Factors Affecting the Tourism Expenditure of Chinese Tourists in Mueang District, Chiangmai Province

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Abstract

This study investigates the factors influencing the expenditure of Chinese tourists in Mueang District, Chiang Mai Province. Data were collected through questionnaires from 150 Chinese tourists. The findings reveal that income is the most significant factor affecting tourism expenditure. Specifically, for every 1,000-yuan increase in income, daily tourism spending rises by 346 yuan. To attract more Chinese tourists to Chiang Mai, the government should target specific groups by disseminating tailored tourism information. As most respondents in the study were self-employed, promotional efforts should focus on private business owners, offering special privileges to encourage their visits. Additionally, the development and promotion of natural attractions should be prioritized, as these were identified as the most preferred destinations among tourists.

Keywords: Chinese Tourists, Natural Attraction, Tourism Expenditure

1. Introduction

The tourism industry is an industry that plays an important role in the overall economic development of the country by using tourism spending patterns, reducing unemployment and helping to distribute income across different regions. Reduce the overlap caused by differences in people's income to less because the expenditure of tourists able to buy tourism products distributed in different regions, so tourism income is the same as income from export but in this case, the buyer has traveled to buy in Thailand. Therefore, tourism is as important to the Thai economy as in producing goods for export and the economic impact that tourism can have is Tourism helps to increase the value of domestic products (Atchara, 2012).

The growth of tourism worldwide, including Thailand, is continuously expanding. The main reason is that the population is educated and the income is increasing. Accessing tourist destinations is easier than ever. The population needs quality of life. In addition, the transportation is convenient, fast, and the cost is reduced. There is a liberalization of international travel. There is more open airspace (Ferrer-Rosell et. al, 2014).

The tourism industry in Thailand has grown over the years. Tourism is an important economic driver of the country. Looking back over the past 6 years, there will be a change of movement in the number of tourists coming to Thailand, which in 2013 there were only 26,546,725 tourists, the growth rate decreased by 6.54 percent (Table 1), Compared to the year 2018, the number of tourists is 38,178,194 (Table 1), the number is noticeably increased compared to 2013 and the growth rate has increased by 7.91 percent (Table 1) Revenues from tourism in Thailand is better in comparison with other countries, because when you look at revenue from tourists in 2018. The tourism income is ranked

4th in the world, which is 1,876,136.90 million baht and has a growth rate of 2.46 percent (Table 2).

Table 1. International Tourist Arrivals to Thailand by Country of Nationality

Country of Nationality	Number of tourists (person)					
	2013	2014	2015	2016	2017	2018
Grand Total	26,546,725	24,809,683 (-6.54%)	29,923,185 (20.61%)	32,529,588 (8.71%)	35,381,210 (8.77%)	38,178,194 (7.91%)
East Asia	15,911,375	14,603,825	19,908,785	21,593,285	23,642,669	25,974,407
ASEAN	7,282,266	6,641,772	7,920,481	8,585,251	9,119,941	10,196,287
China	4,637,335	4,636,298	7,936,795	8,757,646	9,805,753	10,534,340
Hong Kong	588,335	483,131	669,617	751,264	820,894	1,015,599
Japan	1,536,425	1,267,886	1,381,702	1,439,510	1,544,328	1,655,996
Korea	1,295,342	1,122,566	1,373,045	1,464,200	1,709,070	1,796,401
Taiwan	502,176	394,149	552,699	522,273	572,964	687,584
Others	69,496	58,023	74,446	73,141	69,719	88,200
Europe	6,305,945	6,161,893	5,631,438	6,174,957	6,511,195	6,759,855
The Americas	1,166,633	1,099,709	1,235,468	1,407,458	1,541,520	1,599,004
South Asia	1,347,585	1,239,183	1,404,271	1,523,555	1,770,166	1,982,212
Oceania	1,021,936	942,706	922,977	910,901	938,687	921,759
Middle East	630,243	597,892	658,278	747,219	789,847	739,487
Africa	163,008	164,475	161,968	172,213	187,126	201,470

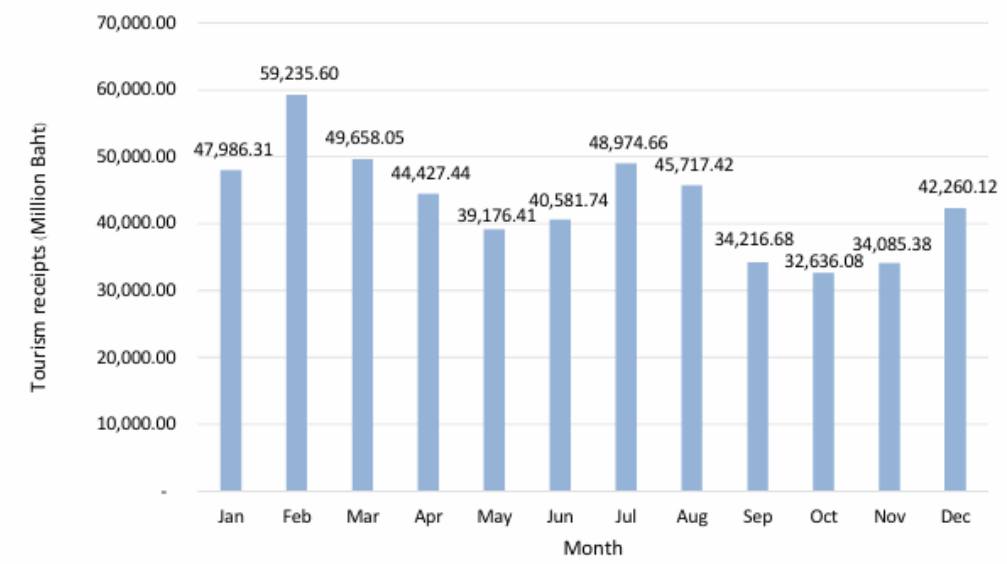
Note: The number in parentheses is Rate of change in percentage units (2013 = base year) Source: Division of Economy, Tourism and Sports, 2019

Table 2. Tourism receipts from International Tourist Arrivals

Country of Nationality	Tourism receipts (Million Baht)					
	2013	2014	2015	2016	2017	2018
Grand Total	1,207,145.82	1,172,798.17 (-2.85%)	1,457,150.28 (24.25%)	1,633,497.55 (12.10%)	1,831,104.99 (12.10%)	1,876,136.90 (2.46%)
East Asia	534,953.37	511,647.46	784,962.13	894,557.12	1,024,238.69	1,068,971.87
ASEAN	195,857.00	183,406.84	231,002.31	260,036.26	299,045.14	318,816.91
China	188,912.67	200,658.69	388,694.10	456,183.67	520,722.39	522,264.78
Hong Kong	23,318.17	19,146.73	28,054.18	29,701.31	32,917.30	40,265.44
Japan	57,728.20	48,539.60	56,430.67	60,823.67	66,679.99	80,420.36
Korea	49,697.91	43,569.40	56,847.18	63,365.85	75,506.73	71,158.50
Taiwan	17,036.88	14,436.65	21,140.72	21,282.38	24,936.34	30,953.75
Others	2,402.54	1,889.55	2,792.97	3,163.98	4,430.80	5,092.13
Europe	421,120.32	417,360.48	395,230.16	432,959.12	463,602.99	465,086.23
The Americas	76,504.62	74,635.47	81,611.06	99,159.70	109,104.11	111,246.21
South Asia	51,322.91	49,213.69	60,196.48	61,285.32	73,299.88	87,058.06
Oceania	71,208.47	67,509.16	72,963.70	70,837.11	73,908.31	67,512.64
Middle East	42,374.10	42,530.92	51,377.59	62,818.91	72,739.64	61,795.44
Africa	9,662.03	9,900.99	10,809.16	11,880.27	14,211.37	14,466.45

Note: Year 2013 Exchange rate 1 US$ = 30.73 Baht, Year 2016 Exchange rate 1 US$ = 35.30 Baht, Year 2014 Exchange rate 1 US$ = 32.48 Baht, Year 2017 Exchange rate 1 US$ = 33.94 Baht, Year 2015 Exchange rate 1 US$ = 34.25 Baht, Year 2018 Exchange rate 1 US$ = 32.31 Baht, The number in parentheses is Rate of change in percentage units (2013 = base year)

Source: Division of Economy, Tourism and Sports, 2019.



Source: Division of Economy, Tourism and Sports, 2019

Figure 1 Tourism receipts from Chinese tourists 2018

However, in 2018 The overall situation of international tourists in Thailand is in a slowdown, with the number of tourists arriving in Thailand increasing by only 7.91 percent (Table 1) and tourist revenue increasing by only 2.46 percent (Table 2) due to The Thai tourism industry has faced many challenges. Both the competition from many countries that give more importance to the tourism market. And the "boat crashes" in Phuket affecting the tourism industry in the second half. Causing tourists, especially the Chinese market, to cancel a lot of travel and have a significant impact on tourism revenue at the end of this year (China Xinhua News, 2018) from August to End of 2018 (Figure 1).

researchers are interested to study the factors that affect the expenditure of Chinese tourists in Mueang District, Chiang Mai Province. And

researchers will add factors of education level and purpose of tourism to be considered by using Multiple Regression Analysis.

2. Research Objectives

2.1 To examine the factors that affect the expenditure of Chinese tourists in Mueang District, Chiang Mai Province

3. Research Methodology

3.1 Data

The data I used in the research was primary data. Collecting data from questionnaires by inquiring from Chinese tourists traveling to the Muang district Chiangmai Province.

3.1.1 Population and sample

The population used in this study is Chinese tourists visiting the Muang district Chiang Mai Province, amount 10,534,340 people (Division of Economy, Tourism and Sports, 2019). The sample group used in this study was Chinese tourists visiting Muang district Chiangmai Province. And calculate the sample by using the finished table of Yamane (Yamane, 1967) by specifying the 95% confidence level and 5% error value (Kalaya, 2006). Therefore, from the calculation, the sample group will be equal to 400 people.

$$n = N/1 + N(e)^2 \quad (1)$$

By n = Calculated sample size

N = Population (here = 10,534,340)

e = The error is equal to 5% will get 0.05 Substitute

From the *Equation 1* $n = N/1 + N(e)^2$

$$= 10{,}534{,}340 /1 + 10{,}534{,}340(0.05)^2 \quad (2)$$

$$= 10{,}534{,}340 / 26{,}335.8525 \quad (3)$$

$$= 399.99 \quad (4)$$

The sample size is 400 people. In this research, the researcher will determine the size of the sample group of 400 people. With the sampling method purposive random sampling.

3.1.2 Location for data collection and Data collection period

This study will study factors that affect tourism expenditure of Chinese tourists in Mueang District Chiangmai Province. During January - February 2020.

3.1.3 Data analysis

Questionnaire in Chinese to ask Chinese tourists about travel expenditure in Mueang District, Chiang Mai Province. Which is divided into 2 parts. The first part shows the general structure details such as gender, age, status, occupation, education level and income. The second part studies the behavior and expenditure of tourism of Chinese tourists. And the expenditure will be divided into 3 parts which are accommodation, food and souvenirs

3.2 Methods

3.2.1 Theoretical Model

Multiple linear regression is used to explain the relationship between one continuous dependent variable and two or more independent variables. The independent variables can be continuous or categorical (dummy coded as appropriate) (Barry et al., 1972). By writing the equation as follows:

$$\hat{Y} = b_0 + b_1X_1 + b_2X_2 \ldots + b_kX_k + e \quad (5)$$

Where $\hat{Y}$ is the variable predicting the result. b_0 is a constant. b_1 is the regression coefficient of each independent variable (Xi Du et al., 2020).

3.2.2 Empirical model

Regression analysis is a set of statistical processes for estimating the relationships between a dependent variable and one or more independent variables. The most common form of regression analysis is linear regression, in which a researcher finds the line (or a more complex linear function) that most closely fits the data according to a specific mathematical criterion (Gray, 1966). From the Equation 5, the equation used in this research can be written as follows:

$$EXP_i = \beta_0 + \beta_1 INC_i + \beta_2 AGE_i + \beta_3 DURATION_i + \beta_4 EDUCATION_i + \beta_5 CAREER_i + \beta_6 PURPOSE_i + e_i \quad (6)$$

The symbols used to represent variables are as follows:

β_0 = A constant

$\beta_1 - \beta_6$ = The coefficient of the relationship between each independent variable and the dependent variable

e_i = Error term

EXP_i = The average daily expenditure of tourism within the Mueang District Chiang Mai Province of Chinese tourists (Yuan)

INC_i = Average incomes of Chinese tourists per month (Yuan / month)

AGE_i = Age of tourists (years)

$DURATION_i$ = Length of stay of tourists per visit

$EDUCATION_i$ = Tourist education level

$CAREER_i$ = Occupation of tourists

$PURPOSE_i$ = The purpose of traveling to Chiang Mai

Table 3 Hypothesis

Variable	Hypothesis
Income	+
Age	+,-
Duration of stay	-
Education	+
Career	+,-
Purpose of traveling	+,-

From Table 3, average incomes of tourists ($INCi$) and the average daily expenditure of tourism per day ($EXPi$) have the same direction. If average

income of tourists increases, it will also increase the average expenditure of travel per day. And on the contrary If the average income of tourists is reduced, the average daily expenditure will be reduced as well (Jang et al., 2004). In part of age of tourists ($AGEi$) People of different ages will have different travel expenditure, such as teenagers with low incomes and no savings. Making people in this age making less decisions about tourism which may be different from middle aged people with more incomes. As a result, middle aged people are more able to travel than teenagers, so age can influence both positive and negative expenditure (Perez et al., 2000). Duration of stay of tourists per visit ($DURATIONi$) and the average expenditure of travel per day ($EXPi$) will have a relationship in the opposite direction if tourists have a long stay, the average daily travel expenditure will be reduced. In the opposite direction if tourists have a short average stay, the average daily travel expenditure will increase (Saranya, 1991). And Education ($EDUCATIONi$) is a factor that makes people more knowledgeable, get to know more stories or news of other society and saw the importance of tourism and recreation. Therefore, it is expected that education levels will have positive influence on direct tourism expenditure (Natthakan, 1999). Career ($CAREERi$) differences will affect travel decisions. The effect of tourism expenditure can be both positive and negative. Because different occupations of tourists will result in the ability to travel differently, may be due to different incomes and free time (Ruchira, 2007). And the last part is purpose of traveling ($PURPOSEi$) If the purpose of the visit is different, it will affect the expenditure of tourist attraction differently and may have both positive and negative effects, for example, if the tourists come to relax, it will affect the average expenditure and duration of stay. Different from the tourists that come to the meeting (Perez et al., 2000).

4. Research Findings Summary

4.1. Results

In the study of factors that affect tourism expenditure of Chinese tourists in Mueang District Chiangmai Province, the data were collected from 150 tourists by using sampling method purposive random sampling. The study results can be divided into 4 parts which are

4.1.1. General structure details about Chinese tourists

From the questionnaire, shows the sample group between the ages of 18 - 45 years and the average monthly income is between 700 - 45,000 yuan, found that 80 Chinese tourists are male (53.3%) and were 70 females (46.7%), most of them are single status 91 people (60.7%) and marital status 59 people (39.3%). In term of career, found that most Chinese tourists have an own business of 59 people (39.3%), followed by 51 students (34%) and employed by 28 people (18.7%), Civil service / state enterprise (7.3%). And finally, 1 other occupation (0.7%). In the last part, found that most of the samples have a bachelor's degree education of 143 people (95.3%), followed by the secondary level of 3 people (2%), while tourists with a higher education level than bachelor's degree and others have the same amount of 2 people (1.3%)

4.1.2. Tourism behavior of Chinese tourists

From the questionnaire, shows that tourists have a daily cost between 300 - 7,500 yuan and have a stay between 2 - 10 days, found that most of the tourists come to rest, 84 people (56%), followed by traveling to Shopping 39 people (26%), while visitors arriving for other purposes are 14 (9.3%), which is close to business contact with 9 people (6%) and finally, tourists visiting relatives / 4 friends (2.7%), most of them traveled with friends 111 people (74%), followed by with families 15 people (10%), which is the

closest proportion to traveling together as a couple 14 people (9.3%) as for alone travelers, there are 8 people (5.3%) and finally, traveling with the company, 2 persons (1.3%). In term of Channels, found that most tourists received information from friends 79 people (52.7%), followed by Weibo 35 people (23.3%), which is the closest proportion to receiving information from China tourism 34 people (22.7%). And lastly, from other sources, 2 people (1.3%). In the last part, found that the 3 most popular tourist attractions are the first place is Wat Phra That Doi Suthep at 38.7%, the second is Chiang Mai Zoo at 29.3% and the third is Nimmanhaemin Road at 12.7%.

4.1.3. Tourists' expenditure

From the questionnaire, found that most of the tourists choose to stay at the guest house, 76 people (50.7%), followed by hotels with 62 people (41.3%) and finally, tourists choose to stay at the resort, Airbnb and others, the same number is 4 people (2.7%), most Chinese tourists will stay in the price of 1,000 -1,500 baht per day for 98 people (65.3%), followed by staying at the price of 1,501-2,000 baht per day for 24 people (16%) while staying under the price of 1,000 baht per day 22 people (14.7%) and tourists who choose accommodation at the rate of more than 2,000 baht per day 6 people (4%).

In term of Food type, it was found that the types of food that Chinese tourists like the most are the top 3 as follows: the first is Chinese food of 77 people (35.8%), the second is Thai food of 66 people (30.7%) and the third is Chiang Mai local food 53 People (24.7%), most tourists have food expenditure between 1,000 - 1,500 baht per day for 77 people (51.3%) and expenditure between 1,501 - 2,000 baht per day for 32 people (21.3%). For less than 1,000 baht per day, there are 26 people (17.3%) and finally, tourists have food expenditure of more than 2,000 baht per day, of 15 people (10%).

In the last part of the expenditure, found the souvenirs that most Chinese tourists like in the top 3 are as follows. The first is software, 62 people (34.8%). The second is ChaTraMue, number of 48 people (27%) and third is Miss Teen Lipstick, 33 people (18.5%), most tourists have souvenirs expenditure between 1,000 - 1,500 baht per day for 76 people (50.7%) and expenditure between Less than 1,000 baht per day for 33 people (22%) which is in proportion to the expenditure of 1,501 - 2,000 baht and finally, tourists have souvenirs expenditure of more than 2,000 baht per day, of 8 people. (5.3%)

In terms of product and service quality development. In the questionnaire, most of the tourists gave reasons for choosing accommodation, which is the price of accommodation suitable for the quality they received, 67.3%. Therefore, the owners should set the accommodation price as appropriate, not too expensive. In the part of the top three reasons for choosing food are restaurants near the accommodation (46%), restaurants with unique local characteristics (30%), and finally, tasting local food (19.3%). Therefore, restaurants should adjust the decor of the restaurant to be local and add more menus to local food. And the last part, reasons for buying souvenirs of Chinese tourists. The first is inexpensive products (58%), the second is the products have the symbol that shows Thai identity (31.3%) and in the end, the products are of good quality (26%). Therefore, the owner of the souvenir business should adjust the product price to be suitable for quality. The product should be durable and should show the Thai identity in the product.

4.1.4 Study about the relationship between expenditure and other factors of Chinese tourists in Mueang District, Chiang Mai Province.

Table 4 The final results by multiple linear regression method

Variable	Coefficient	Std. Error	Prob.
Constant	545.0797	1471.220	0.7116
Income	0.0567**	0.026584	0.0346
Age	-16.3810	30.2614	0.5891
Duration of stay	-86.7572	66.4728	0.1939
Education	375.0099	436.2701	0.3915
Career	209.2871	183.3688	0.2556
Purpose of tourism	53.4899	85.2452	0.5313
R^2	0.0727		
Adj.R^2	0.0338		
DW	1.643		
F:	1.8693		

Note: *, **, *** Show significance at 1%, 5% and 10% level.

The results from Table 4, show a 95% confidence interval with only 1 variable have significant to the tourism expenditure of Chinese tourists in Mueang District Chiangmai Province. It is income. However, the most not significant variables are age, purpose of tourism, Education, Career, and the last one is Duration of stay.

From above information, researcher found that the most effective factors that affect tourism expenditure of Chinese tourists is income. That's mean, Chinese tourists have an average expenditure of travel per day without any other factors involved, equal to 545.0797 yuan. As for the monthly income of tourists, it is a positive assumption which means that if the tourist's income increases by 1,000 yuan, the expenditure of tourism will increase by 346 yuan per day.

Most variables have not significant to the tourism expenditure of Chinese tourists because the researchers collected not enough questionnaires. Which results in a low relationship between independent variables and dependent variables. And can be explained as follows: R squared is equal 0.0727 means can explain 7.27% and another 92.73% is can't explain, Adjusted R squared is 3.38%, Durbin Watson is 1.643 and F statistic is 1.8693

4.2. Discussions

Average incomes of tourists and the average daily expenditure of tourism per day have the same direction. That's mean, if average income of tourists increases, it will also increase the average expenditure of travel per day. And on the contrary If the average income of tourists is reduced, the average daily expenditure will be reduced as well. Consistent with Jang et al. (2004), they study about understanding travel expenditure patterns and the result of income level and investigated the determinants of travel expenditure in the US. Is the same direction.

The age of tourists and the average daily expenditure of tourism per day have not the same direction. That's mean, people of different ages will have different travel expenditure. Consistent with Perez et al. (2000), they study about Tourism expenditure for mass tourism markets and the result of age and Tourism expenditure is not the same direction.

Duration of stay of tourists per visit and the average daily expenditure of tourism have not the same direction. That's mean, if tourists have a long stay, the average daily travel expenditure will be reduced. In the opposite direction if tourists have a short average stay, the average daily travel expenditure will increase. Consistent with Saranya (1991), she studies about factors determining spending behavior and duration of stay of foreign tourists.

and the result of duration of stay of tourists per visit and the average daily expenditure of tourism have not the same direction.

Education and the average daily expenditure of tourism have the same direction. That's mean, tourist has more knowledge, get to know more stories or news of other society and saw the importance of tourism.

Career and the average daily expenditure of tourism have the same direction. That's mean, career differences will affect travel decisions. Consistent with Ruchira (2007), she studies about factors determining tourism costs of foreign tourists within Chiang Mai Province. and the result of career and the average daily expenditure have the same direction.

Purpose of traveling and the average daily expenditure of tourism have the same direction. That's mean, the purpose of the visit is different, it will affect the expenditure of tourist attraction differently. Consistent with Perez et al. (2000), they study about Tourism expenditure for mass tourism markets and the result of Purpose of traveling and the average daily expenditure of tourism have the same direction.

5. Discussion of Research Findings

This research studies about Factors that affect tourism expenditure of Chinese tourists in Mueang District Chiangmai Province by focus on income, age, duration of stay, education, career and purpose of traveling from 150 people of sample. From the result, income is the most effective factors that affect tourism expenditure of Chinese tourists. That's mean, if the tourist's income increases by 1,000 yuan, the expenditure of tourism will increase by 346 yuan per day.

To persuade Chinese tourists to come to Chiang Mai government should disseminate tourism information to target groups. In this research, most of the tourists are own business. Therefore, should be promoted by focusing on private business people. There may be special privileges given to these people if they are traveling to Chiang Mai. And should focus on the development of natural attractions because results from the questionnaire, the two most favorite tourist attractions in Chiang Mai are natural attractions.

For future research Should study other provinces that have tourism potential similar to Chiang Mai such as Chon Buri and Phuket to compare with this study. Because Chon Buri and Phuket are the top three destinations for foreign tourists.

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