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Linking Sustainable Human Resource Management in Hospitality: An Empirical Investigation of the Integrated Mediated Moderation Model

Chung-Jen Wang

Department of Hotel and Restaurant Management, National Pingtung University of Science and Technology, 1, Shuefu Road, Neipu, Pingtung 91201, Taiwan; wchungzen@gmail.com; Tel.: +886-8-770-3202 (ext. 7545)

Received: 5 January 2019; Accepted: 14 February 2019; Published: 18 February 2019



Abstract: This research proposed and investigated a mediated moderation research framework that links employee job satisfaction, knowledge sharing, innovation capability, and job performance for sustainable human resource management in hospitality. Data from 395 Taiwanese hospitality companies with structural equation modeling (SEM) analyses, and the results showed that job satisfaction had significantly positive influences on knowledge sharing, both job satisfaction and knowledge sharing were significantly and positively related to innovation capability, while innovation capability had significantly positive influences on job performance. Support was also found for the significant and positive mediating effects of knowledge sharing between job satisfaction and innovation capability, and different organizational forms have moderating effects on the relationship between job satisfaction, knowledge sharing and innovation capability. The implications of these findings for sustainable human resource management in hospitality are also discussed.

Keywords: job satisfaction; knowledge sharing; innovation capability; performance; organizational forms; mediation; moderation; sustainability; hospitality

1. Introduction

Sustainable human resource management has been used as a gateway that connects human resource management to sustainability [1,2]. Unlike traditional strategic human resource management practices or policies which focus on ultimate financial and market performance in organizations, sustainable human resource management stresses the importance of managing working people in organizations with sustainable outcomes [1,3]. In other words, sustainable human resource management demonstrates a novel perspective and meanings for long-term development and renewal in the relationship between sustainability and human resource management [2,4,5]. In addition, knowledge workers are the essential ingredients of the modern economy [6]. A corporation can promote business performance through their talented employees with expertise [7]. Therefore, most hospitality firms now recognize that employees are central to their performance, competitive advantage and even survival. Most important of all, how to promote participation, satisfaction, engagement and performance of employees in working environments has become an important sustainable human resource management issue that has received wide attention from many researchers and managers [8–10]. In the related hospitality research fields of job satisfaction, knowledge sharing, innovation management, and organizational performance, most studies view innovation capability as supported by the way employees access, learn, accumulate and utilize knowledge. Innovation capability may thus be closely related to employee performance, and the goal of this research is to empirically study this relationship.

Owing to the paucity of related empirical study in sustainable human resource management, this work first reviewed the related literature and categorized the determinants which may have an

important impact on innovation capability with regard to job satisfaction and knowledge sharing processes [11,12]. Six hypotheses and a conceptual framework were then produced based on the proposed relationships between each variable and job performance. After that, this research proceeded with 395 samples based on hospitality firms in Taiwan to explore our proposed hypotheses. It is expected that the results of this research will be valuable to both academics and practitioners for sustainable human resource management in hospitality.

2. Literature Review

The meaning of sustainable human resource management is obtaining and sustaining of a necessary competitive advantage from a great many valuable, satisfied and committed employees with effective people management practices [1,3,13]. This concept has been widely used for human outcomes which benefit long term sustainable performance in organizations [1,4]. Plenty of terms have been adopted to connect sustainability and human resource management activities including work satisfaction [14–16], a knowledge sharing system [17–19], the abilities of innovation [3,20,21], and performance at work [5,22,23]. These terms may display in diverse approaches for organizational sustainable effectiveness, however, there has been no attempt to integrate them into a research framework to better investigate human and social outcomes particularly in hospitality sectors. Therefore, this study acknowledged that job satisfaction, knowledge sharing, innovation capability, and job performance will influence the extent for working people in an organization together providing positive influences on competitiveness and success of hospitality organizations. The literature review was offered in the following.

2.1. Job Satisfaction

Job satisfaction is an important topic, and it is seen as having a wide-ranging number of effects in organizational research. According to the suggestion of Locke [24], job satisfaction means an employee's positive emotional condition or attachment regarding his or her work. Hulin and Judge [25] noted that job satisfaction includes multidimensional psychological responses to one's job, and that such responses have cognitive, affective, and behavioral components. For the organization, job satisfactions mean a workforce that is motivated and committed to high quality performance. In addition, satisfied employees are more likely to have good mental health and be better at making adjustments in their lives [26]. Locke [24] proposed that satisfaction is determined by a discrepancy between what one wants in a job and what one has in a job. Judge et al. [27] argued that there are four core self-evaluations (self-esteem, general self-efficacy, locus of control, and neuroticism) that determine one's disposition towards job satisfaction. Judge et al. [28] also stated that higher levels of self-esteem, general self-efficacy, having an internal locus of control, and lower levels of neuroticism lead to higher job satisfaction. Herzberg [29] stated that there are motivation and hygiene factors in the workplace that cause job satisfaction. In addition, motivation can be seen as an inner force that drives individuals to attain personal and organization goals [30,31]. Accordingly, for the sustainability in hospitality organization, increased productivity—the quantity and quality of output per hour worked—seems to be a byproduct of greater job satisfaction. In this vein, the implementation of positive working environments can contribute to job satisfaction for important sustainable human resource management practices.

2.2. Knowledge Sharing

The only certainty in the business world is maintaining competitive advantages [32]. Organizations thus recognize that knowledge constitutes a valuable intangible asset for creating and sustaining competitive advantages [33], and its value can be shared through knowledge management processes such as the implementations of information systems and business administration [34]. More specifically, Teece [35] stated that knowledge management is the tool for organizations to use the most know-how regarding better producing process. In the knowledge management literature,

knowledge sharing is an important factor in reaching the goals of knowledge innovation and successful management for both individuals and organizations. Knowledge sharing is a dynamic process where individuals mutually exchange their implicit and explicit knowledge and jointly create new knowledge [36]. Knowledge sharing is a critical source of value creation [32], and a successful knowledge-sharing effort requires both the intentions and activities necessary to establish appropriate administrative structures, and facilitate the transfer of knowledge. Knowledge is a competitive advantage, and is a particularly lasting one [37]. Fagerberg et al. [38] proposed that successful knowledge sharing had to meet the requirements to improve the process and designs in the firm. Following these arguments, for acquiring a sustainable competitive advantage as well as business performance, knowledge sharing could be regarded as a critical element in sustainable human resource management of hospitality organizations.

2.3. Innovation Capability

Innovation is a key topic in the study of business, entrepreneurship, economics, technology, and knowledge management, and improves the firm performance by methods of better design, quality, process and customer satisfaction. Croitoru [39] noted that innovation is a prime mover of economic change, while Thompson et al. [40] defined it as the generation, acceptance, and implementation of new ideas, processes, products, or services. Amabile et al. [41] examined the environmental and work factors conducive to creativity and innovation. Van de Ven [42] stated that the process of innovation process involves the development and implementation of new ideas, and Tidd et al. [43] claimed that managers are able to aid this by the identification and development of core competencies, the constraints imposed by different technologies and markets, and the structures and processes for organizational learning. Leonard [44] defined innovation capability as the ability to create new and useful knowledge based on previous knowledge. Burgelman et al. [45] defined technological innovation as innovation strategies that are supported by organizations. Since innovation capability is to manage different key organizational capabilities and resources successfully [46,47], human resource practitioners could promote the application of innovation activities with sustainable business practices in hospitality organizations.

2.4. Job Performance

Performance is one of the major methods used to measure the achievement of an organization's target goals. However, according to a literature review, performance research has done little to aid managerial decision-making in practice. More than two decades ago, Banks et al. [48] warned that this apparent gap between performance research and practice would increase, while Napier et al. [49] suggested that the progress on performance practice has lagged because the research which might inform it has been neglected. Bretz et al. [50] concluded that better understanding of organizational contexts in performance research would contribute to better performance in practice. McCrae et al. [51] examined the Big Five personality dimensions and their relationship with job performance. Campbell [52] suggested determinants of performance components, and stated that individual differences on performance are mainly due to three determinants: declarative knowledge, procedural knowledge and motivation. Accordingly, with a concept of the human dimension for sustainability, how employees sustain valuable human resources at work could be associated with higher levels of performance. Furthermore, it contributes to the understanding of promoting job performance as a constitutive perspective of organizational sustainability, and could be accepted as an extremely important criterion that is strongly related to hospitality organizational outcomes and success.

3. Conceptual Framework and Hypotheses Development

3.1. Relationship between Job Satisfaction and Knowledge Sharing

Job satisfaction is important in organizational behavior, and it is based on the individual employees' subjective perceptions and feelings. In studies of the relationship between job satisfaction and personal characteristics, most indicate a positive association between age and job satisfaction [26]. In addition, various learning processes and associated types of knowledge have been identified as characteristic of a learning organization [53]. Bussing et al. [54] suggested that job satisfaction is developed through an assessment of the match between expectations, needs, and motives and the work situation. The relationship between employee rights to satisfactory employment conditions, employee responsibilities in decision-making, and employee willingness to share their knowledge collaboratively has also been investigated [55]. Koys [56] found that employee satisfaction and turnover intention both had positive relationships with the effectiveness of the organization. Hendriks [57] stated that "Knowledge sharing presumes a relationship between at least two parties" The owner of the knowledge shares through the process of externalization, and the recipient internalizes knowledge. The former can involve writing books, attending meetings and performing tasks, while the latter can take the form of observing others, learning on the job, reading books and accessing and assimilating knowledge from knowledge data bases. For example, Bock et al. [58] revealed that self-efficacy is a critical driver of employee knowledge sharing behavior for high autonomy and intrinsic motivation. Consequently, we expect that job satisfaction could naturally facilitate the knowledge sharing process for sustainable human resource management in hospitality organizations.

Hypothesis 1. *Higher levels of job satisfaction tend to promote higher levels of knowledge sharing.*

3.2. Relationship between Knowledge Sharing and Innovation Capability

Nonaka's [59] dynamic theory of organizational knowledge creation holds that it is created through a continuous dialogue between tacit and explicit knowledge via four patterns of interactions, socialization, combination, internalization and externalization. In order to respond to the complexities of the environment, there is a level of stretch requiring the company to incorporate innovation and creativity in the efficient use of resources [60], and new ideas and solutions require knowledge and expertise [61]. Studies on innovation have put attention on contextual conditions that promote or inhibit organizational innovations [62]. The generation of innovation is a novel process or practice that is new in the organization [11]. Van de Ven [42] proposed the meaning of innovation as the creation and implementation of novel methods with high employee involvement within an organization, while performance of these novel ideas and applications needs knowledge and experience [61]. Therefore, integrating the arguments of sustainable human resource development above, we propose that knowledge sharing can enhance innovation capability in the context of hospitality organizations.

Hypothesis 2. *Higher levels of knowledge sharing tend to promote higher levels of innovation capability.*

3.3. Relationship between Job Satisfaction and Innovation Capability

Herzberg, Mausner and Snyderman [63] saw "motivation factors" as consisting of the work itself or outcomes directly derived from it, such as the nature of the jobs, achievement in work, promotion opportunities, and chances for personal growth and recognition. Management system and top managers can promote employee motivation and satisfaction, and create a friendly environment to support innovation and change, while satisfied employees tend to have more contributions for organizational innovation [62]. Organizational learning has been shown to be more effective when projects are operated with autonomy with respect to goals and supervision [64]. Reiner and Zhao [26] suggested that the importance of the environment or situational and job characteristics lies in their influence on employees' satisfaction. Delmas [65] also proposed that innovation capabilities

had relations with leadership, and employee job satisfaction. On the basis of these sustainable human resource management perspectives, we anticipate that job satisfaction can facilitate innovation capability in organizations especially under the context of hospitality settings.

Hypothesis 3. *Higher levels of job satisfaction tend to promote higher levels of innovation capability.*

3.4. Mediating Effects of Knowledge Sharing Orientation

Creating knowledge for mobilization and implementing personnel management practices that motivate knowledge sharing are critical, and the conversion process requires overlapping knowledge [32]. These abilities can integrate internal knowledge in a company and external requirements from the market with dynamic perspectives [66]. Thus, innovation capability is the ability of a company to integrate available resources and knowledge to maintain their competitive advantage [67], and organizations with good communication and sharing can encourage employees regarding these behaviors [68]. Since organizational innovation capability is about the ability of the firm to mobilize the knowledge embodied in employees for the combination and creation of new resources, high-performing companies carefully screen employees for job satisfaction and knowledge sharing behaviors [69]. In the central role of human resource development for sustainable organizations, these competitive advantages could be required to maximize knowledge with the organizations and used to mobilize the novel knowledge outside the organizations effectively. Applying this viewpoint into hospitality organizations, a proposition and recommendation for the mediating roles of knowledge sharing linking job satisfaction and innovation capability is shown in the following hypothesis:

Hypothesis 4. *Knowledge sharing tends to have positive mediating effects on the relationship between job satisfaction and innovation capability.*

3.5. Relationship between Innovation Capability and Job Performance

According to Nonaka [59], innovation is conceptualized as a structural and mental knowledge process. Hansen [70] expanded the idea of innovation diffusion in social networks to explain diffusion in contexts of information abundance and information scarcity. Fiol et al. [71] suggested that higher-level organizational learning is more prevalent in firms with a diverse environmental context than from those in more homogeneous environments. They also suggested that the higher-level patterns of learning resulting in specialization depend on three critical factors: information transfer and retrieval, experimentation or promotion of change, and the development of dynamic routines. Nair et al. [72] provided a theory of effective management of a firm's resources, productive opportunities, and diversification strategy, offering durable principles governing the growth of firms and the rate at which they can grow efficiently. In addition, she placed emphasis on competitive advantage over time, with efforts regarding corporate economic value of innovation and dynamic capabilities. Nair et al. [72] were original in providing a theory that explains the role of firm-specific tacit knowledge in the context of firm growth, innovation, and diversification, one that provides causal links between resources and the generation of productive opportunities for growth and innovation. With the perspective of dynamic capabilities, novel resources lead to organizational innovation and help to create value. Knowledge not only influences the process of services delivery, but also has a strong relationship with the performance of a company. Unused productive services are, for the enterprising firm, at the same time, a challenge to innovate, an incentive to expand, a source of competitive advantage, and facilitate the introduction of new combinations of resources—innovation—within the firm. Accordingly, in a sustainable human resource management perspective, we expect that innovation capability could facilitate organizational performance in the settings of hospitality organizations.

Hypothesis 5. *Higher levels of innovation capability tend to promote higher levels of job performance.*

3.6. Moderating Effects of Organizational Forms

Daft et al. [12] examined firms adopting new ways of structuring their boundaries and internal organization with regard to their governance of transactions. Knowledge is the main resource used to perform work, and organizations that foster the spontaneous creation of knowledge and help guide it to useful purposes are more likely to be successful [73]. As discussed previously, every successful organization in the knowledge economy has in some way or another, managed part or some forms of its knowledge. This entails implementing the value creation required for that stage is put in place. Of all the possible kinds of changes in hospitality organizations, structural ones require the highest level of innovation capability and resource allocation, while organization form changes require the longest time and are the hardest to effect. As a result, companies with different organizational forms looked for valuable competitive advantage as well as sustainable human resource management practices diversely, and we proposed that organizational form could affect employees' behavioral routines and modes of decision making at work. These analyses lead to the hypothesis that:

Hypothesis 6. *Organizational forms have moderating effects on the relationship among job satisfaction, knowledge sharing, and innovation capability.*

4. Methodology

4.1. The Research Model

The objective of this study is to investigate the interrelationships among employee job satisfaction, knowledge sharing, innovation capability, and job performance for sustainable human resource management in hospitality (see Figure 1). Specifically, this study attempts to explore the influence of job satisfaction and knowledge sharing on innovation capability, as well as the influence of innovation capability on job performance. Furthermore, the moderating roles of organizational forms in the relationships among job satisfaction, knowledge sharing, and innovation capability are explored. Finally, the mediating effects of knowledge sharing orientation on the relationship between job satisfaction and innovation capability are evaluated.

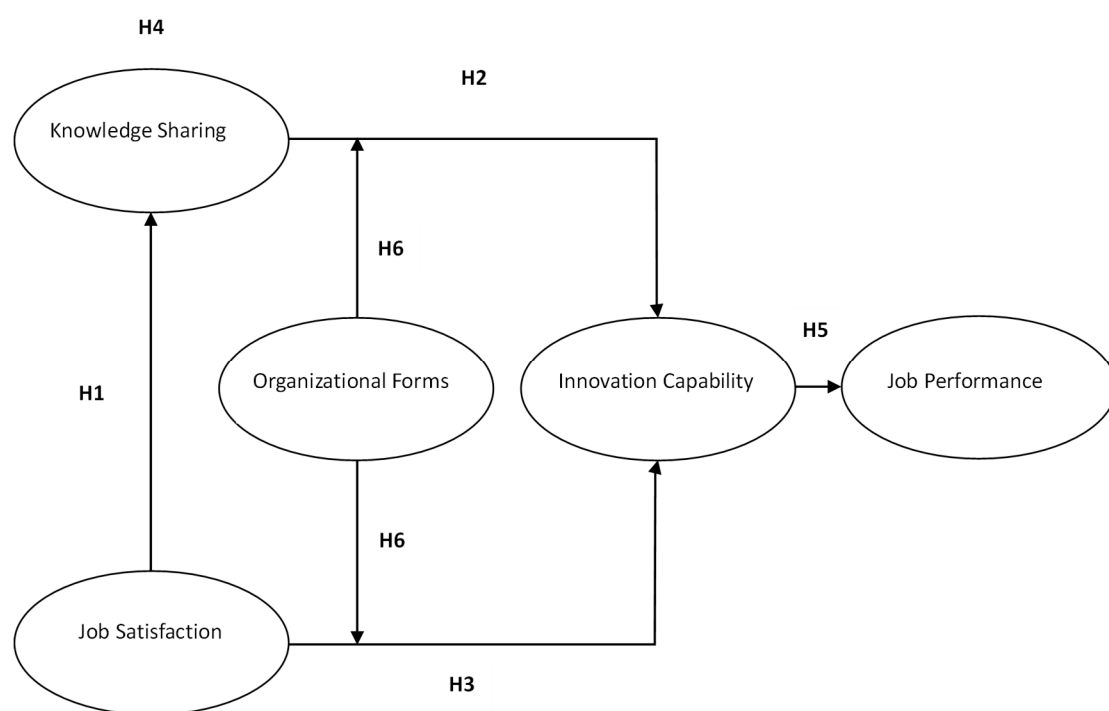


Figure 1. Conceptual research model.

4.2. Data Collection and Sampling Frame

There were three steps to the data collection process. First, we conducted field studies, and had phone interviews with selective groups for a better understanding of the nature of the work environment. Second, we had a pilot study to verify the reliability and validity of our proposed variables. Finally, the surveys were conducted for data collection. The sampling frame for the survey comprises hospitality companies in Taiwan, and we focus on a comparative empirical study between international tourist hotels and local hotels for their differences of organizational forms. Besides, in order to reduce the problem of common method variance (CMV) which may have influenced the results, job satisfaction and knowledge sharing constructs were answered by employees and innovation capability and job performance constructs were answered by direct supervisors. Out of the 600 questionnaires distributed, 395 were returned, giving a response rate of 66%.

4.3. Construct Measurement

Existing scales identified through the literature review were modified to suit the research purpose and context. These modified scales were supplemented using interviews with managers and academics researchers. For the statistical integration, all other measurements ranged from one to seven (1 = “strongly disagree”, 7 = “strongly agree”). In our study, job satisfaction was measured with twenty items from the Minnesota Satisfaction Questionnaire [74], which were adapted to the current study (The Cronbach’s alpha for this scale was 0.85). Knowledge sharing was measured with seventeen items that were developed by Bock and Kim [58] (The Cronbach’s alpha for this scale was 0.83). Innovation capability was measured with nine items adapted from the work of Scott and Bruce [75], which capture the expectations for individual episodes of innovation (The Cronbach’s alpha for this scale was 0.94). Finally, job performance reflects managers’ perceptions of how well employees are achieving organizational goals, and is measured using eighteen items adapted from the scales developed by Lee, Locke and Latham [76] (The Cronbach’s alpha for this scale was 0.75). In addition, employee age, company capital, employee education, industry, number of working people in company, employee gender, and employee tenure were included as control variables.

4.4. Data Analysis

In order to test our hypotheses, we conducted structural equation modeling (SEM) analyses using AMOS 22.0 with maximum-likelihood estimation. Following the suggestions of Anderson and Gerbing [77], we adopted a two-stage approach to test the structural equation model. First, we examined the discriminant and convergent validity of the measurement model with a series of confirmatory factor analyses (CFA) with Chi-squared (χ^2) index, the goodness-of-fit index (GFI), the comparative fit index (CFI), the normed fit index (NFI), the incremental fit index (IFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR) to assess the model fit [78,79]. Second, we examined the hypothesized structural model and assessed the conditions for mediation [80].

5. Results

Table 1 presents the means, standard deviations, reliabilities, and correlations of the study variables. The results show that education, job satisfaction, and innovation capability are positively and significantly related to job performance ($r = 0.10$ – 0.67 , all p values < 0.05), education, people, job satisfaction, knowledge sharing are significantly related to innovation capability ($r = -0.12$ – 0.26 , all p values < 0.05), and job satisfaction is positively and significantly related to knowledge sharing ($r = 0.59$, p values < 0.01).

Table 1. Means, standard deviations (SD) and intercorrelations among variables.

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1. Age	2.44	0.83	-										
2. Capital	3.50	1.65	0.02	-									
3. Education	2.23	0.56	−0.08	0.31 **	-								
4. Industry	2.01	1.02	0.15 **	−0.40 **	−0.23 **	-							
5. People	2.32	1.65	0.09	0.62 **	0.27 **	−0.24 **	-						
6. Sex	1.44	0.49	−0.18 **	−0.18 **	−0.25 **	0.14 **	−0.18 **	-					
7. Tenure	1.66	1.05	0.54 **	−0.01	−0.18 **	0.15 **	0.05	−0.03	-				
8. Job Satisfaction	5.49	0.87	0.11 *	−0.04	−0.03	0.18 **	−0.05	0.02	0.04	0.81			
9. Knowledge Sharing	5.62	0.75	0.07	0.06	0.09	0.08	0.00	−0.09	−0.01	0.59 **	0.74		
10. Innovation Capability	3.71	0.58	−0.04	0.02	0.14 **	−0.10	−0.12 *	0.03	−0.06	0.18 **	0.26 **	0.74	
11. Job Performance	4.24	0.57	0.00	−0.02	0.10 *	−0.08	−0.06	0.05	−0.07	0.10 *	0.09	0.67 **	0.71

Note: * $p < 0.05$; ** $p < 0.01$ (two-tailed); $N = 395$; Square roots of average variance extracted (AVE) coefficients are presented in boldface on the diagonal.

5.1. Confirmatory Factor Analyses

As can be seen in Table 2, CFA analyses were used to test the measurement model, and the results revealed a good fit to the data ($\chi^2 = 644$ $df = 269$, $\chi^2 / df = 2.39$; GFI = 0.98; NFI = 0.90; IFI = 0.93; CFI = 0.93, and SRMR = 0.05). To evaluate the discriminant validity of measures, we conducted a series of CFAs, and the results showed that the 2-factor model, the 3-factor model, and the 4-factor model provided a more adequate fit than the 1-factor model, and Chi-squared difference tests showed that the χ^2 decrement between the 1-factor model, the 2-factor model, the 3-factor model, and the 4-factor model was significant (see Table 3). Thus, we concluded that the 4-factor model (the proposed model) was the better model of the three. CFA results supported this conclusion, indicating the distinctiveness of the four constructs measured in this study. Moreover, the factor loadings of all items in the 4-factor model were statistically significant (all p values < 0.01), suggesting that the convergent validity of all measures was acceptable.

Table 2. Fit indices. Chi-squared (χ^2), the comparative fit index (CFI), the goodness-of-fit index (GFI), the incremental fit index (IFI), the normed fit index (NFI), and the standardized root mean square residual (SRMR).

Fit Indices	Model Value	Reference Value	Overall Model Fit
χ^2 / df	2.39	< 5.00	Yes
CFI	0.93	> 0.90	Yes
GFI	0.90	> 0.90	Yes
IFI	0.93	> 0.90	Yes
NFI	0.90	> 0.90	Yes
SRMR	0.05	< 0.05	Yes

Table 3. Results of confirmatory factor analyses. The root mean square error of approximation (RMSEA).

Models	χ^2	df	$\Delta\chi^2$	Δdf	GFI	CFI	NFI	IFI	RMSEA	SRMR
1-Factor model	1954	275			0.64	0.69	0.66	0.70	0.12	0.13
2-Factor model ^a	1461	274	493	1.00	0.73	0.78	0.75	0.78	0.10	0.11
3-Factor model ^b	789	272	1165	3.00	0.85	0.91	0.86	0.91	0.07	0.05
4-Factor model (proposed model)	644	269	1310	6.00	0.90	0.93	0.90	0.93	0.05	0.05

Note: The values of χ^2 and df were differences between the 1-factor model and other models. ^a Combines innovation capability, job performance and knowledge sharing into one factor. ^b Combines innovation capability and job performance into one factor.

5.2. Hypotheses Testing

In order to test Hypothesis 1, Hypothesis 2, Hypothesis 3, and Hypothesis 5, we followed Baron and Kenny's [80] suggestion to assess the first condition of mediation. As can be seen in Table 1, the correlation coefficients indicate that innovation capability is positively and significantly related to job performance ($r = 0.67$, p value < 0.01); job satisfaction, and knowledge sharing are significantly related to innovation capability ($r = 0.18$ – 0.26 , all p values < 0.01); and job satisfaction is positively and significantly related to knowledge sharing ($r = 0.59$, p values < 0.01). Moreover, as can be seen in Figure 2, the results of the direct effects of job satisfaction on knowledge sharing, the direct effects of knowledge sharing on innovation capability, the direct effects of job satisfaction on innovation capability, and the direct effects of innovation capability on job performance were statistically significant (standardized direct effects = 0.70, 0.27, 0.25 and 0.80, all p values < 0.05). Therefore, Hypothesis 1, Hypothesis 2, Hypothesis 3, and Hypothesis 5 were all supported. For Hypothesis 4, we assessed the indirect effects of mediation with percentile and bias-corrected percentile bootstrapping base on 5,000 bootstrap samples at a 95% confidence interval. We estimated the lower and upper bounds of confidence intervals to investigate whether the mediating relations were significant. As shown in Table 4, the bootstrap test results provide evidence for the positive and significant indirect relations of knowledge sharing on the relationship between job satisfaction and innovation capability (standardized indirect effect = 0.19, p value < 0.01). As a result, Hypothesis 4 was supported.

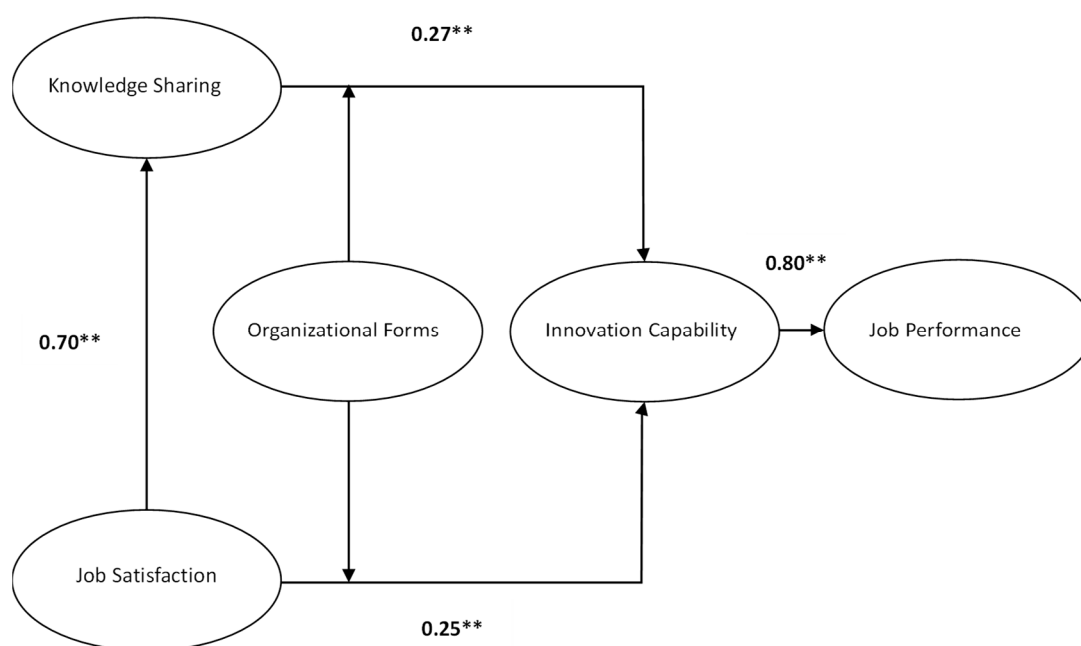


Figure 2. Standardized structural equation model with maximum-likelihood estimation.
 ** Standardized direct effects = 0.70, 0.27, 0.25 and 0.80, all p values < 0.05 .

Table 4. Bootstrapping analyses of the hypothesized model.

	Regression Weights	Path Coefficients	Bootstrapping				Two Tailed Significance
			Percentile 95% Confidence Interval		Bias-corrected Percentile 95% Confidence Interval		
		Standard Error	Lower	Upper	Lower	Upper	
Standardized Direct Relations							
Job Satisfaction → Knowledge Sharing	0.70	0.11	0.07	0.46	0.07	0.45	0.00**
Knowledge Sharing → Innovation Capability	0.27	0.09	0.05	0.34	0.05	0.35	0.00**
Job Satisfaction → Innovation Capability	0.25	0.09	0.05	0.28	0.05	0.28	0.00**
Innovation Capability → Job Performance	0.80	0.11	0.08	0.57	0.08	0.58	0.00**
Standardized Indirect Relations							
Job Satisfaction → Innovation Capability	0.19	0.04	0.01	0.13	0.01	0.13	0.00**
Knowledge Sharing → Job Performance	0.22	0.03	0.02	0.14	0.02	0.14	0.00**
Job Satisfaction → Job Performance	0.15	0.04	0.02	0.14	0.02	0.15	0.00**

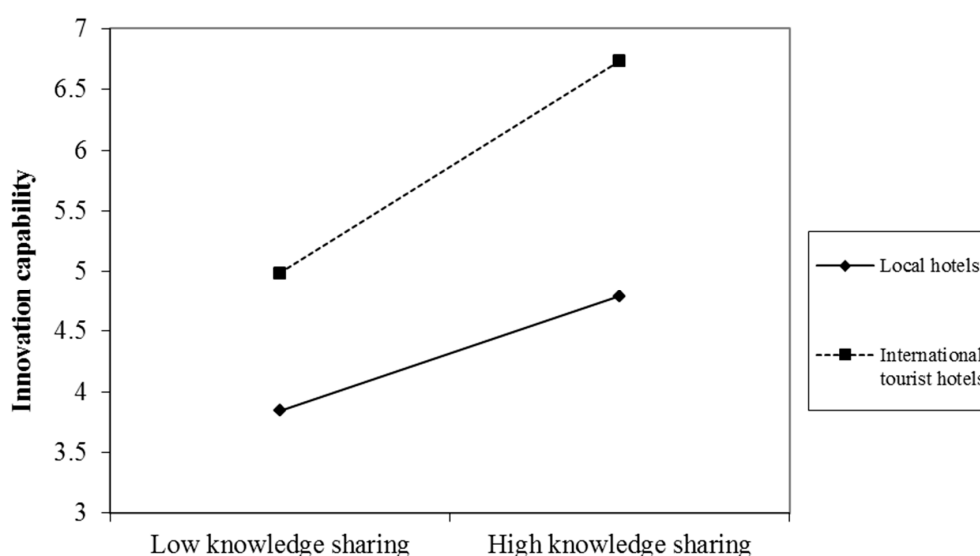
Note: Standardized estimation of 5,000 bootstrap samples, * $p < 0.05$; ** $p < 0.01$ (two-tailed); $N = 395$.

We constrained the path of job satisfaction to knowledge sharing, and the path of job satisfaction to innovation capability to test to moderating effects of organizational forms. As can be seen in Table 5, the result of Chi-squared difference tests showed that the χ^2 decrement between the Non-Constrained Model, and the Constrained Model was significant ($\Delta\chi^2 = 6.44$, $\Delta df = 2$, p value < 0.05), while Figures 3 and 4 also revealed the moderating effects of different organizational forms on the relation between knowledge sharing and innovation capability as well as the relation between job satisfaction and innovation capability. Hence, Hypothesis 6 was also supported (see Table 6).

Table 5. Results of moderating analyses.

	χ^2	df	$\Delta\chi^2$	Δdf	P Value
Non-Constrained Model	993.19	542			
Constrained Model	999.63	544	6.44	2.00	0.046 *

Note: * $p < 0.05$; (two-tailed); $N = 395$.

**Figure 3.** The moderating effect of different organizational forms on the relation between knowledge sharing and innovation capability.

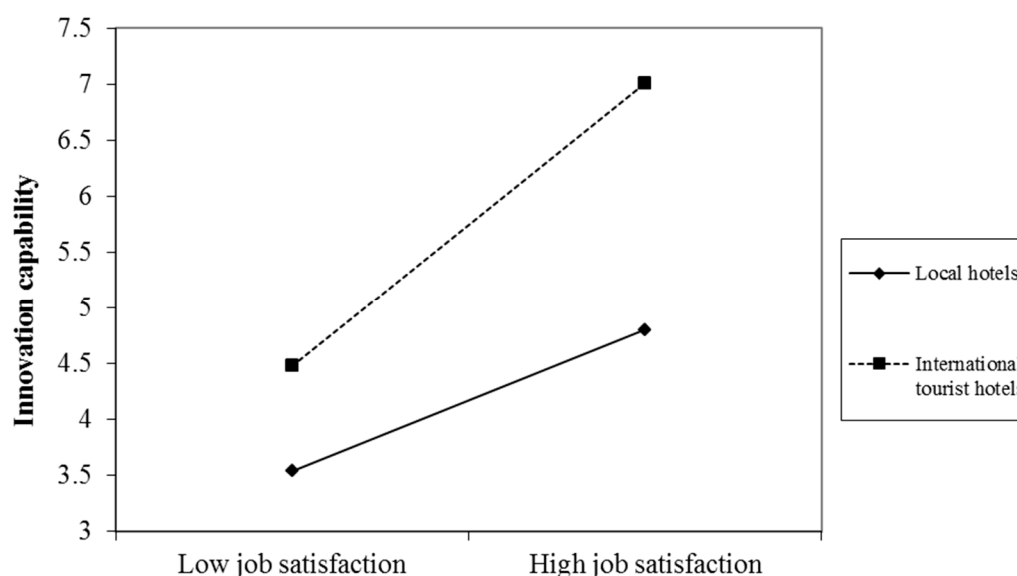


Figure 4. The moderating effect of different organizational forms on the relation between job satisfaction and innovation capability.

Table 6. Results of hypothesis (H) testing.

Hypothesis	Path	Result
H1	Job satisfaction → Knowledge sharing	Accepted
H2	Knowledge sharing → Innovation capability	Accepted
H3	Job satisfaction → Innovation capability	Accepted
H4	Job satisfaction → Knowledge sharing → Innovation capability	Accepted
H5	Innovation capability → Job performance	Accepted
H6	Moderating effects of organizational forms	Accepted

6. Discussion

Our research findings offer several theoretical contributions and practical implications for sustainable human resource management in the hospitality industry. First, in line with prior research in human resource practices and sustainable management [1,3,5,10], this study presents a new perspective to people management looking for long-term human resource development in hospitality [1,2]. In other words, unlike traditional strategic human resource management which focuses on only financial or market performance, sustainable human resource management seeks for managing working people in organizations with sustainable outcomes [1,3]. More specifically, the empirical results of this study provide evidence for hospitality sectors that sustainable human resource management could be regarded as a gateway that connects human resource management to sustainability [1,2].

Second, though sustainable human resource management is obtaining and sustaining competitive advantage from valuable employees with effective people management practices [3,13], previous studies had no attempt to discover the linkage between sustainability and human resource management practices such as work satisfaction, knowledge sharing mechanism, innovation abilities, and performance at work. Therefore, to clarify the attributes of sustainable human and social outcomes for value-added contribution and success in running business, this study contributes to literatures that testified an integrated model with SEM analyses that coordinate the dynamic linking mechanism for job satisfaction, knowledge sharing, innovation capability, and job performance of working people in hospitality organizations.

Furthermore, in the rapidly changing and competitive global economy, hospitality companies need to organize professional and successful services for tourists. As this research sample was composed of hospitality companies, it is important to discuss the specific findings for the future development

and sustainable human resource management of such firms. Our research findings revealed that hospitality organizations could develop an appropriate environment inside the organization to foster both job satisfaction and knowledge sharing, as this can greatly aid innovation. In other words, this study supports appropriate environments wherein job satisfaction can be created and strengthened by utilizing knowledge sharing processes. Expanding prior human resource management research in hospitality [10,23], the results of this study also provided empirical support for the critical positive mediating effects of knowledge sharing in the relationship between job satisfaction and innovation capability.

Moreover, this study supports that job performance is derived from innovation capability at hospitality companies, and this means that innovation is the sum of all the employees' efforts in the hospitality organization. In other words, hotel companies are situated at a pivotal position to build internal mechanisms to enhance the self-efficacy and effectiveness of workers. In this regard, our research findings can provide ideas for firms to develop and consolidate the relationship among employee job satisfaction, knowledge sharing, innovation capability, and job performance. Most important of all, our research findings are valuable for both leading companies in international tourist hotels and local hotels, in that they point to a way to create and utilize innovation capability with different organizational forms. More specifically, considering the moderating influences of different organizational forms, employees in international tourist hotels could have higher job satisfaction as well as knowledge sharing behaviors which lead to greater innovation capability than those in local hotels. In this vein, future hospitality research can also highlight the influence of innovation capability on job performance and take other factors or various samples of organizational level into multi-level consideration for sustainable human resource management.

Last but not least, as for practical implications, we suggest human resource managers or hoteliers could focus on employee training for continuous growth of sustainable human resource management in hospitality organizations. Together with job design and staff recruitment, training programs could contribute to workers' psychological capital, emotional stabilization, and organizational performance even in diverse turbulent circumstances [81,82]. Most important of all, after taking well-organized training courses, employees' high level of satisfaction toward training could thus promote their knowledge and skills at work allowing better job satisfaction, high knowledge sharing behavior, enhanced innovation capability as well as overall job performance [83]. This implication of training programs is essential for business sustainability, and provides broader benefits for hospitality organizations in terms of employees' overall commitment, satisfaction and engagement toward work with a lower likelihood to quit [8]. Therefore, hotel practitioners for sustainable human resource management could organize plans for conducting employee training via formalized training programs, and develop participants' positive psychological capital for improving their job performance.

7. Conclusions

How human resource management respond to sustainability is in part a function of obtaining satisfied and high performing employees for effective people management practices [1,3,13]. The present study provides empirical support for a mediated moderation research framework that links employee job satisfaction, knowledge sharing, innovation capability, and job performance for sustainable human resource management. Furthermore, we also concluded that different organizational forms could have essential moderating effects on the relationship among job satisfaction, knowledge sharing and innovation capability. These findings could thus be used to augment the development of sustainable human resource management in a variety of ways for hospitality contexts.

Funding: This research was funded by National Pingtung University of Science and Technology.

Acknowledgments: The author thanks the valuable opinions of anonymous reviewers for the manuscript.

Conflicts of Interest: The author declares no conflict of interest.

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