Structural Equation Model Development : Human Resource
Management and Efficiency of Hotels in Southern of Thailand

Pitchayut Penmas[1]

Jutamanee Trakulmututa[2]

Pradthana Leekpai[3]

Abstract

The objectives of this study were to analyze the resource management of hotel employees in southern Thailand and to examine the associated factors by conducting a mixed method study combining qualitative and quantitative approaches. The samples in quantitative data research consisted of 1,201 hotel employees from 45 out of 245 hotels that are members of the Thai Hotels Association - Southern Chapter. Statistical analyses were conducted using mean values, percentages, One-Way ANOVA, Structural Equation Modeling (SEM), and qualitative measures associated with quantitative data. The quantitative findings revealed that every dimension of human resource management of hotel employees was rated at a high level ($\bar{x}$ = 3.82). While human resource recruitment was rated at the highest level ($\bar{x}$ = 3.91), human resource development was rated relatively lower than other factors of human resource management ($\bar{x}$ = 3.76). At the provincial level, the top-performing provinces in human resource management are Chumphon Province and Phang Nga Province, where both were rated at the highest level ($\bar{x}$ = 4.07). On the other hand, Nakhon Si Thammarat Province was rated at the lowest level ($\bar{x}$ = 3.40). After a few adjustments, the results from the SEM model were shown to be valid. Data points were fitted empirically, yielding a Chi-square index of (X^2) = 887.125, df = 123, RMSEA = 0.07 (ranging 0.068 to 0.076 within the 90% Confident Interval), CFI = 0.95, and RMR = 0.02. The model demonstrated human resource management that factors influencing include: organizational commitment (overall influence = 0.80), overall citizenship behavior (overall influence = 0.47), organization justice (overall influence = 0.87), and work efficiency (overall influence = 0.61). Moreover, the qualitative data was well supported by the quantitative data. what's the results of qualitative.

Keywords: Human resource management, Commitment, Organizational Citizenship Behavior, Organizational Justice, Efficiency

Introduction

Tourism industry is the world's fastest growing and biggest sector with myriad employment. In 2009 Thailand gained 527,326 baht from the business, which was about 8.5 percent of the export value (55.1 percent of all service sectors), or 5.8 of Thai gross domestic product (GDP). The business provides job opportunities for more than two million people or 6-7 percent of all businesses. This includes the spread of incomes and employment to many tourist attractions in rural areas; however, the sector still requires much more labor. In addition to the quantitatively necessity, businesses in tourism sector are active in promoting expertise of their staffs provided that the sector is highly competitive. Thus, those organizations have recognized the significance of employing personal management theories in doing such tasks.

[1]Program in Management, Management of Science prince of Songkla university

[2]Program in Human Resource Development, Management of Science prince of Songkla university

[3]Social Sciences and Applied Science Department Faculty of Commerce and Management prince of Songkla university

Hotel industry is dominant to the growth of Thai tourism industry. It attracts foreign currency, reduces the current account and balance of payment deficit, increases more job opportunities, and spreads incomes to staffs at practitioner levels (Deloitte-Travel Tourism & Leisure, 2004; Dessler; 2006). Besides, this results in the growth of relevant businesses such as construction, shipping, catering, handicraft and others (Getz & Petersen, 2005). According to National Statistial of Thailand in 2012, there were 9,865 hotels and quest houses with 457,976 rooms available, 93,853,419 guests, 265,906 staffs, who earned about 147,350 per year. The fast growing of hotel industry results in the critical needs of professional staffs, who have enough fundamental knowledge. Meanwhile, experienced personnel have more opportunities to work for any hotels, which offer more benefits in the forms of money or non-money. This results in higher labor turnover (Chaisompaong Chaowprasert, 2003; Vidal, 2007).

Considering the fast growing rates, huge market shares, high employment rates, and competitiveness, businesses in tourism industry are inevitably required to promote expertise for their people to be more qualified. Likewise, the Seventh, Eighth, Ninth, and Tenth National Economic and Social Development Plan propose the substantial status of human resource development, quality of life and environment, manufacturing base and service improvement, promotion of fairness and reduction of economic and social inequality, and the strengthening of morale in crises. These include the arrangement for the participation in ASEAN Community in 2015 in which eight strategies have been included. The fourth strategy centers at the development of human resources by improving ASEAN educational standard, handicraft skills, as well as language skills. The goal is to investigate labor, entrepreneurs, and governmental officers.

Consequently, the researcher of this study is interested in examining human resource management and capability of hotel staff in service departments in southern Thailand. This study was aimed to investigate the management of those hotels because effective human resource management results in loyalty in one's organization, perception on fairness, organizational citizenship behavior, and quality of tasks, which could finally improve the hotels' performances.

Objectives of the Study:

1. To investigate human resource management of hotels in southern Thailand.

2. To develop a structural equation model of effective human resource management of hotel staff in hotels in southern Thailand.

The Population:

The population of this study was 245 hotels staff in the south of Thailand, who were members of Thai Hotel Association.

The Participants

The sample size of this study was calculated through many processes proposed in previous studies. 245 hotels from 245 were selected and 1,500 of their staff were the participants of this study. The multi-stage method was employed to calculate the sample size to ensure the attainment of hotel staff in different areas in the South. The numbers of the staff depend on the ratio of the total amount of hotels in each province. Only those who have worked for at least six month were included, provided that they get through the period of probation (Chi & Gursoy, 2009). Simple random sampling was employed by drawing the names of all hotels in the south. After that the researcher contacted the hotels to request for corporation in doing questionnaire. If any hotels were inconvenient to do such task, the other ones were drawn again to substitute them.

The Research Tools

This study employed mixed-methods methodology. The major approach was quantitative and the qualitative was compliment to answer the research questions. The research tools included: A set of questionnaire in which six sections were featured;

Section 1: Background information of the respondents such as genders, age, status, work duration, salary, and educational level,

Section 2: The survey of attitudes toward human resource management, in which Ivancevich (2001)'s criteria were modified. They included four aspects; human resource procurement, human resource rewarding, human resource management, and protection and maintenance of human resources. This part featured 15 items,

Section 3: The commitment to the organizations, in which Mowday et al. (1982)'s criteria were adapted. It contained 9 items of three facets; trust and acceptance on the organizations, efforts for the organizations, desire to be a part of the organizations,

Section 4: The organizational citizenship behavior in which Organ (1988) was modified. Five categories with 15 items were featured; prosocial organization behavior, cooperation behavior, assistance behavior, endurance behavior, and consideration behavior,

Section 5: Fairness in the organizations was modified from Greenberg & Baron (2000)'s criteria. This featured 10 items regarding benefits and processes of fairness in the organizations,

Section 6: Quality of jobs was adapted from Peterson & Plowman (1993). This part included 4 sub-categories; work quality, workload, working hours, and expense with 12 items.

In order to ensure the reliability of the questionnaire, Cronbach's Alpha Coefficient was performed. Meanwhile, Revelle, W., Zinbarg, R., 2009's criteria were adopted. It was found that cronbach's alpha coefficient was between 0.70 – 0.95, which showed high reliability of the research tool.

Data Processing, Data Analysis, and Discussions

Descriptive statistics through SPSS was applied to provide explanations of background information of the participants and the intended factors. Each step can be explained as follows:

1. The analysis of background information of the participants, frequency, percentage, mean, and standard deviation (SD) were employed,

2. The statistical analysis of factors involved with calculation of mean, SD, skewness, and kurtosis in describing the distribution of each intended factor through probability. The targeted skewness was 2.0, while the kurtosis was 7.0 (Byrne, 2010, Kline, 2010),

3. The analysis of measurement model dealt with two steps; the analysis through assuring component and structural equation models (Anderson & Gerbing, 1988).

Table 1 Correlation of the Structural Equation Model

Statistical Values	Criteria (m ≥ 30)
X^2	Significant p-value
Comparative Fit Index (CFI)	CFI > 0.90
Standard Root Mean Square Residual (SRMR)	SRMR ≤ 0.08 (comparing to CFI, which is higher than .92)
Root Mean Square Error of Approximation	RMSEA < 0.07 (comparing to CFI, which is equal to 0.90 or higher)

Hair et al., (2010).

Results

According to the first section of the questionnaire, 61.6 percent of the participants were women and 38.4 percent were men. 54.3 percent of them aged between 25-35, while 21 percent aged between 36-45. Most of the participants were single (60.5%) with only 36.2

married. The majority of the participants worked for their hotels for 1-3 years (35.6%), the rest of them had 6 month to 1 year working duration (22.2%). In terms of their monthly incomes, 62 percent of the participants gained between 10,001 – 20,000 baht and 19.4 percent obtained less than 10,000 baht. Finally, most of the participants achieved bachelor's degrees (49%), while only 28.4 percent acquired high school certificates/ diplomas.

Concerning the sizes of the targeted hotels, 26 of them (61.90%) were medium-sized, 12 (28.57) were small, and only 4 of them (9.52) were large. The majority of the participants, 721 people (60.03%) worked for medium-sized hotels, 360 of then (29.97%) were with small-sized hotels, and 120 (9.99%) were with large hotels.

The mean and SD of overall human resource management of each province were evaluated. Results showed that Chumphon obtained the highest mean scores of 4.07. Concerning human resource procurement, Ranong acquired the highest mean scores at 4.45, followed by Chumphon with 4.13. In terms of human resource rewarding, Chumphon and Ranong also obtained the highest means, 4.11 and 4.01 respectively. Finally, Phang-Nga gained the highest mean scores of 4.15 regarding protection and maintenance of human resources.

Moreover, the overall mean scores and SD of human resource management in terms of hotel sizes showed that large hotels obtained the highest score of 4.05 followed by medium hotels, which attained 3.82, and 3.56 mean scores of small hotels.

The analysis of measurement model revealed that Chi-Square (X^2) was equal to 1003.966, df was 118, and RMSEA was 0.072. Besides, the RMSEA was from 0.075 to 0.084, CFI was equal to 0.952, and RMR was 0.022. This could be simplified that the correlation between the model and the empirical data was high.

Table 2 Discriminant validity of measurement models

Variable	CR	AVE	$\sqrt{\textbf{AVE}}$
Human Resource Management	0.86	0.60	(0.774)
Commitment	0.80	0.65	(0.806)
Organizational Citizenship Behavior	0.89	0.61	(0.781)
Organizational Justice	0.78	0.51	(0.714)
Efficiency	0.90	0.69	(0.830)

According to table the square root of average variance extracted of each latent variable in the same row and column (Hair et al, 2010) was its $\sqrt{\textbf{AVE}}$. Human resource management was 0.774, while organizational loyalty exceeded 0.806, and organizational citizenship behavior was 0.781. Besides, the organizational fairness was 0.714, and the work efficiency was 0.830. The results implied that the measurement model had discriminant validity.

This study was entitled, "Developing Structural Equation Model: Human Resource Management of Hotel Staff in Southern Thailand." The unit of analysis was personal level. The participants were hotel staff in 14 provinces in the South of Thailand, which included Krabi, Chumphon, Trang, Nakhon Sri Thammarat, Narathiwat, Pattani, Phang-Nga, Phuket, Yala, Ranong, Songkhla, Satun, and Surat Thani (Thai Hotel Association, 2012). 42 hotels among 245 of them were selected. Meanwhile, 1,201 staff, who worked for those hotels for more than 6 months provided responses through a set of questionnaire. It was equal to 80.06 percent of the questionnaire.

In addition to the quantitative research tools, a qualitative data source through an interview was adopted. 30 of the hotel staff were interviewed (3 from each hotel). The data analysis was bi-faceted. First, the quantitative analysis employed SPSS/ PC for windows in calculating frequencies, percentage, mean, SD, skewness, and kurtosis. Likewise, AMOS for windows was applied

to analyze the confirmative components and the structural equation model, which affected human resource management. The second section was the qualitative analysis, in which content analysis was applied.

Conclusion

      The first research objective was to investigate human resource management of the hotels in southern Thailand. With regard to the mean scores of the overall human resource management, almost every hotel obtained high mean scores of 3.16. Human resource procurement gained the highest mean scores of 3.97, and human resource development acquired the lowest at 3.82. Besides, considering the whole situations of human resource management in each province Chumphon and Phang-nga both exceeded the highest scores of 4.07, and Ranong was with 4.05. The one with the lowest scores was Nakhon Sri Thammarat.

      The second research question was to investigate the structural equation model for human resource development of hotel staff in southern Thailand. It was discovered that almost all factors fell into "high" scale. The analysis of background information, which facilitated the examination of the model for human resource management of hotel staff in southern Thailand, included the investigation of observed variable distribution and the relations between those variables. The results showed that obviously form mean, SD, skewness, and kurtosis, all the data was normally distributed and near to zero.

      The analysis of the confirmative components and the structural equation model was performed through the examination of confirmative components for the construct validity of a preferable structural equation model. Results showed that a preferable model should include 5 variables. At the beginning, the investigation of the model did not show high correlation between the model and the empirical

data. Thus, the model was revised and correlation between some observation variable were acceptable based on theories and previous studies as well as the correlation on SPSS. In this study, the model was revised by studying the relationship between the errors on 7 lines of the graph including the relationship between trust and organization acceptance and responsibility awareness behavior, the errors of the desire to be members of organizations and responsibility awareness behavior, the errors of responsibility awareness behavior and consideration behavior, the errors of responsibility awareness behavior and the quality of work, the errors of association behavior and cooperation behavior, and the errors of responsibility awareness behavior and endurance behavior. Meanwhile, the errors of assistance behavior and endurance behavior were also calculated. After the revision the X^2 was equal to 1003.966, the df was 118, and the RMSEA was 0.072. Besides, the RMSEA were from 0.075 to 0.084, CFI was equal to 0.952, and RMR was 0.022. To put it simpler, the correlation between the model and the empirical data was high. The minor variables could be explained as follows:

      1. It was found that confidence and acceptance in the organization were the best indicators for commitment to the organizations with the mean scores of 4.02, while the desire to be a part of the organizations was at 3.94.

      2. In terms of the prosocial organizational behavior, assistance behavior and cooperation behavior were the most desirable with the mean scores of 4.22 and 4.18 respectively.

      3. The results showed that fairness of rewarding was the most effective indicator of fairness in the organizations with the means scores of 3.88, while fairness of processes gained 3.86.

      4. Finally, expense with the mean of 3.99 was the best indicator of quality of jobs, followed by workload of which the mean was 3.95.

Discussions

The present study entitled, "Developing Structural Equation Model: Human Resource Management of Hotel Staff in Southern Thailand," aimed to 1) investigate human resource management of hotels in southern Thailand, and 2) to develop a structural equation model of effective human resource management of hotel staff in hotels in southern Thailand. The analysis of five variables of a structural equation model was performed. The discussions featured two aspects according to the research objectives. Regarding the first research objective, considering from all the four aspects of human resource management; procurement, rewarding, management, and protection and maintenance, most of the hotel staff perceived human resource management in their organizations as "High" with the mean of 3.82. Next, in terms of human resource management processes, recruitment obtained the highest scores. This means that those hotels in the south of Thailand have qualified methods for recruiting according to Beer et al (1984)'s human resource management concepts.

The Second Research Objective

With regard to the development of the structural equation model for effective human resource management of hotel staff in the south of Thailand, the most two prominent factors were recruitment (3.97), and protection and maintenance (3.89). Regarding the commitment to the organization, it was found that trust and organization acceptance and the desire to be a part of the organization had the highest impact on the commitment with the mean of 4.02 and 3.94 respectively. In terms of preferable member behavior the majority of the participants perceived assisting behavior as the dominant indicator with the mean scores of 4.22, while cooperation gained 4.18. Meanwhile, fairness of rewarding and processes were the outstanding indicators for organization fairness with the mean scores of 3.88 and 3.86 respectively. Finally, it was found that expense and workload were the most noticeable factors for quality of jobs at 3.99 and 3.95. The following section provides more explanations for the findings:

1. Mowday et al. (1982)'s concept was adopted in explaining commitment to the organization and it was discovered that staff had high commitment to their organizations. The mean score of trust and organization acceptance was the most significant indicator for organization commitment (4.02) with the mean score of 3.94 in the desire to be a part of the organizations, while efforts for the organizations gained the lowest at 3.81. Thus, hotel staff would have higher commitment to their organization provided that they have high acceptance and strong trust in the organization, which is congruent to Yang (2010).

2. Organ (1988)'s framework was employed on investigating the organizational citizenship behavior. In line with Morrison (1994) the results showed that assistance behavior gained the highest mean score of 4.22 with 4.18 of cooperation behavior. Besides, consideration behavior obtained the mean of 4.12 and endurance behavior mean score was 4.09. Lastly, prosocial organization behavior attained the lowest means core of 3.99.

3. According to Greenberg &Baron (2000)'s concepts, the participants had positive attitude toward fairness in their organizations. The mean score of the fairness of benefits was the higher than the fairness of processes with the mean scores of 3.88 and 3.86. The results were in line with Kwok Leung, Smith, Zhongming Wang and Haifa Sun, 1996.

4. Concerning work quality, Peterson & Plowman (1993)'s concepts were employed a baseline framework. The results showed high quality of work of the staff. To clarify, the highest mean score was on the expense (3.99). Besides, the workload obtained 3.95 with 3.94 for the working hours, and the lowest mean score was 3.74 for the work quality. The results support Max Weber (1911)'s Ideal Type of Bureaucracy, which explains that practitioners require skills to perform

effective tasks. Thus, promotion, development, shearing, and training for those staff could obviously result in reduction of resources, time, commanding processes, and rules. Likewise, Honda Soichiro and Yume O Chikarani (1953) suggest that when people could seek for their happiness in lives, they could work efficiently. In other words work quality is the condition for how people live their lives. The researcher mentioned three aspects of the quality; 1) time, 2) money, and pride, which is in line with Mohinder Chand, (2007).

Recommendations

Recommendations for Future Studies:

The present study was entitled "Developing Structural Equation Model: Human Resource Management of Hotel Staff in Southern Thailand." The population was hotels in the south of Thailand, which registered for Thai Hotel Association, while there are numbers of unregistered hotels in the areas. In addition, this study centered at investing the overall situations of human resource management of all hotels with no attention on sizes of the hotels. Thus, the study on the unregistered group in terms of their sizes would provide holistic results.

Reference

1. Jame C.Anderson & David W. Gerbing. (1988). **Structural equation modeling in practice: A review and recommended two-step approach.** *Psychological Bulletin, 103*(3), (1998), 411-423.

2. Chi, C.G., & Gursoy, D. (2009). **Employee satisfaction, customer satisfaction and Financial performance: an empirical examination.** *International Journal of Hospitality Management. 28* (2009), 245-253.

3. Deloitte-Travel Tourism & Leisure. (2006). **Focus on Thailand/hotel industry continues to attract interest/Deloitte Report.** Retrieved December 17, 2006, from http://www.Hospitality Net-Industry New-Focus Thailand Hotel Industry Continues to Attract Interest Deloitte Report.htm.

4. Getz, D., & Pertersen, T. (2005). **Growth and profit-oriented entrepreneurship among family business owners in the tourism industry.** International Journal Hospitality Management. 24 (2005) 2: 219-242.

5. Ivancevich, M. J., (2001). **Human Resource Management.** (8th ed.) New York: McGraw-Hill.

6. Morrison, W. E., (1994). **Role definitions and organizational citizenship behavior: The importance of the employee's perspective.** Academy of Management Journal.

7. Mowday, T. R., Porter W. L., & Steers M. R. (1982). **Employee-Organization Linkages: The Psychology of Commitment, Absenteeism and Turnover.** New York: Academic Press.

8. Organ, D.W. (1988). **Organizational Citizenship Behavior: The Good Soldier Syndrome.** Massachusetts: Lexington.