

## A Study on the Correlations between Knowledge Sharing Behavior and Organizational Citizenship Behavior in Catering Industry: The Viewpoint of Theory of Planned Behavior

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**ABSTRACT** According to the 2012 industry-academic cooperation case report of Taipei College of Maritime Technology on service procedure improvement and standardization formulation in catering industry, this study aims to construct the Knowledge Sharing Behavior model. The major variables contain (1) Attitudes, (2) Subjective Norm, (3) Perceived Behavioral Control, and (4) Behavioral Intention; and, the dimensions for Knowledge Sharing, referring to cover (1) Internalization, (2) Externalization, (3) Socialization, and (4) Combination. Furthermore, the dimensions for Organizational Citizenship Behavior are applied to discussing the correlations among Theory of Planned Behavior, Organizational Citizenship Behavior, and Knowledge Sharing Behavior. The service personnel in the catering enterprises are taken as the research subjects, and the sampling quota, 273 samples, is proportioned to the sizes of such organizations. Independent-Sample T Test, One Way Analysis of Variance, and Structural Equation Modeling (LISREL) are utilized for exploring the Knowledge Sharing Behavior model constructed in this study. The research results are summarized as 1. The background characteristics of the service personnel in the catering enterprises would affect parts of the variables in the Knowledge Sharing Behavior model. 2. In relation to the effects of attitudes, subjective norm, and perceived behavioral control on knowledge sharing behavior intention of the service personnel in the catering enterprises, merely the positively collinear correlations between subjective norm and knowledge sharing intention do not reach the significance, while both attitudes and perceived behavioral control reveal remarkably positive effects on knowledge sharing intention. 3. The personnel's knowledge sharing intention, with mediating effects, would positively affect the knowledge sharing behavior and even indirectly influence the degree of the member's knowledge sharing through organizational citizenship behavior.

### INTRODUCTION

The boom of domestic catering industry, which gradually becomes the first industry in Taiwan, has resulted in the establishment of snack bars, fast food restaurants, and even high-consumption hotels everywhere. Moreover, the frequent reports of gourmet food in magazines and special columns and the shows of cooking

contests have revealed people's emphasis on food, which becomes the best medium for modern people relaxing the bodies and mind as well as getting well along with the family and friends. Nevertheless, the emphasis on products has been changed to pursuing the experiences in satisfaction and pleasure, and all consumers expect to receive the best bargain. Face-to-face services in restaurants therefore cannot be neglected. In order to outstand in the diverse and competitive catering enterprises and attract the revisit of consumers, the first-line service personnel, in addition to the innovative development of food and the delicious flavor, present the importance, as they are the key impression on consumers (Tseng and Kuo 2013). From sell-

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ing the taste of food to selling the services, services become critical in catering industry to satisfy modern people's demands for more intangible perception than tangible one. To sum up, the first impression of services in a catering enterprise has become the key factor in consumers evaluating the restaurant (Liu 2013). To create high knowledge sharing behavior in an organization to successfully and smoothly establish the educational training system is the primary issue for catering enterprises. The organizational members in the catering enterprises in Taiwan are studied to explore the key factors in knowledge sharing behavior from the aspects of Ajzen's (2002) Theory of Planned Behavior and Bateman and Organ's (1983) Organizational Citizenship Behavior.

## Literature Review

### *Organizational Citizenship Behavior*

Morrison (1994) pointed out Organizational Citizenship Behavior as the members in an enterprise contributing to the organization beyond the work. Organ (1998) referred organizational citizenship behavior as an individual unconditionally presenting certain contribution to the organizational effectiveness without a direct or definite reward system similar to specific high-efficient productivity or development of innovative technology in an organization. Aiming at the dimensions proposed by Organ (1998) for organizational citizenship behavior, Hsu (2002) discovered that some dimensions did not have correspondent concepts in domestic culture, possibly because of cultural differences. Without overcoming such cultural differences, but directly translating the English words for the questionnaire, the validity might be problematic as the citizens might misunderstand the concepts that the errors could not be accurately measured. To actually reflect the cultural differences and accurately measure organizational citizenship behavior of the citizens, Lin (1992) developed the organizational citizenship behavior scale suitable for domestic enterprises by referring to Organ's (1998) organizational citizenship behavior and the questionnaire constructed. Six dimensions were then concluded, namely: Identification with Organization, Altruism, Impersonal Harmony, Protecting Company Resources, Conscientiousness, and Self-development.

### *Theory of Planned Behavior*

Theory of Planned Behavior (TPB), proposed by Ajzen in 1985 and 1987, provides an overall and comprehensive structure, deriving from Theory of Reasoned Action (TRA), for predicting certain behaviors of an individual (Ajzen and Driver 1992). It aims to understand and predict individual behaviors based on Expected Value Theory and is the social psychology trying to explain human behavioral decision-making processes. Three key factors in intention are covered, as Attitudes and Behavior (AT), the internal factors in an individual preferring certain behaviors, Subjective Norm (SN), the external factors of important others in an individual supporting certain behaviors, and Perceived Behavioral Control (PBC), the factor of the correspondence between time and opportunity in an individual controlling oneself to complete certain behaviors. Such dimensions are further affected by behavioral belief, normative belief, and locus of control. Behavioral belief could generate individual attitudes towards behaviors; normative belief would result in individual subjective norm; and, locus of control would form individual perceived behavioral control (quoted from Wang 1998).

### *Knowledge Sharing*

Nonaka and Takeuchi (1995) organized several studies on knowledge and divided it into implicit knowledge and explicit knowledge. The former could hardly be formalized or expressed with texts or sentences and was invisible that it was subjective but real. It could hardly be communicated or shared with others and was tacit, but could not be explained in words, including cognitive skills and technological skills derived from experiences, such as the knowledge, subjective vision, intuition, and premonition of an experienced craftsman. The latter could be easily communicated with languages, recorded in words, and followed with rules and systems. It could be shared and communicated through specific data, scientific formula, standardized procedure, or ordinary principles and was objective and metaphysical, such as job descriptions or established operating principles. Nonaka and Takeuchi (1995) regarded the process of an organization internally creating knowledge as the interaction between implicit knowledge and ex-

PLICIT knowledge. In the interactive process, four Knowledge Sharing models were defined, namely 1. Internalization (operational knowledge), 2. Externalization (conceptual knowledge), 3. Socialization (resonant knowledge), and 4. Combination (systematic knowledge).

### ***Relative Research on Knowledge Sharing, Theory of Planned Behavior, and Organizational Citizenship Behavior***

Relevant research (Huang 2001; Chen 2001; Fang 2003; Ryu et al. 2003) proved that behavioral intention of the organizational members could be predicted with attitudes, subjective norm, and perceived behavioral control and including theory of reasoned action into perceived behavioral control could enhance the prediction and explanation.

Although knowledge sharing intention in this study could be understood through Theory of Planned Behavior, there are some other possible factors in knowledge sharing behavior. For instance, Davenport and Prusak (1998) proposed the key effects of trust and altruism on knowledge sharing behavior, where, among the factors in enhancing the operating efficiency of knowledge market, trusting people exchanging or sharing knowledge in an organization depended on the reliability of the knowledge buyer (Hu 1999). Such two factors in knowledge sharing behavior were seldom mentioned in the Theory of Planned Behavior model, but were related to the principle of organizational citizenship behavior. Furthermore, an employee's knowledge sharing behavior revealed spontaneity and was hard to receive the effectiveness with force, corresponding to the contribution to the organization beyond the work mentioned in the research on organizational citizenship behavior. Moreover, it was also found in the empirical research on organizational citizenship behavior that organizational citizenship behavior indeed appeared significantly positive correlations with knowledge. Lin et al. (2005) mentioned that experienced employees presenting altruism in organizational citizenship behavior on teaching newly recruited ones with skills required at work could reduce the training costs of the organization. When the employees showed courtesy to actively inform other employees of possible problems at work, it could reduce a lot of managers' time and energy dealing with problems. It showed that knowledge

sharing behavior could be a performance of organizational citizenship behavior. When an organization reveals high organizational citizenship behavior, the members' knowledge

intention would be stronger. As a result, when discussing the factors in knowledge sharing intention of the employees in the catering enterprises with theory of planned behavior, organizational citizenship behavior, which is related to knowledge sharing behavior, is included to verify the key factors in knowledge sharing behavior intention.

## **RESEARCH METHODOLOGY**

### **Research Framework and Hypothesis**

Aiming at the key factors in knowledge sharing behavior of the employees in the catering enterprises, the knowledge sharing behavior scale, covering the dimensions of internalization, externalization, socialization, and combination proposed by Wang et al. (2002), is utilized for measuring the degree of knowledge sharing behavior of the research subjects. The preexisting factors of attitudes, subjective norm, and perceived behavioral control in Ajzen's (2002) Theory of Planned Behavior are applied to understanding the effects on behavioral intention and the organizational members' knowledge sharing behavior in order to construct the knowledge sharing behavior model. Six dimensions for organizational citizenship behavior, developed by Lin (1992), containing identification with organization, altruism, impersonal harmony, protecting company resources, conscientiousness, and self-development, are regarded as the mediators. The questionnaires of Theory of Planned Behavior, Knowledge Sharing Behavior, and Organizational Citizenship Behavior are applied to exploring the knowledge sharing behavior model of the personnel in the catering enterprises and the mediating effects of organizational citizenship behavior on knowledge sharing intention and behavior. The research concept is showed in Figure 1.

### **Research Subject and Sampling**

The service personnel in the catering enterprises are regarded as the research population, and Feast and Food Gourmet Group, the 2012 industry-academic cooperation case of Taipei College of Maritime Technology in the project of

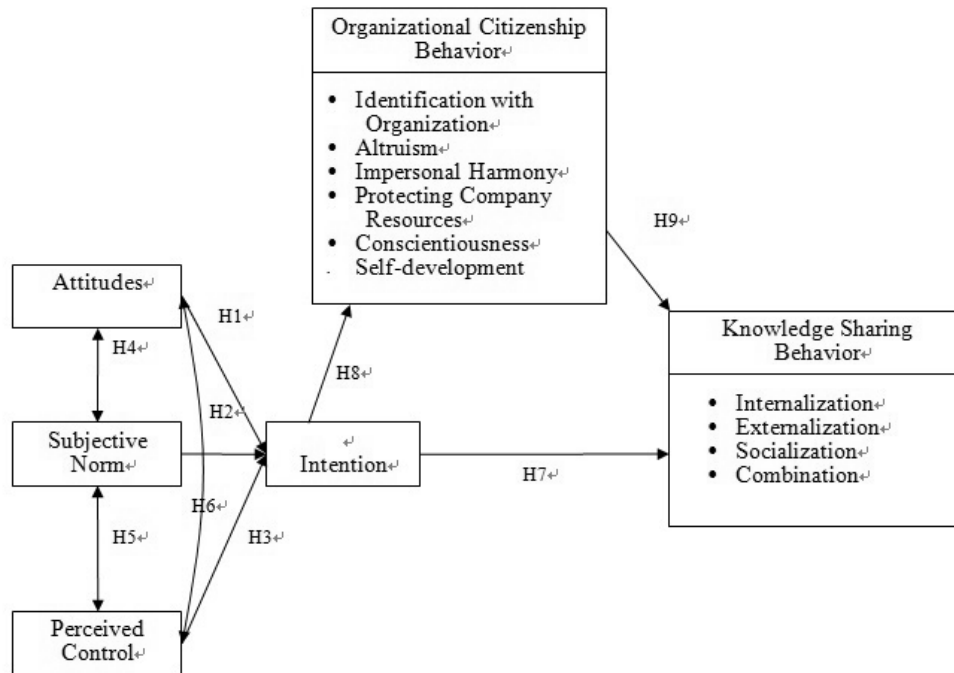


Fig. 1. Research conceptual diagram

Service Procedure Improvement and Standardization Formulation in Catering Industry, is considered as the research subject. Feast and Food Gourmet Group contains the brands of Eattogether, Kaifun, Fruitful Food, Siam More Thai Bar, and Fuli Sichuan Cuisine, which locate in northern, central, and southern Taiwan. With various service styles in catering industry, it shows representativeness and completeness for the research. The middle and high level managers with educational training and management experiences are preceded in-depth interviews before the questionnaire survey in order to revise the preliminary structural questionnaire and enhance the validity and reliability. The managers with experiences in educational trainings and promotion in the catering enterprises in Taiwan are invited as the participants for the questionnaire survey on knowledge sharing behavior. The sampling quota is proportioned to the number of employees in the companies with distinct scales. Since some questions in the questionnaire are related to negative evaluation of the company, non-managing members are distributed the questionnaire to avoid the subjective answers. Total 400 cop-

ies of questionnaires are distributed, and 338 copies are collected. Deducting 65 invalid ones, total 273 copies are valid, with the retrieval rate 68.3%.

## RESULTS AND DISCUSSION

### Evaluation of Structural Equation Modeling

Aiming at the overall fitness test result of knowledge sharing behavior of the service personnel in the catering enterprises, Table 1, merely conscientiousness and self-development in organizational citizenship behavior appeared  $R^2 < 0.5$ . Huang (2004) indicated that  $R^2$  of individual items with  $t > 1.96$ , achieving the significance, was acceptable. All  $t$  values in this model achieved the significance that  $R^2$  of the individual items was acceptable. In this case, knowledge sharing behavior of the service personnel in the catering enterprises was consistent with the fit of internal structure of model, presenting the construct reliability and convergent validity of the latent variables in the hypotheses. In other words, knowledge sharing

**Table 1: Overall fitness test result with structural model**

Fit index	Test value	Standard value	Result
<i>Absolute Fit Index</i>			
$\chi^2(df)$	253.9 (171)	$P > 0.1$	Inconsistency
	$P = 0.000$		
GFI	0.918	$< 0.9$	Consistency
SRMR	0.047	$\geq 0.05$	Consistency
RMSEA	0.041	$\geq 0.08$	Consistency
<i>Relative Fit Index</i>			
NNFI	0.981	$> 0.9$	Consistency
CFI	0.984	$> 0.9$	Consistency
RFI	0.942	$> 0.9$	Consistency
<i>Parsimonious Fit Index</i>			
PNFI	0.784	$> 0.5$	Consistency
CN	235	$> 200$	Consistency
$\chi^2/df$	1.47	$< 3$	Consistency

behavior of the service personnel in the catering enterprises corresponded to the fitness test standard that there was no inconsistency between the data and the model. The verification of the hypotheses and the deduction and test among variables in this study therefore were preceded.

**Parameter Estimation and Hypothesis Verification**

Overall speaking, subjective norm and knowledge sharing intention in knowledge sharing of the service personnel in the catering enterprises, who participated in the questionnaire survey, did not appear positively linear relationship ( $\tilde{\alpha} = .04, p = .73$ ). The effects of subjective norm on knowledge sharing intention being statistically insignificant were not consistent with the past research. Nevertheless, knowledge sharing attitudes ( $\tilde{\alpha} = .71, p < .01$ ) and perceived knowledge sharing behavior control ( $\tilde{\alpha} = .27, p < .01$ ) revealed positively linear relationship with knowledge sharing intention. Such results supported H1a and H1c, consistent with Ajzen’s theoretical model, but did not support H4b. In this case, Hsu (2002) mentioning the rejection of the effects of subjective norm on behavioral intention was consistent that theory of planned behavior was revised for the research. The casual relationship between subjective norm and intention was deleted, and the correlation between sub-

**Table 2: Hypothesis verification of knowledge sharing behavior of the service personnel in the catering enterprises**

Research hypothesis	Path relationship	Coefficient	Result
H1: The employees' attitudes towards knowledge sharing behavior would positively affect the knowledge sharing intention.	Attitudes → Intention	$\gamma = 0.71$ $\tau = 4.45$	Supported
H2: The employees' subjective norm towards knowledge sharing behavior would positive influence the knowledge sharing intention.	Subjective norm → Intention	$\gamma = 0.04$ $\tau = 0.34$	Not supported
H3: The employees' perceived knowledge sharing behavior control would positive affect the knowledge sharing intention.	Perceived control → Intention	$\gamma = 0.27$ $\tau = 2.56$	Supported
H4: The employees' knowledge sharing behavior attitudes present positive correlations with subjective norm in knowledge sharing behavior.	Attitudes ← → subjective Norm	$\Phi = 0.88$ $\tau = 41.76$	Supported
H5: The employees' subjective norm and perceived knowledge sharing behavior control appear positive correlations.	Subjective norm ← → Perceived Control	$\Phi = 0.85$ $\tau = 23.3$	Supported
H6: The employees' knowledge sharing behavior attitudes and perceived knowledge sharing behavior control appear positive correlations.	Attitudes ← → Perceived control	$\Phi = 0.78$ $\tau = 28.17$	Supported
H7: The employees' knowledge sharing intention would positively affect the knowledge sharing behavior.	Intention → Sharing Behavior	$\beta = 0.40$ $\tau = 4.22$	Supported
H8: The employees' knowledge sharing intention would positively influence the organizational citizenship behavior.	Intention → Organizational citizenship behavior	$\beta = 0.64$ $\tau = 5.08$	Supported
H9: Organizational citizenship behavior would positively affect the employees' knowledge sharing behavior.	Organizational citizenship behavior? → Sharing behavior	$\beta = 0.45$ $\tau = 6.18$	Supported

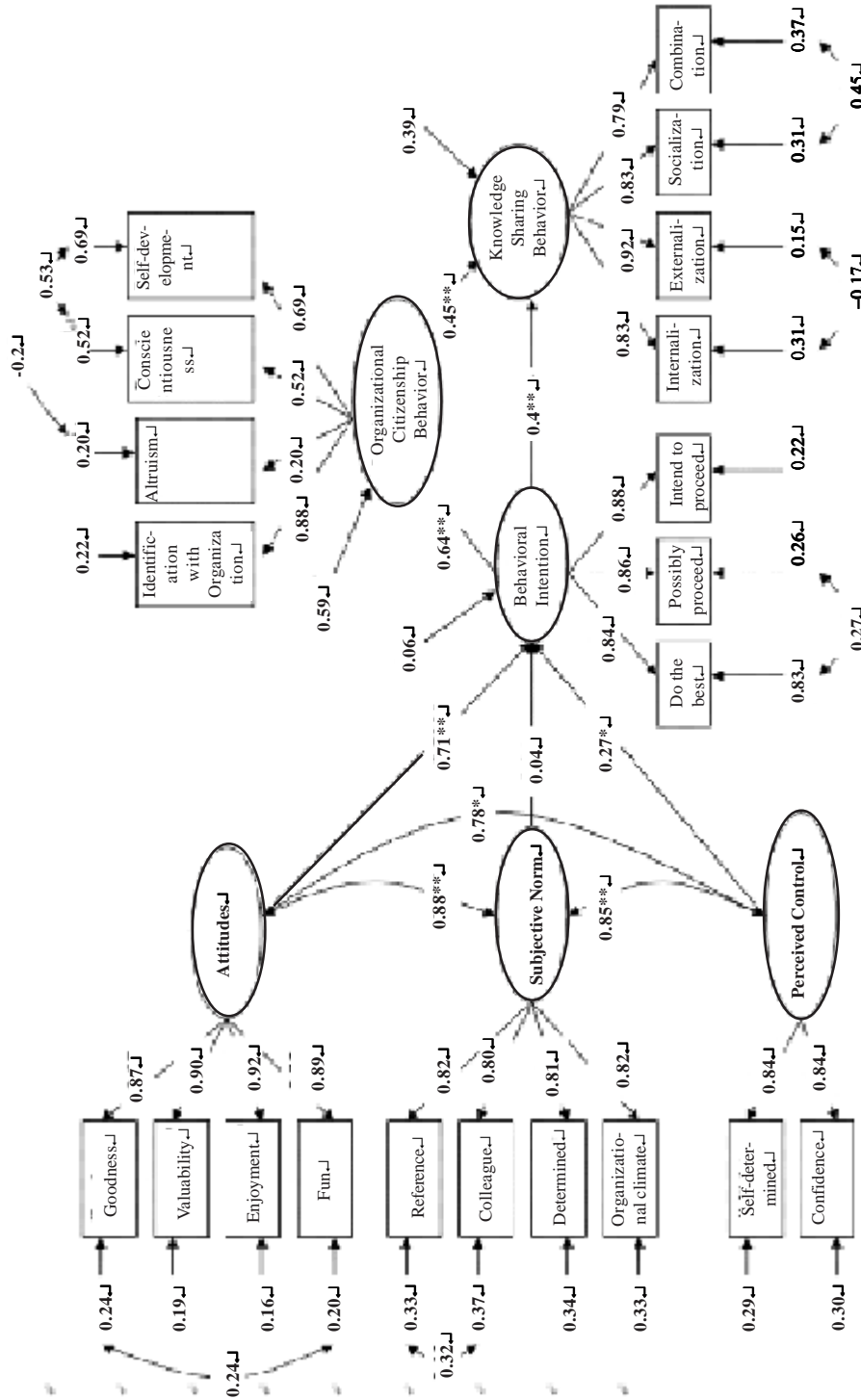


Fig. 2. Parameter path diagram of service personnel in the cater enterpr

jective norm and attitudes was revised as the casual relationship. The research results showed that subjective norm affected intention through attitudes (Wu 2003).

The antecedent variables of attitudes, subjective norm, and perceived behavioral control presented positive and significant correlations, where knowledge sharing attitudes of the service personnel in the catering enterprises showed positive correlations with subjective norm ( $\hat{\beta} = .88, p < .01$ ), Knowledge sharing attitudes appeared positive correlations with perceived knowledge sharing behavior control ( $\hat{\beta} = .78, p < .01$ ), and subjective norm revealed positive correlations with perceived knowledge sharing behavior control ( $\hat{\beta} = .85, p < .01$ ). H2a, H2b, and H2c therefore were supported, consistent with Ajzen's theoretical model. Before including organizational citizenship behavior as the mediator, knowledge sharing intention ( $\hat{\beta} = .69, p < .01$ ) showed positively linear relationship with knowledge sharing behavior. After including the mediator, knowledge sharing intention still presented positive effects on knowledge sharing behavior ( $\hat{\beta} = .40, p < .01$ ). However, knowledge sharing intention would indirectly affect knowledge sharing behavior ( $\hat{\beta} = 0.45, p < .01$ ) through organizational citizenship behavior ( $\hat{\beta} = 0.64, p < .01$ ) that H3 and H4 were supported. It verified the important effects of trust and altruism in organizational citizenship behavior on knowledge sharing behavior, proposed by Davenport and Prusak (1998). The hypothesis verification results of knowledge sharing behavior of the service personnel in the catering enterprises are organized in Table 2, and the parameter path diagram is shown in Figure 2.

### CONCLUSION

The realization of the service personnel in the catering enterprises about attitudes, subjective norm, and perceived behavioral control shows the correlations. For the personnel in the catering enterprises, the correlations among attitudes, subjective norm, and perceived behavioral control correspond to the theory of planned behavior, meaning the service personnel in the catering enterprises with the more positive knowledge sharing attitudes are likely to accept the norms and pressure formed by the reference subjects of supervisors and colleagues, or organizational climate. In other words, the personnel can better identify such reference subjects'

expectation and opinions of knowledge sharing and perceive the confidence of control that the achievement of knowledge sharing behavior would be higher.

The members' knowledge sharing behavior is directly affected by knowledge sharing behavior intention and organizational citizenship behavior that the overall effects of knowledge sharing behavior are influenced by the four paths of Attitudes' Behavioral Intention' Organizational Citizenship Behavior' Knowledge Sharing Behavior, Attitudes' Behavioral Intention' Knowledge Sharing Behavior, Perceived Control' Behavioral Intention' Organizational Citizenship Behavior' Knowledge Sharing, and Perceived Control' Behavioral Intention' Knowledge Sharing. It means that the more positive knowledge sharing attitudes and evaluation of the personnel would enhance the knowledge sharing intention to further engage in knowledge sharing behavior. The employees would also engage in knowledge sharing behavior because of high knowledge sharing intention of the employees and the favorable organizational citizenship behavior of the company. The employees' knowledge sharing intention would also be enhanced to engage in knowledge sharing behavior because of knowledge sharing control and higher confidence. In this case, the employees are likely to engage in knowledge sharing behavior when they appear high knowledge sharing intention and the company shows favorable organizational citizenship behavior.

Organizational citizenship behavior is the mediator in this research model, meaning that the employees would present higher probability on actual sharing behavior when the members in the catering enterprises appear higher intention to share knowledge and the company shows higher organizational citizenship behavior climate. As a result, when the employees in the catering enterprises present stronger knowledge sharing intention, they would precede knowledge sharing behavior; and, when the higher organizational citizenship behavior appears in the catering enterprises, that is, the altruistic climate among members, the employees would reveal actual knowledge sharing behavior. Social exchange relationship in organizational citizenship behavior therefore could be presented on knowledge sharing behavior. With the cultivation of social exchange relationship in the organization, the character of helping others in the catering

enterprises could enhance the employees' knowledge sharing behavior. When knowledge sharing behavior could benefit the organizational operation, the members in the catering enterprises with high organizational citizenship behavior would automatically present sharing culture. Once the employees show high knowledge sharing intention, they would encourage such knowledge sharing behavior.

### RECOMMENDATIONS

1. Since attitudes would positively affect behavioral intention, a manager should reinforce the evaluation of the employees' knowledge sharing to enhance the knowledge sharing attitudes in order to facilitate knowledge sharing behavior among the members in catering enterprises. The employees therefore would identify knowledge sharing being pleasant and valuable, and the individuals would appear higher sharing intention so as to promote knowledge sharing behavior.
2. Since perceived behavioral control presents positive effects on knowledge sharing behavior intention, the enterprises could assist the employees in reducing the factors in knowledge sharing so that they would appear higher sharing confidence and control. It therefore could enhance the sharing intention and promote knowledge sharing behavior of the employees in catering enterprises.
3. With the significant mediating effects of organizational citizenship behavior, the organizational climate is also considerable. Organizational citizenship behavior should be regarded as a part of corporate culture. When the members in an enterprise present organizational citizenship behavior, other employees would automatically share the knowledge and experiences to assist the ones encountering problems or difficulties. Besides, the employees would actively and spontaneously precede knowledge sharing behavior when they perceive knowledge sharing behavior being beneficial for the organizational operation.
4. The mediating effects of organizational citizenship behavior on knowledge shar-

ing behavior are definite that high organizational citizenship behavior culture in an organization is critical. It is therefore suggested that a personality test related to organizational citizenship behavior could be designed to test the organizational citizenship behavior characteristics when the managers in catering enterprises recruit new staff. It could also be applied to evaluating the employees.

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