each other. On the contrary, under the management environment against errors, errors were taken as negative examples that should be avoided and prohibited from sharing. According to their opinions, once employees acutely perceived organization support, they were unlikely to leave office because they believed that the organization authentically cared about their welfare. The research showed that error management culture often brought about work incentive and psychological security to organization members. As a special form of error culture, error management culture contributed to the improvement of organization performance and organization security. The low flow of employee on this basis made for the long-run development of organizations.

The error management culture has two distinctive characteristics based on previous studies: (1)Mitigating aftermath by controlling errors; (2) Learning from errors. In error management culture, negative effects of errors could be decreased by controlling the aftermath and organizations could augment the positive effects of errors by learning, boosting initiative and drawing experience to enact more sound error response strategies. As a result, prominent control and learning characteristics in error management culture enable errors to be efficiently processed and coordinated and in the meantime make higher product quality and service quality possible (Van Dyck, 2005).

As mentioned above, it is the best way to share rules, experience, values and practice strategies inside an organization by incorporating error management into organization culture. Error management culture refers to the sum of a series of behavioral activities and attitudes in which the organization manager aims to make full use of positive error utility and internal adjustment to lower the negative influence of errors. Under error management culture, resources including error communication, error analysis, error learning, and error ability (effective error handling strategy) help employees boost work performance, efficiently handle problems, and give necessary help to organization members if required.

2.1.2 Dimension and Measurement of Error Management Culture
In 2000, VanDyck classified the dimension of error management culture for the first time and grouped the basic contents of error management culture into four dimensions to fabricate an error management culture scale. In particular, the dimension of error mastery, error communication, and error risk-taking belonged to positive error management culture, while the dimension of error antipathy belonged to negative error management culture. In 2005, VanDyck further refined the measurement scale based on previous research findings to design the new error management culture scale, including 17 items in the dimension of error learning, error ability, error thinking, and error communication. Especially, error learning was the method by which organization members summarized experience and lessons and actively learned problem-solving measures from errors; error ability was the ability of organization members to actively undertake risks and dispose of errors; error thinking was the measure taken by organization members to actively analyze the causes of errors and reflect over possible solutions; error communication was about whether organization members could have open communication and exchange existing errors and find the most effective problem-solving way via sharing and communication. This scale used for measuring the positive error management culture inside the organization had been universally acknowledged and widely applied by the academic community.

In combination with the research orientation of the paper, compilation of error management culture scale should refer to the error management culture theory supplemented by VanDyck in 2005 and the adapted scale concurrently so as to give a more efficient and comprehensive assessment on employees' attitudes towards the error management culture shaped by organization work environment.

2.2 Job Satisfaction

2.2.1 Concept of Job Satisfaction

Job satisfaction refers to employees' virtuous feelings and psychological state about their work and relevant matters (work environment, state, manner, pressures, challenges, interpersonal relationship, etc.) in the organization. Job satisfaction plays a vital role in organization management behaviors because of its impacts on member value judgment and psychological health. Additionally, employees who have higher job satisfaction also leave positive impacts on surrounding colleagues and work atmosphere (Dawal, 2006). The concept of "job satisfaction" was coined by Hoppock in his masterpiece *Job Satisfaction* issued in 1935 which defined job satisfaction as employees' subjective perception and reaction towards environment factors in psychology and physiology. Under the strenuous exploration, study and analysis made by numerous scholars for job satisfaction, definitions of job satisfaction could be generally classified into three categories although no consensus has been derived yet - namely, comprehensive definition, expected gap definition and expected gap definition (Xu Shijun, 1997). (1) The alleged job satisfaction gap definition means employees' total and general attitudes towards work and work environment. This definition views job satisfaction as a single concept, excluding any consideration about the dimension, formation causes and process of job satisfaction. (2) Job satisfaction expected gap definition reveals the gap between employees' perceived personal rewards and due rewards. In reality, it is the gap between "the acquired" and "the expected." When the perceived gap narrows, employees would have higher job satisfaction and vice versa. Expected gap definition is also known as "need deficiency definition." (3) The job satisfaction reference framework definition is the result obtained by employees after explaining the properties of work as per specific reference framework, and also the perception of employees towards every aspect and level of work.

2.2.2 Dimension and Measurement of Job Satisfaction

The dimension of job satisfaction is actually the influential factor of job satisfaction. In earlier research stage, the research of Hoppock et al. on the influential factors of job satisfaction mostly started from the material level. Together with the progress of the society, people start to concentrate on different things, and scholars start to consider the psychology and spirits of employees. Locke (1969) presented that the dimension of job satisfaction could be grouped to work-related factors and actor-related factors. In particular, the former included work, work rewards, work environment, and the latter included actor, internal and external organization members. The study on job satisfaction in China began in the 80s and then developed in combination with overseas research findings and practical conditions of Chinese companies. Yuan Shengli (2002) carried out a classified study on the influential factors of job satisfaction from the perspective of the individual. Work and companies were covering individual factors, including age and years of working, while work factors included work post, employee work, and learning opportunity, work challenges, colleague relation, leadership style, etc. Liu Yun (2005) conducted the research on job satisfaction from the perspective of work returns (salary welfare, promotion training, individual growth, work conditions) and psychological comfort (leadership management ability, interpersonal relation, work challenge). Kuang Jiaqing (2014) theoretically defines the job satisfaction of hotel employees and constructs a hotel employee satisfaction evaluation model based on the concept of employee satisfaction. It is evaluated in five aspects: job content satisfaction, job environment satisfaction, job return satisfaction, management status satisfaction, and career development satisfaction. Tang Jianxiong et al. (2013) studied the influence of leadership social responsibility orientation on hotel employee satisfaction. JDI (Job Description Index) was used to simplify the scale. Empirical research was conducted to measure employee satisfaction. Empirical research showed that the most important factors affecting employee satisfaction were job reward and employee social responsibility to leaders. Perceived orientation, working environment, and working relationship. Wang Xing et al. (2017) based on the moderating effect of inter-generational differences, made an empirical study on Hotel employees' job values and job satisfaction. The study shows that inter-generational differences have moderating effects on job engagement and job satisfaction. In summary, the paper will refer to Yuan Shengli's empirical theory in job satisfaction dimension measurement. While designing the questionnaire in accordance with the influential factors of job satisfaction, the paper emphasizes the influence of leadership level, learning opportunity and colleague relation on hotel employee job satisfaction.

2.3 Employee Turnover Intention

2.3.1 Concept of Turnover Intention

Overseas economists and business scholars already cast their eyes to the study on turnover intention. Hulin and Miller (1979) expressed that turnover intention was turnover thought and job-hunting attitude or general presentation, and an important variable used to predict turnover behaviors. Brown and Peterson (1993) mentioned in their research report that turnover intention was a key factor useful in the prediction of employees' variation actions and in general, it was defined as the behavioral indicator of employees' actual turnover intention. Tett and Meyer (1993) regarded turnover intention as the "purposeful intention to leave the organization." Mobley (1997) defined turnover intention as the intention for employees to leave the organization upon thoughtful considerations after working for a certain period. In other words, the turnover intention could best predict the possibility of turnover behavior since it was in the last stage when employees really planned to resign the office and sought another job. In summary, this research will refer to the argument of Mobley (1997) to give a definition for turnover intention.

2.3.2 Model and Measurement of Turnover Intention

How to measure turnover has always been the core question in turnover research. With the deepening of relevant discussion and study on turnover intention, scholars and scientific institutions across different countries successively develop multiple turnover intention models. The model developed by Mobley (1997) brings forward the sequence problem of mediating variables concerning job satisfaction and turnover for the first time, finding that employees' satisfaction or dissatisfaction about work assessment results would produce an influence on their turnover intention. The model summarizes that the three main influential factors of employee turnover intention are job satisfaction, work expectation, and appeal of other possible job opportunities. On account of previous models, Price and Mueller (1981) started from multiple perspectives (psychology and economics) to observe the influential factors of turnover intention. In line with the research needs of the paper, turnover intention measurement and model citation will consult the research scale of Mobley (1997) which contains the alteration of employees' impressions on the company, generation of turnover intention, job-hunting behaviors, the possibility of finding a new job and other variable factors.

2.4 Relation Model of Error Management Culture, Job Satisfaction, and Turnover Intention

2.4.1 Relation between Error Management Culture and Job Satisfaction

As it is, rare studies pay attention to the correlation between error management culture and employee job satisfaction. Lee (2011) clearly showed the significant role of error management culture in the improvement of employee job satisfaction and social integration. Hartnell et al. (2011) proved in the empirical research that when organization culture provided a supportive environment for employees (such as higher participation degree, sharing degree and communication degree), employees' attitudes (satisfaction and integration degree) would be positively affected. Lee (2011) added that the organization might reinforce employee job satisfaction by systematically managing culture and disposing errors and beyond this point, faster error response speed would result in higher job satisfaction. Guchait et al. (2016) observed the close intimacy between error management culture values and job satisfaction. In comparison, those employees who had higher job satisfaction would have stronger ability to dispose things and recover services in case of any errors. O'Reilly Chatman and Caldwell (1991) insisted that organization stability had a close connection with values and error handling means. Likewise, another research also demonstrated the positive influence of stability on employee job satisfaction and accordingly verified the major relation between error management and job satisfaction (Nasab & Shahrakipour, 2015). To sum up, as per previous research and theoretical evidence, the research assumes that error management culture will produce a positive influence on employee job satisfaction.

2.4.2 Relation between Job Satisfaction and Turnover Intention

Based on the "attitude-intention-behavior" model raised by scholar Fishbein and Ajzen (1975), job satisfaction possibly affects employee turnover intention and behaviors. In 2001, Lambert et al. clarified in empirical research on job satisfaction and turnover intention that the influence of job satisfaction on turnover intention was

natural and job satisfaction was a decisive antecedent in job turnover intention. Chen (2006) put forward that the connection between job satisfaction and employee turnover intention was much closer than that between job satisfaction and employee detention intention. Singh and Loncar (2010) perceived that the two influential variables of employee job satisfaction and salary satisfaction, the former obviously exerted more influence on turnover intention. Tnay (2013) stated in the report that job dissatisfaction was the main cause of employee turnover behavior. Javed (2014) noticed that when employees felt satisfied with their own work, their turnover rate would decrease and additionally, employee job satisfaction generated more influence on turnover rate than work performance. While Saeed et al. (2014) suggested in empirical research that employee job satisfaction had a greater influence on turnover intention than work participation, work performance and change of unit. They stressed that employee job satisfaction would produce a maximum influence on work transfer decisions. In conclusion, the connection between job satisfaction and turnover intention is very intimate. To be more specific, relatively higher job satisfaction would give rise to relatively lower turnover intention, and relatively lower job satisfaction would give rise to a relatively higher turnover intention.

2.4.3 Job Satisfaction as a Mediating Variable in Error Management Culture and Turnover Intention

Since there still lacks any direct study on error management culture and employee turnover intention, this research aims to verify the negative influence of error management culture on employee turnover intention under the mediating effects of job satisfaction. Egan et al. (2004)listed the similarities between organization learning culture and error management culture because they sought continuous improvement means of the organization through the regulation of job satisfaction in turnover intention. Aarons and Sawitzky (2006) alluded in the report that the influence of constructive and participatory management culture on employee turnover intention was totally mediated by work attitude (satisfaction, participation), which implied that employees might decrease their job satisfaction and even make job transfer or turnover decisions because of improper organization culture. Park and Kim (2009) ascribed the influence of organization culture on turnover intention to job satisfaction. Biswas(2010) found the mediating role of job satisfaction, concluding that organization culture generated a negative influence on turnover intention through manipulating job satisfaction. Maclntosh and Doherty (2010)[29] also proved the finding in their research. They thought that the influence of organizational culture on employee turnover intention was completely regulated by job satisfaction and although organization culture did not directly result in a job transfer, it still affected employee turnover intention by affecting employees' job satisfaction. Moreover, as announced by Lobburi (2012) organization support or culture dimension related to job satisfaction (such as justice of rewards, access to the decision-making process, possibility to obtain support and help) would produce an influence on employee turnover intention. Emerson (2013) claimed that the care and respect for employee culture would not directly affect employee turnover intention, but indeed exerted indirect influence via job satisfaction. He emphasized that job satisfaction played complete mediating effects between organization culture and employee mobility intention. Goi (2013) agreed with the mediating effects of job satisfaction, revealing that job satisfaction varied with organization management culture and accordingly affected employee turnover intention. Pattanayak (2014) believed that employees never made turnover decisions because of organizational culture or organization atmosphere, but the two factors indeed lowered employee job satisfaction and triggered turnover intention. In another word, job satisfaction had complete mediating effects on turnover intention while job satisfaction as the mediator tended to reinforce the positive relation, such as the relation between error management culture and low turnover propensity. Accordingly, this research concludes that error management culture indirectly affects turnover intention by virtue of job satisfaction but does not exert any direct influence on it.

3. Research Method

3.1 Variable Setting

（1）Error Management Culture

Error management culture refers to the sum of a series of behavioral activities and attitudes in which the hotel organization manager aims to make full use of positive error utility and internal adjustment to lower the negative influence of errors. Positive error management culture is characterized by two features: (1) reducing aftermath

by controlling errors; (2) learning from errors. Error management culture in this paper consists of error learning, error ability, error thinking, and error communication.

（2）Job Satisfaction

Job satisfaction refers to hotel employees' perception and response to their work and other aspects and levels related to work. This definition refers to the reference framework definition given by Smith et al. (1969). Job satisfaction is defined as a single dimension in this paper. In accordance with the job satisfaction scale proposed by Spector (1985), the paper altogether selects six relevant measurement items in combination with the research subject to have deep insights into hotel employee job satisfaction from leadership, learning opportunity, colleague relation, etc.

（3）Employee Turnover Intention

Turnover intention refers to the intention for employees to leave the hotel organization upon thoughtful considerations after working for a certain period. This definition cites the opinion and measurement model of Mobley (1997). The turnover intention in the paper is a single dimension too.

3.2 Research Hypotheses

This paper primarily investigates the influence of hotel error management culture on employee turnover intention and discusses the utility of job satisfaction in error management culture and turnover intention. Pursuant to numerous scholars' explanation for relevant theories, the paper puts forward the following hypotheses regarding the correlation among error management culture dimension, job satisfaction, and turnover intention and research subject based on previous research results.

H1: Error management culture has a positive correlation with job satisfaction.
H1a: Error learning has a positive correlation with job satisfaction.
H1b: Error thinking has a positive correlation with job satisfaction.
H1c: Error ability has a positive correlation with job satisfaction.
H1d: Error communication has a positive correlation with job satisfaction.

H2: Job satisfaction has a correlation with turnover intention.
H3: Job satisfaction totally mediates the relation between error management culture and turnover intention.

3.3 Theoretical Model Construction

In line with the relation study and theoretical hypotheses concerning the three factors, the paper follows "environment-perception-behavior" logic thread to construct the theoretical model of the research in view of the influence of hotel error management culture (environment) on employee job satisfaction (perception) and employee turnover intention (behavior).
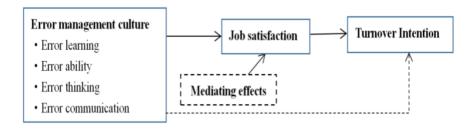
Fig.3-1 Theoretical Model Construction

3.4 Scale Design and Data Collection

（1）**Questionnaire**

The questionnaire is the prime data collection method employed in the empirical analysis of this research. This research scale is made up of four parts, namely demographics, error management culture, job satisfaction, and post. The first part questionnaire demographics scale includes five demographic problems - age, gender, education, years of working and post. The second part error management culture scale consults the scale adapted by VanDyck (2005) and the research method adopted by Cigularov (2010) to merely select positive management scale. Therefore, error management culture in this paper actually indicates positive (active) error management culture which covers 16 measurement questions in the dimension of error learning, error ability, error thinking, and error communication. Nowadays, this scale has been widely applied in the academic research field and proved to possess favorable reliability and validity. Lickert five-point scale is used for scoring, in which five points (very agree) - 1 point (very disagree) respectively manifest hotel employees' perception about the influence of error management culture and higher points mean higher perception. The third part job satisfaction scale adheres to the job satisfaction scale proposed by Spector (1985) and makes adjustment and compilation as per real conditions in the hotel. Six items in the seven dimensions will be illustrated to measure job satisfaction. The corresponding scoring also follows Lickert five-point scale from five points (very agree) to 1 point (very disagree), in which higher points mean higher job satisfaction degree. The fourth part employee turnover intention scale consults the influential factors developed by Cammann (1982) et al. to measure employee turnover intention. The corresponding scoring also follows Lickert five-point scale from five points (very agree) to 1 point (very disagree), in which higher points mean higher employee turnover intention.

（2）**Data Collection**

The paper initiated online and comprehensive offline survey on employees from the Food and Beverage Department of Shenzhen high star hotels (three five-star hotels and two four-star hotels) as of December 2017. Based on previous research results, the author increases and decreases corresponding measurement items as per the research subject and research orientation of the paper. Additionally, the author discerns and corrects ambiguous expressions. Throughout the communication with the principals of human resources in the five hotels, the author explains research contents and cooperation intention so as to ensure the success of follow-up online (phone questionnaire) and offline (questionnaire envelope) survey. Since the questionnaire involves the sensitive topic about turnover, employees fill in the questionnaire anonymously. The author altogether distributed 160 questionnaires on March 2018 and recollected offline questionnaires one week later. After screening and removing invalid questionnaires from altogether 123 collected questionnaires, there were 109 valid questionnaires.

4. The Analysis of Results

4.1 Statistical Description of Questionnaire

4.1.1 Questionnaire Data Distribution

Demographics variables involved in the investigation include gender, age, diploma, years of working and post in the Food and Beverage Department. Table 4-1 lists the distribution characteristics.

Table 4-1 Sample Individual Attribute Distribution

demographics variable		number of sample	proportion（%）
gender	male	51	46.8
	female	58	53.2

age	25 and below	51	46.8
	25-30	36	33.0
	31-40	19	17.4
	41 and above	3	2.8
diploma	senior high school, technical secondary school and below	33	30.3
	Junior college	35	32.1
	undergraduate	37	33.9
	undergraduate and above	4	3.7
years of working	1year and below	29	26.6
	1-2 year(s)	30	27.5
	2-3 years	26	23.9
	3years and above	24	22.0
post (Food and Beverage Department)	a front-line employee of the hotel（FOH）	61	56.0
	back-line employee of the hotel（BOH）	48	44.0

4.1.2 Test of Scale Reliability and Validity

Reliability of all measurement indicators is analyzed with Cronbach internal consistency coefficient (α coefficient). On the suggestions of Nunnally, indicators with low Cronbach's α reliability below 0.7 should not be used. The α coefficient of this research scale as 0.751 proves the high consistency and reliability of the scale. The α coefficient of error management, job satisfaction, and turnover intention respectively as 0.860, 0.920 and 0.920 above 0.7 prove the high reliability of the research. Likewise, the KMO value of all measurement indicators in error management scale as 0.827 above 0.7 also prove the high correlation among all variables in the measurement dimension. In addition, Barlett test of sphericity X2 statistics significance probability as 0.000 below 0.01 refuses the spherical hypopaper, which also proves that the correlation among variables is suitable for factor analysis.

4.2 Statistical Analysis

Descriptive statistical analysis on all measurement items of the scale derives the maximum, minimum, mean and standard deviation of each item. As shown in the following table 4-2, interviewees' opinion about all indicators in error management does not vary a lot. In particular, the item of error communication has maximum approval degree while the item of error ability has relatively low approval degree. In terms of job satisfaction, the mean of approval is 3.74, which suggests that interviewees basically feel satisfied with present work performance. The mean of turnover intention as 2.67 below the average mean 3 signals that most interviewees now do not have intense turnover intention.

Table 4-2. Descriptive Statistical Analysis

	N	minimum	maximum	mean	standard deviation
error learning	109	2.00	5.00	4.07	.574
error thinking	109	2.20	5.00	4.07	.570
error ability	109	2.33	5.00	3.99	.692
error communication	109	2.50	5.00	4.16	.564
error management	109	2.79	5.00	4.07	.434

job satisfaction	109	1.33	5.00	3.74	.713
turnover intention	109	1.00	5.00	2.67	1.015

4.2.1 Correlation Analysis

The paper conducts a correlation analysis on error management, job satisfaction, and turnover intention and presents the significance of Pearson correlation and two-tailed test in Table 4-3.

Table 4-3 Correlation Test on Error Management Culture, Job Satisfaction and Turnover Intention

		error management	job satisfaction	turnover intention
error management	Pearson correlation	1	.629**	-.555**
	Significance(two-tailed)		.000	.000
	N	109	109	109
job satisfaction	Pearson correlation	.629**	1	-.607**
	Significance(two-tailed)	.000		.000
	N	109	109	109
turnover intention	Pearson correlation	-.555**	-.607**	1
	Significance(two-tailed)	.000	.000	
	N	109	109	109

**. Significant at 0.1 level (two-tailed)

As shown in the above table, the correlation between error management and job satisfaction is 0.629, and corresponding significance is above 0.01, which suggests the significant positive correlation between them. While the correlation coefficient between error management and turnover intention as -0.555 below 0.01 suggests the significant negative correlation between them. Similarly, the correlation between job satisfaction and turnover intention as -0.607 below 0.01 also suggests the significant negative correlation between them.

4.2.2 Regression Analysis

On the basis of correlation analysis results, the paper further explores the influence of error management on turnover intention by the correlation analysis and examines whether job satisfaction has any mediating effects on error management and turnover intention.

The regression analysis takes job satisfaction as the dependent variable and error management as the independent variable. Table 4-4 presents the regression results. Adjusted R square of the equation is 0.390, and corresponding P value is below 0.01, which suggests the statistical significance of the established regression model. In the regression equation (P<0.01), independent variable error management standard regression coefficient is 0.629, which suggests the significant positive influence of error management on job satisfaction. In brief, the higher error management degree indicates higher employee job satisfaction.

Table 4-4 Regression Analysis of Job Satisfaction

model	nonstandard coefficient		standard coefficient	t	Sig.
	B	standard error	trial version		
1 (constant)	-.462	.505		-.914	.363
error management	1.032	.123	.629	8.365	.000

R =0.629 adjusted R square=0.390 P=0.000

473

The test results of mediating effects are as shown in Table 4-4. In regression model 1, adjusted R square is 0.301 and P=0.000, which proves the statistical meaning of established regression model. In the equation, error management standard regression coefficient is -0.555. This implies that higher error management degree results in lower employee turnover intention.

In regression model 2, adjusted R square is 0.407 and P=0.000. In the regression equation, the standard regression coefficient of error management and job satisfaction (P<0.01) is respectively -0.287 and -0.427. Thus it can be seen that the standard regression coefficient of error management in model 1 is far above that in model 2, which reflects the partial mediating effects of job satisfaction on the influence of error management on employee turnover intention. In another word, error management affects turnover intention by affecting employee job satisfaction. For this reason, hotels need to improve error management culture and employee job satisfaction so as to lower employee turnover intention.

Table 4-4 Test on Job Satisfaction Mediating Effects

model		nonstandard coefficient		standard coefficient	t	Sig.
		B	standard error	trial version		
1	(constant)	7.952	.770		10.329	.000
	error management	-1.297	.188	-.555	-6.900	.000
2	(constant)	7.671	.712		10.773	.000
	error management	-.670	.223	-.287	-3.008	.003
	job satisfaction	-.608	.136	-.427	-4.477	.000

R=0.555 adjusted R square=0.301 P=0.000
R=0.647 adjusted R square =0.407 P=0.000

5. Discussion and Policy Suggestions

5.1 Research Results

This research aims to explore how should corporate managers utilize the error instrument to improve service quality and management level. In consequence, taking the "influence of error management culture on star hotel employee turnover intention" as the research topic and employees in star hotel Food and Beverage Department as the research object, the research comes up with theoretical model and key research hypotheses based on previous relevant studies and sets forth the correlation among error management culture, job satisfaction and turnover intention, including the influence of error management culture and all dimensions on employee job satisfaction, the influence of employee job satisfaction on turnover intention, as well as the mediating role of employee job satisfaction on error management culture dimensions and employee turnover intention. Following conclusions are drawn from above empirical analysis and research.

(1) Error management culture has a positive influence on employee job satisfaction
Research hypopaper and empirical analysis results conform to the findings derived by Lee (2011) and Frese (2015) in a study about the influence of error management culture on job satisfaction. Error learning, error thinking, error ability, and error communication all have a positive influence on employee job satisfaction, namely positive error management culture has a positive correlation with job satisfaction. Positive error

management culture could be taken as a measurement means which achieves ideal results through regulating employee job satisfaction.

（2）Job satisfaction has a negative influence on employee turnover intention

In earlier empirical research and research report, Mbah and Ikemefuna et al. (2012) already made clear the great influence of job satisfaction on turnover rate and employee job satisfaction would lower turnover intention. Empirical analysis of this research also manifests the negative correlation between job satisfaction and employee turnover intention. Employees who have higher job satisfaction tend to have the lower turnover intention and vice versa.

（3）Error management culture has an indirect influence on employee turnover intention

One major finding of the research is the mediating effects of job satisfaction on error management culture and turnover intention. As demonstrated by the research results, although error management culture is a factor which could improve job satisfaction, it does not have any direct influence on turnover intention. However, if hotel organizations adopt error management culture to create higher job satisfaction, employee turnover intention would be lowered, and hotel employees would never generate turnover intention because of organization error management culture. However, the turnover intention would produce corresponding negative influence once employee job satisfaction is affected. From this point of view, hotel industry managers ought to realize the contribution of error management culture to the reduction of employee turnover intention as an important institutional factor in improving job satisfaction. Positive (active) error management culture might be a major variable that is able to effectively manage replacement intention (one of the employees' representative negative behaviors). Although many previous studies have discussed and tested the application and influence of error management culture, rare of them start from the perspective of employee work attitudes to determine reliable variables concerning employee loss reduction. Considering the importance of human resource as a major component of hotel service, this research presents a new concept that influences employee work attitudes. As found by the research, hotels are supposed to constantly improve their culture management culture so as to enhance employee job satisfaction and lower employee turnover intention.

5.2 Management Suggestions

（1）To face up to the naturalness of errors and create favorable error management culture

Organizations should make it clear that errors could not be completely prevented or avoided and acutely realize and envisage the importance of this problem in hotel industry management. In order to effectively implement hotel error management, the first thing is to review the organization culture perspective. Human service is the main source of market competition, while the hotel is also the industry that takes service as the core competitiveness. Because hotel employees confront different consumer groups and different consumption demands every day, they must provide humanistic and invisible personal service. At the same time, because of their high autonomy at work, employees have a high possibility to make errors. When there are errors in the work environment, many organizations fail to timely offer any effective guidelines. Consequently, the way to overcome such limitation is to integrate error management into organization culture and it is essential for employees to treat errors as a natural phenomenon and for managers to tolerate errors with open attitudes. Admittedly, it does not mean that such error-tolerance environment should blindly ignore and indulge overall procedural errors. Instead, it needs to rationally deal with the errors unconsciously made by employees so that they are capable of trying to correct errors and quickly learn in such environment and perceive organization support and tolerance, therefore indirectly altering employee turnover intention.

（2）To establish a top-down error management system and cultivate error response ability

Rochlin (1999) clearly stated that the establishment of error management organization culture requested the action of a team with high cultural homogeneity degree. Hence, the hotel industry made up of teams more easily introduces error management into organization culture owing to its unique responsibility structure. In the long run, it is necessary to found a system where employees could obtain timely response and communication when they make errors. By sharing experience and knowledge, they can prevent the re-occurrence of the same error

and learn to seek solutions and countermeasures. It is noteworthy that the top-down error management system first requires the manager to learn the importance of constructing a favorable error management atmosphere, then makes improvement and restructuring on defective hotel organization structure to better propel the operation of error management system with advantageous responsibility structure, and finally establishes a sound error communication, exchange and transmission platform to ensure the accurate, fast delivery and solution of erroneous information in the organization and generate positive influence on organization innovation and development.

（3）To fully utilize positive error management culture and boost competitiveness

Although there is no direct causality between error management culture and turnover intention, the indirect influence regulated by job satisfaction indeed exists. Up to now, available studies on error management culture remain at the organization level. Whereas, even under the same organization culture, individual employees also have diverse opinions. The importance of employee opinions about organization error management culture is rather self-evident. This research confirms that error management culture could be viewed as a kind of organizational culture which helps shape common rules and values inside the organization and further affects employee job satisfaction and turnover intention. Nowadays, the competition in the hotel industry is actually the competition of talent. Hotels with service-core competitiveness could only preserve advantages and reinforce competitiveness by constantly seeking human resource support. Therefore, hotel managers should keenly realize the role of error management culture in hotels.

Reference

Wang Wenjun, Chen Xuezhi & Liu Wei. *Chinese Restaurant Operation and Management - Problems and Countermeasures* [M]. Beijing: China Travel & Tourism Press, 1997:28-29.

Guchait P, Kim GK, Namasivayam K, Error management at different organizational levels: frontline, manager, and company [J].Intl J Hosp Manag 2012,31(1):12–22.

Dyck C, Frese M, Baer M, Sonnentag S, Organizational effort management culture and its impact on performance a two-study replication[J]. Appl Psychol ,2005,90(6):1228–1240.

Guchait P, Pasamehmetoglu A, Dawson M, Perceived supervisor and co-worker support for management: impact on perceived psychological safety and service recovery performance[J]. Intl J Hosp Manag, 2014,41 (1):28–37.

Klein KJ. Dansereau F. Hall RJ. Levels issues in theory development, data collection, and analysis[J]. Acad Manag Rev, 1994, 19:195-229.

Xie Yangqun, Li Yang. Research on Some Problems of Error Information[J]. Library and Information Service, 2014: 17-23.

Dawal SZ, Taha Z, The effect of job and environmental factors on job satisfaction in automotive industries[J]. Intl J Occup Saf Ergon, 2006,12(3):267–280

Xu Shijun. *Job Satisfaction, Personal Traits and Organization Climate* [J]. Journal of Taipei University of Political Science, 1997,35:37-59.

Locke EA, What is job satisfaction? [N].OB Hum Perform, 1969,4:309–336

Liuyun. The Economic analysis of Employee Satisfactions and "Jumping"[J]. Auditing and Finance, 2005,2:33-35.

Kuang Jiaqing. Construction and evaluation of hotel staff's job satisfaction conseptual model[J]. Research on Financial and Economic Issues.2014，Vol 5. 231-234.

Tang Jianxiong, Tu Xin, Bo H. Ferns. The impacts of Leaders' Social Responsibility Orientation on Hotal Employees' Job Satisfaction[J]. Tourism Tribune, 2013 Vol.28 No.3.

Wang xing, Zhang hui, Xu Honggang. Effects of work values on work engagement and satisfaction: The Moderating effects of genearationanl differences[J]. Tourism Tribune, 2017 Vol.32 No.12.

Brown SP, Peterson, RAAntecedents and consequences of salesperson job satisfaction: meta-analysis and assessment of causal effects[J]. J Mark Res, 1993, 30(1):63–77

Tett RP, Meyer JP, Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings[J]. Pers Psychol, 1993, 46:259–293

Mobley WH, Intermediate linkages in the relationship between job satisfaction and employee turnover[J]. J Appl Psychol, 1977, 62:237–240

Lee SC, The relationship between error management culture and job satisfaction-organizational commitment:

the analysis of interaction effect on social worker's psychological capital[J]. Korean J Soc Welf, 2011, 63(2):81–107

Hartnell CA, Qu AY, Kinicki A, Organizational culture and organizational effectiveness: a meta-analytic investigation of the competing values framework's theoretical suppositions[J]. J Appl Psychol, 2011,96:677–694

O'Reilly CA, Chatman J, Caldwell DF, People, and organizational culture: a profile comparison approach assess ing person-environment fit[N]. Acad Manag J, 1991, 34:487–516

Fishbein M, Ajzen I, Belief, attitude, intention, and behavior. Reading[D]. Addison-Wesley, Boston,1975。

Chen CF, Job satisfaction, organizational commitment, and flight attendants' turnover intentions: a note[J]. J Air Trans Manag, 2006, 12(5):274–276.

Singh P, Loncar N, Pay satisfaction, job satisfaction and turnover intent[J]. Ind Relatsh, 2010, 65(3):470–490

Javed M, Balouch R, Hassan F, Determinants of job satisfaction and its impact on employee performance and turnover intentions[J]. Intl J Learn Dev, 2014, 4(2):120–140

Saeed I, Waseem M, Sikander S, Rizwan M, The relationship of turnover intention with job satisfaction, job performance, leader member exchange, emotional intelligence and organizational commitment[J]. Intl J Learn Dev, 2014, 4(2):242–256

Egan T, Yang B, Bartlett K, The effects of organizational learning culture and job satisfaction on motivation to transfer learning and intention to sharing knowledge[J]. Hum Resour Dev Q, 2004,15(3):279–301

Aarons GA, Sawitzky AC, Organizational climate partially mediates the effect of culture on work attitudes and staff turnover in mental health service[J]. Adm Policy Ment Health, 2006, 33(3):289–301

Park JS, Kim TH, Do types of organizational culture matter in nurse job satisfaction and turnover intention? [J]. Leadersh Health Serv, 2009, 22(1):20–38

Biswas S, Relationship between psychological climate and turnover intentions and its impact on organizational effectiveness: a study in indian organizations[J]. IIMB Manag Rev, 2010, 22(3):102–110

Maclntosh EW, Doherty A, The influence of organizational culture on job satisfaction and intention of leave[J]. Sport Manag Rev, 2010, 13(2):106–117

Lobburi P, The influence of organizational and social support on turnover intention in collectivist contexts[J]. J Appl Bus Res, 2012, 28(1):93–104

Emerson D, Organizational culture, job satisfaction, and turnover intentions: the mediating role of perceived organizational support[D]. Doctoral Paper, University of Virginia, Charlottesville, 2013

Goi MT, Impact of organizational climate on intentions to leave and job satisfaction[J]. In: Proceedings of global business and finance research conference, 2013 ,28–29 October

Pattanayak S, Chhabra B, The impact of perceived organizational support on job satisfaction, affective commitment, turnover intentions, and organizational citizenship behavior: a study of insurance sector[J]. IJLTEMAS, 2014, 3(7):78–87

Spector PE, Measurement of human service staff satisfaction: development of the job satisfaction survey[J]. Am J Community Psychol, 1985,13(6):693–713

Cammann C, Fichman M, Jenkins D, Klesh J, The Michigan organizational assessment questionnaire[D]. University of Michigan, Ann Arbor, 1979.

Ju Xiaohong. *Empirical Study of the Influence of Error Management Culture on Individual Error Report* [D]. Southwestern University of Finance and Economics, 2016,11(12).