How to make Knowledge-sharing More Efficient in Hospitality Industry

Peiying Wu

{ wupeiying@hsu.edu.cn}

Department of Tourism, Huangshan University Huangshan City, Anhui Province

Abstract. With the advent of the digital economy era, traditional enterprises are facing the uncertainty and complexity of digital transformation. Knowledge sharing and experience extraction have become an important driving force for the upgrading of enterprise industrial structure. In the hospitality industry, knowledge sharing is more reflected in learning from work, error management and work experience accumulation in the workplace. In this study, a total of 303 valid samples were collected, and the hypotheses was tested by SPSS PROCESS. The results show that error management culture, psychology safety and perceived insider status have positive effects on employees' knowledge sharing behavior, and psychology safety and perceived insider status play a partial mediating role in the relationship between error management culture and knowledge sharing behavior. This study further expands the application of error management culture in service-oriented enterprises and verifies the internal mechanism of the impact of error management culture on employee knowledge sharing.

Keywords: hospitality industry; knowledge sharing behavior; digital economy era

1 Introduction

In digital economy era, more and more enterprises take particular emphasis on innovation.Since the opening of the era of Tourism 4.0, "smart tourism", "cultural and tourism integration" and "tourism format integration" have become new keywords. Hospitality industry is the pillar industry of the tourism industry, and enterprise service innovation is an inevitable choice to adapt to the fierce competitive market environment. Enterprise service innovation is talent innovation, and the innovation of employee service performance means constant trial and exploration in work practice^[1]. According to social learning theory, trial and exploration is also a process of "trial and error". If the enterprise blindly pursues the culture of "error aversion", especially in some enterprises with service innovation as the core, the psychological pressure of individuals will be increased over time, the thinking of employees will be constrained, and the cohesion of internal members will be reduced^[2]. Therefore, whether employees' error in workpractice can bring useful value mainly depends on the enterprise's error management culture. Van Dyck (2005) pointed out that the focus of organizational error management should be placed on the long-term and potential value brought by "errors", such as learning, innovation and resilience of employees^[3], and suggested that enterprises should take error management culture as an important organizational culture.

At present, studies by many scholars have also provided verification. In general, studies on error management culture focus on its positive impact on overall performance, individual innovation and organizational innovation^[4,5]. Taking the hospitality industry as an example, most jobs have a high degree of job autonomy and skill diversity. Cerasoli et al. (2018) pointed out that corporate training should take these job characteristics into account, adopt informal learning to a greater extent, and allow employees to try and make mistakes^[6]. Employees do a good job of service based on customer needs, depending on the specific work situation. Hospitality staff are not only the "consumers" of knowledge and skills, but also the "creators" of knowledge and skills ^[7]. In the process of changing from "consumers" to "creators", individuals constantly try and revise based on work situations. It is meaningful to introduce enterprise error management culture to better discuss "service situation" and "knowledge sharing" in hospitality industry.

Whether employees will actively share their experience in the team is based on the premise that employees have a sense of safety, and this sense of safety comes from the evaluation of their work behavior^[8]. Individuals will serve the organization more loyally if they see themselves as insiders. Therefore, we introduce the concepts of psychology safety and perceived insider status, and try to build a dual intermediary model to analyze the mechanism between error management culture and employee knowledge sharing behavior.

2 Theoretical Framework & Hypotheses

2.1 Error management culture and knowledge sharing behavior

With the vigorous development of the modern service industry, under the common influence of the external market environment and the internal development needs of the enterprise, the life cycle of the work content of most posts in the enterprise is constantly shortened. The term "error" refers to an employee's unconscious deviation from a work plan, performance target or code of conduct, mainly due to insufficient knowledge and skills or improper methods. Differ from traditional error avoidance views, error management focuses not on how to avoid error results as a whole, but on how to reduce the negative impact of error results and how to increase the occurrence of potential positive results (Van Dyck, 2005).

Error management culture is a relatively stable state formed in the long-term practice of an organization, which is embodied in the attitude, behavior, procedures and related systems held by the organization towards work errors^[9]. If the enterprises believe that employees' mistakes are inevitable, then the organization can quickly find work errors. After work errors occur, the organization will actively communicate and discuss with employees to learn lessons from the mistakes (Frese & Keith, 2015)^[10]. In such an atmosphere, for employees, after errors occur, they will not cover up, there is no excessive psychological burden, and they can quickly self-report, rationally analyze the causes of errors, and find learning opportunities. The excessive psychological burden of employees afraid of mistakes will directly affect the quality of their work service. It is precisely this encouraging environment that provides employees with space to explore problems and facilitates the process of digesting error knowledge. The digestion of knowledge enhances the depth of individual understanding of knowledge and expands the breadth of knowledge ^[11]. The behavior of knowledge sharing arises precisely because

employees have no concerns about the work situation^[12]. Therefore, the hypothesis is suggested:

Hypothesis 1. Error management culture (EMC) positively influences employees' knowledge sharing behavior(KSB).

2.2 Error management culture and psychology safety

Psychology safety is an individual characteristic of employees, reflecting their psychological state and self-perception, and is an individual's judgment on whether their actions are safe, clear and predictable in the situation. The error management atmosphere reflects the principle of managers to deal with errors and conveys the criteria of reward and punishment to employees. Therefore, the error management atmosphere is an important factor for employees to judge whether they are safe or not.

The organization treats employees' error or mistakes with a relatively tolerant attitude, and more importantly, gives employees ample opportunities to communicate, and helps them find reasons and gain experience. Employees do not worry too much about punishment, and have a more objective cognition of their own performance evaluation. Employees are convinced that they will not be punished after making mistakes, so their own behaviors will not be constrained and their psychological security will be enhanced. Therefore, this study proposes:

Hypothesis 2. Error management culture (EMC) positively affects employees' psychology safety (PS).

2.3 The mediating effect of psychology safety(PS)

Psychology safety, as a kind of overall and personalized real feeling of individuals, is an important predictor in organizational management, which can explain employees' cognition of psychological safety in the workplace, and then remove the motivation barrier of knowledge sharing. Person-situation interaction theory holds that an individual's behavior is the result of the interaction between his or her intrinsic characteristics and the situation in which he or she is located. On the other hand, according to the social exchange theory, when there is a work error, the organization does not blindly punish employees. Employees are in a tolerant and open employee-organization relationship mode, and they can share their experience to help colleagues improve the overall performance and maintain the collective interests. In summary, this paper proposes:

Hypothesis 3. Psychology safety will mediate the relationship between error management culture and employees' knowledge sharing behavior.

2.4 The mediating effect of perceived insider status(PIS)

The perceived insider status refers to employees' perception of whether they belong to the team, and individuals' psychological perception of whether the organization trusts and recognizes them ^[13]. The perception of employee's insider identity mainly comes from two aspects. One is self-reinforcing and belongs to internal cause; The other is the organization's giving and feedback, and the external stimulus. An organization's error management culture will affect employees' perceived insider status, and individuals will clearly see the recognition and evaluation of their own value given by the organization. When employees are in an

environment of criticism, employees will think that the organization does not trust, recognize and respect them. If employees feel that they are not respected and recognized for a long time, The idea that the organization is excluding them and they are not important will arise, and the demands of employees will not be met in the organization, which will lead to the decline of their perception of insider status^[14].

When the error management atmosphere is good and inclusive, employees are more active in sharing their experiences and helping colleagues around them. On the contrary, employees are afraid that they cannot be treated and evaluated fairly, and feel that they are outsiders, so they dare not truthfully show themselves in the work, which will weaken their own initiative, and they are not willing to take the initiative to share their experience with others. Therefore, this paper suggests:

Hypothesis 4. Error management culture (EMC) positively affects employees' perceived insider status.

Hypothesis 5. Employees' perceived insider status (PIS) will mediate the relationship between error management culture and employees' knowledge sharing behavior (KSB).

Based on the above research hypotheses, the theoretical hypotheses model of this study is constructed, as shown in Figure 1.



Fig.1. Theoretical model

3 Methods

3.1 Sample

In this study, online questionnaires were used to collect data, and the survey objects were staff of small and medium-sized hotels in some cities in Anhui, Zhejiang and Jiangsu provinces. A total of 400 questionnaires were sent out, 368 were recovered, and 303 were valid after excluding invalid questionnaires, with an effective recovery rate of 82.3%. The basic information of sample is shown in Table 1.

Table 1. Basic information of sample

Items	structure	frequency	Percent %	Items	structure	frequenc y	Percent %
	male	143	47.2		high school/technical secondary school and	14	4.6

					below		
gender	female	160	52.8	education	junior college	66	21.8
					undergraduate	174	57.4
					postgraduate and above	49	16.2
	18-25	35	11.6		less than 1 year	12	4
age	26-30	133	43.9	working tenure	1-3yesrs	97	32
	31-40	103	34		4-6years	92	30.4
	41-50	24	7.9		7-10years	75	24.8
	Over 50 years old	8	2.6		10 years above	27	8.9

3.2Measures

This study involves four variables. The foreign traditionality scales was used to ensure the reliability and validity of the research tool. All variables were measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5(strongly agree).

1. Error management culture (EMC) .The sisteen-item scale developed by Van Dyck (2005) ^[3].($\alpha = 0.962$).

2. Knowledge sharing behavior (KSB) .The five-items were selected from Bock et al (2005) ^[15]. An example item is "I always share my work experience and professional knowledge with my colleagues." ($\alpha = 0.851$).

3. Psychology safety (PS) .The five-items were selected from Li Ning and Yan Jin ^[16] (2007) localization study on the basis of May et al. (2004) ^[17] .An example item is "My skills and talents are valuable to my work and organization." ($\alpha = 0.909$).

4. Perceived insider status (PIS) .The five-items were selected from Stamper (2002) ^[18]. ($\alpha = 0.895$).

4 Data Analysis

4.1 Confirmatory factor analysis

A confirmatory factor analysis (CFA) was conducted to examine the distinctiveness of the conceptual variables in the model. The fitting index of the main variable measurement model is as follows: $\times 2/df=1.764$, RMSEA=0.064, TLI=0.904, CFI=0.912, IFI=0.923. The model fit indices manifested that the fitting between the model and data was good. In addition, Harman single factor test was used to test the common method bias of variables, and it was found that the maximum factor variance explanation rate was 34.1%, less than 40%, and there was no serious common method bias.

4.2 Descriptive statistical analysis

Pearson partial correlation analysis method was adopted in this paper. The following table presents the mean and standard deviation of each variable and the correlation coefficient

between each variable. As shown in Table 2, error management culture was significantly positively correlated with psychology safety (r=0.312,p<0.01). There was a significant positive correlation between organizational error management culture and knowledge sharing behavior (r=0.433,p<0.01). There was a significant positive correlation between organizational error management culture and perceived insider status (r=0.192,p<0.01). Other variables also showed significant correlation and were consistent with the direction of the hypothesis, which provided a prerequisite for the subsequent verification of the hypothesis.

Variables	М	SD	1	2	3
1.Error Management Culture	3.71	0.861			
2.Psychological Safety	3.69	0.511	0.312**		
3.Knowledge Sharing Behavior	3.83	0.821	0.433**	0.560**	
4.Perceived Insider Status	3.34	0.641	0.192**	0.337**	0.392**

Table 2.Means, standard deviations, and correlations among the study variables

Note: N = 303, * p < 0.05, ** p < 0.01.

4.3 Regression analysis

In this study, SPSS22.0 was used to conduct hierarchical regression analysis to examine the effects of organizational error management culture on three variables, namely employee knowledge sharing behavior, psychology safety and perceived insider status, and the effects of two mediating variables (psychology safety and perceived insider status). The results are shown in Table 3.

In M2, after controlling for demographic information, the addition of the impact of EMC explained an additional 19% of the variance in their KSB ($\beta = 0.41$, p < 0.001), and hypothesis 1 is supported. In model 6 and model 7, it is shown that independent variable EMC has a positive effect on PS and PIS ($\beta = 0.311$, p < 0.001; $\beta = 0.178$, p < 0.05), thus hypothesis 2 and hypothesis 4 are supported, respectively. In this paper, the three-step mediate regression analysis method of Wen Zhonglin et al was adopted. In M3, when adding the hypothesized mediator PS, it is shown that PS has a positive effect on KSB($\beta = 0.475$, p < 0.001), and there was still a positively relationship between EMC and KS. In M4, when adding the hypothesized mediator PIS, it is shown that PIS has a positive effect on KS ($\beta = 0.324$, p < 0.001), and there was still a positively relationship between EMC and KSB. However, the regression coefficient of EMC for dependent variable KSB reduced in both model3 and model4 (M3: $\beta = 0.41 \rightarrow \beta = 0.262$; M4: $\beta = 0.41 \rightarrow \beta = 0.352$), which indicating that psychology safe(PS) and perceived insider status perception(PIS) partially mediate the relationship between EMC and KSB.

Table 3. Results Of Hierarchical Regression

Variables			PS	PIS			
	M1	M2	M3	M4	M5	M6	M7
gender	-0.092	-0.056	-0.034	-0.042	-0.028	-0.046	-0.042

age	-0.16**	-0.092	-0.095*	-0.071	-0.082	0.006	-0.064
education	-0.002	-0.012	0.005	-0.055	-0.024	-0.036	0.134*
Years of working	0.133*	0.095	0.12*	0.092	0.115*	-0.054	0.007
EMC		0.41***	0.262***	0.352***	0.245***	0.311***	0.178**
PS			0.475***		0.412***		
PIS				0.324***	0.202***		
\mathbb{R}^2	0.042	0.203	0.406	0.302	0.44	0.104	0.058
$\triangle R^2$	0.029	0.19	0.394	0.288	0.427	0.089	0.042
F	3.228*	15.144** *	33.664***	21.349** *	33.156***	6.88***	3.661***

In order to further test the stability of the results of dual mediating effect, SPSS PROCESS was used in this study.

The results are shown in Table 4. The bootstrap confidence intervals (CIs) of the index of mediation (PS: Effect = 0.127, SE = 0.02, and 95% CI = LL 0.075 and UL 0.184; PIS: Effect = 0.039, SE = 0.016, and 95% CI = LL 0.012 and UL 0.074) exclude zero, thus supporting hypothesis 3 and hypothesis 5 respectively.

Items	Effect	BootSE	BootLLCI	BootULCI
PS	0.127	0.028	0.075	0.184
PIS	0.039	0.016	0.012	0.074
Total	0.166	0.035	0.100	0.238

Table 4. Results of Mediation Effects

5 Discussion

5.1 Conclusions

Error management culture positively influences employees' knowledge sharing behavior. This research conclusion also confirms George's opinion that a well working environment plays an important role in positive psychological state^[19]. It enriches the interpretation and understanding of the effectiveness of organizational error management culture and expands the research on the antecedents of employees' knowledge sharing behavior.

Organizational error management culture can indirectly affect employees' knowledge sharing behavior partly through PS and PIS. A well working atmosphere is an organizational support resource, which can not only improve employees' self-efficacy and organizational identity, but also reduce the emotional loss of employees in dealing with discrimination in the organization. On the one hand, it can enhance employees' psychology safety from an emotional perspective; on the other hand, it can strengthen employees' internal identity and consolidate the relationship between individuals and organizations from the perspective of belonging cognition. Dual mediating paths further affect individual knowledge sharing behavior.

5.2 Practical implications

First of all, this study provides insight into the ways executives or leaders manage their employees to enhance their KSB, the elements such as tolerance, exploration and mutual assistance can be implemented into the employee induction training as the spirit of enterprise, so that employees can face error with a positive attitude, which can cultivate the spirit of effective study. Secondly, the organization should establish a clear error learning mechanism, so that employees can dare to find error in time, openly discuss mistakes or failures, and learn from them.

In management practice, attention should be paid to improving their knowledge sharing ability. Communication and sharing between team members and across teams should be encouraged through regular training, benchmarking publicity, setting up multi-functional small teams and other forms, and employees should be encouraged to learn from colleagues so as to improve their knowledge acquisition, absorption, transfer and application ability, which can creatively solve new problems encountered in the work.

5.3 Limitations and future research

Although this study has obtained some important conclusions and implications, there are still some limitations. First, the selection of samples lacks multiple angles, and the subsequent sample selection should be conducted from multiple perspectives to improve the scientific and accuracy of the research results. Second, this study is a cross-sectional study, and it is better to make more rigorous test and prediction through longitudinal follow-up investigation in future studies, so as to grasp the dynamic changes of employees' knowledge sharing behavior in hospitality industry. Finally, this paper discusses the relationship between organizational error management culture and knowledge sharing behavior, but only discusses the mediating effect of psychology safety and perceived insider status. In fact, employees' behavior may also be affected by other important interfering variables. Future studies should further explore the influence of other variables, especially some moderating variables, to further clarify the mechanism of employees' knowledge sharing behavior.

Acknowledgments: The author acknowledge the financial support from the Social Science Foundation of Anhui Educational Committee (Grant NO. SKHS2020B06).

References

[1]Liu Xiaoyu, Wang Xiaojie. The influence mechanism of employee emotional labor on service innovation: Evidence from the service industry [J]. Economics and Management Research, 2023, 44(2):15.

[2]Aldehayyat J .The role of corporate social responsibility initiatives, error management culture and corporate image in enhancing hotel performance[J].Management Science Letters, 2021(2):019.

[3]Van Dyck C , Frese M , Baer M , et al. Organizational Error Management Culture and Its Impact on Performance: A Two-Study Replication.[J]. Journal of Applied Psychology, 2005, 90(6):1228-1240.

[4]Zhu Yingjun, Pei Yu. The Influence of error management Culture and psychological Empowerment on Employees' Innovation Behavior: The moderating effect of Innovation Efficacy [J]. China Human Resources Development, 2014(17):23-29.

[5]Maurer T J, Hartnell C A, Lippstreu M. A Model of Leadership Motivations, Error Management Culture, Leadership Capacity, And Career Succes[J]. Journal of Occupational & Organizational Psychology, 2017(2).

[6]Cerasoli C P, Alliger G M, Donsbach J S, et al. Antecedents and Outcomes of Informal Learning Behaviors: a Meta-Analysis[J]. Journal of Business and Psychology, 2017, 33(2):1-28.

[7]Cheng Wei, Yang Xianmin, Yu Shengquan. Workplace Learning based on Knowledge generation [J]. Vocational Education Forum.2013(34):64-64.

[8]Tu Xing-Yong, Zhang Yi-Ping, Liu Leijie, et al. How does psychological security improve employees' creative problem solving ability? Testing the mediated role model [J]. Management Review, 2022, 34(8):12.

[9]Li L . An Overview of Error Management Climate[J]. Psychology, 2016, 07(4):623-626.

[10]Frese M, Keith N. Action Errors, Error Management, and Learning in Organizations[J]. Annual Review of Psychology, 2015, 66(1):661-687.

[11]Li Yongjuan, XU Yuanyuan, Yuan Xiao. Research on the influence mechanism of goal Orientation on employees' Innovation Behavior: From the perspective of Tacit knowledge Sharing Behavior [J]. Journal of Beijing Technology and Business University: Social Sciences Edition,2016(4):013.

[12]Seo, Jungmin.Why Does the Impact of Psychological Empowerment Increase Employees' Knowledge-Sharing Intention? A Moderated Mediation Model of Belonging and Perceived Organizational Support[J]. Behavioral Sciences,2021, Vol. 13 Issue 5:387.

[13]Lapalme M, Stamper C L, SEMA R D G, et al. Bringing the Outside in: Can"External"Workers Experience Insider Status[J]. Journal of Organizational Behavior, 2009, 30(7):919-940.

[14]Ma Bei, Hu Bei, Wang Shengzong. The influence of perceived overqualification on organizational citizenship behavior: Based on Insider's identity perception [J]. Soft Science,2019,33(03):137-140.

[15]BOCK G M, ZMUD R W,KIM Y G, et al. Intention Formation in Knowledge Sharing:Examining the Roles of Extrinsic Motivators,Social-Psycholoical Forces,and Organizational Climate[J].MIS Quarterly, 2005,29(1):87~111.

[16]Li Ning, Yan Jin. The role of organizational trust climate on task performance. Acta Psychologica Sinica, 2007, 39(006):1111-1121.

 $[17]May\ D\ R$, Gilson R L , Harter L M . The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work[J]. Journal of Occupational and Organizational Psychology, 2004, 77.

[18]Stamper C L, Masterson SS. Insider or Outsider? How Employee Perceptions of Insider Status Affect Their Work Behavior[J]. Journal of Organizational Behavior, 2002, 23(8): 875-894.

[19]George J. M. State or Trait: Effects of Positive Mood on Prosocial Behaviors at Work[J]. Journal of Applied Psychology, 1991,76(2):299-307.