# FACTORS INFLUENCING CONSUMER CHOICE OF RECREATIONAL TOURISM ACTIVITIES AFTER THE COVID-19 CRISIS

# Komsit Kieanwatana, Srinakharinwirot University

# ABSTRACT

This study examines the factors that affect tourists' purchase decisions. This quantitative study uses data collected from 400 Thai tourists via a questionnaire survey. The results show that different levels of education affect the decision-making process regarding recreational tourism activities after the COVID-19 crisis. Marketing mix factors which affect the decision-making of tourists in such a scenario include the 4S's, namely, Sanitary Product, Sincere Promotion, Satisfied Price and Communication, and Sudden Distribution. Additionally, Sanitary Product and Sincere Promotion positively affect the purchasing of recreational tourism activities after the COVID-19 crisis.

Keywords: Recreational Tourism, Marketing Mix, COVID-19.

# **INTRODUCTION**

Recreational tourism activities include those activities which tourists partake in, in their free time while travelling. It fosters relaxation, fun, entertainment, and enhances new physical, emotional, social, and mental experiences. Recreational tourism as a fundamental factor in strengthening the foundations of society focuses on the development of the people, and economy of the country (Sawangmek, 2015). Recreational tourism is thus highly relevant to the term Tourism Industry, which consists of many types of businesses, including direct-businesses and indirect-businesses or support businesses. In addition, social tourism offers relaxation, along with gaining knowledge and understanding of different cultures. The tourism industry is a source of income in both domestic and foreign currencies, which contributes greatly to the stability of the payment balance. Tourism also plays a role in encouraging the widespread use of resources collected by local residents and folk crafts sold as souvenirs for tourists (Wannathanom, 2009).

The situation of the COVID-19 that has occurred around the world since January 2020, has affected tourism businesses in terms of policy, business programs, as well as travel business model. Around the world, aircrafts have confronted tremendous income misfortunes. Airlines reported a net misfortune of \$5.2 billion within the, to begin with quarter of 2020 (Bureau of Transportation Statistics, 2020). In April 2020, usable seat kilometers decreased by nearly 90% year over year, indicating a dramatic decline in international air travel (Suau-Sanchez et al., 2020). COVID-19 outbreaks also may be triggered by cruise ship movements. The cruise ship Ruby Princess became the largest COVID-19 epicenter in Australia. On March 19, 2020, the Ruby Princess disembarked approximately 2700 passengers at the Port of Sydney. 130 passengers and crew members who had flu-like symptoms were screened for the new virus when they arrived (Reuters, 2020).

With the coronavirus outbreak in 2019 across Thailand, the pandemic had a huge impact on Thailand's economy and tourism, with the temporary closure of all operators and their tourism or service businesses from the end of January 2020. While over 4 million workers in the tourism industry have been affected, some have either permanently been terminated, face loss of temporary jobs, or have faced salary cuts. There is thus, a significant change in the structure of the travel business and the way the tour operators' work. (Prachachat, 2020a & b) Thailand's tourism sector is expected to take more than three years to recover as tourism operators prepare to resume normal service and take the time to reassure tourists and believe that after the end of the crisis, competition in the tourism market will increase as all markets will have to make heavy efforts. Therefore, it is necessary to remind yourself not to enter the competitive game on the price that will lead to further difficulties in the future (Prachachat, 2020a).

Based on the above priorities, the purposes of this paper are to study demographic factors that influenced the decision to purchase recreational tourism activities of Thai tourists after the COVID-19 crisis and to study the impact of market factors on the tourists' decision to purchase recreational tourism activities after the COVID-19 crisis. Following the COVID-19 crisis, the new normal for tourists will thus guide researchers towards the planning of driving sales to meet the needs of consumers, as well as manufacturers and distributors of recreational activities. It is thus, useful to improve, plan and formulate strategies to meet the needs of consumers after the COVID-19 crisis.

#### LITERATURE REVIEW

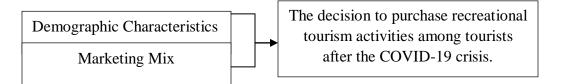
Each tourist has different factors in many ways. Specifically, demographic characteristics such as gender, age, education, and socioeconomic status, where tourists with different demographic characteristics will have different tourism behaviors as well. Therefore, demographics correlate to tourism in many areas, where demographic differences result in different tourists' travel behavior according to gender, age, education level, and socioeconomic status. These factors influence the decision of the destination, style of tourism, travel time, and choice of tourism service, are due to different needs, purchasing power and value, etc. (Swabrooke & Horner, 1999; Brown, 2015; Kieanwatana et al., 2019). From the above discussion they can be assumed as:

- $H_1$  Different sexual demographic factors affect the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis.
- *H*<sub>2</sub> Different generational demographic factors affects the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis.
- $H_3$  Different marital status demographic factors, the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis.
- $H_4$  Different educational demographic factors affect the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis.
- $H_5$  Different occupational demographic factors affect the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis.
- $H_6$  Different average monthly income demographic factors affect the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis

Purchasing decisions are the most important measure of success in any marketing and business corner, with consumers beginning to know and become familiar with. More and more brands arise from the fact that they recognize the advantages of that brand and gain favor. When a demand arises, they will search for additional information for that brand for themselves. The marketing mix helps consumers determine how satisfied they are between the products they are most satisfied with. The purchase decision was then made as a purchase intention and a decision to buy in the end. The product meets the needs of the target customers and is sold at an acceptable price, which consumers are willing to pay. They think it's worth it, including sales and buying behavior to facilitate customers by trying to convince them of the right goods and behaviors. To respond to the needs of and obtain loyalty from target customers, controllable marketing mix factors should be used (Kotler, 2003 & 2009; Kotler & Keller, 2016; Chalitpol et al., 2019; Kieanwatana et al., 2020). From the discussion, the hypothesis can be formulated as:

- *H*<sub>7</sub> *Product factors affect the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis.*
- $H_8$  Price factors affect the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis.
- $H_9$  Place factors affect the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis.
- $H_{10}$  Promotion factors affect the decision to purchase recreational tourism activities among tourists after the COVID-19 crisis.

Based on the mentioned issues, the past studies reported that the factors that affect tourists' purchase decisions to build a theoretical framework of the study given as Figure 1:



# FIGURE 1

# THEORETICAL FRAMEWORK OF THE STUDY SHOWS THE RELATIONSHIP BETWEEN DEMOGRAPHIC CHARACTERISTICS, MARKETING MIX AND TOURIST' DECISIONS

# **RESEARCH METHODOLOGY**

# **Population and Samples**

The population included tourists with Thai nationality aged 18 and over. The sample size was calculated based on the number of Thai nationals aged 18 and over from the 2018 Thai tourist numbers of 227,774,133 (National Statistical Office, 2020) using the Taro Yamane formula (Yamane, 1967) with 95% confidence, no more than 5% error in sampling. Accidental sampling was also employed. Therefore, the size of the sample in this study was 400 people.

# **Data Collection**

This quantitative research used questionnaires as a data collection tool which approved by IOC value is 0.86 and the Cronbach's alpha coefficient value is 0.91 (Rovinelli & Hambleton, 1977; Nunnally & Bernstein, 1994). The Ethics Committee considered the questionnaire and approved it for the research project involving human subjects, with the Srinakharinwirot University, certification number SWUEC/E-157/2020. The questionnaire collection period to collect 400 questionnaires is divided into two phases: Phase I: A total of 158 questionnaires were collected from November 28, 2020 to December 20, 2021 at tourist attractions located in Bangkok including Rattanakosin Island, Chatuchak Weekend Market, MBK Shopping Mall, Siam Square, Railway Market, Yaowarat Road, and Lumpini Park, etc. Phase II: On January 4, 2021, the Thai government announced the temporary closure of these tourist spots due to the COVID-19 outbreak. In some areas of Bangkok, Data collection was adjusted to online channels, Google Forms, thus collecting 242 copies from the January 5, 2021 to February 2, 2021. The accidental sampling was performed on average demographic factors and the process of giving out questionnaires to respondents. First, the researchers asked, "Do you voluntarily agree to respond to the questionnaire?" and explained the preliminary research statement. If respondents voluntarily agreed to respond to the questionnaire, the researcher would then distribute the questionnaire to respondents. The researcher later asked respondents to read and respond to the questionnaires themselves. If in doubt, the researcher would answer that question. In the next step, after the respondent has successfully answered the questions, the questionnaire was then checked for completeness, the data was coded and the results sent to the researcher for analysis.

#### Data Analysis and Hypothesis Testing

The process to analyse the data and test the hypothesis of the research with confidence level of 95%. Inferential Statistics is a study of hypothesis testing data using statistical package. This research uses the following statistics:

- Factor Analysis to group related factors into same element.
- Multiple Regression Analysis to Test Research Hypotheses
- Independent-Sample T-Test analysis to compare differences between 2 independent variables
- One-way variance analysis (ANOVA) to compare differences between more than 2 variables. The researchers analysed the differences individually by Scheffe's method, with a statistical significance test of 0.05.

#### **RESEARCH RESULTS**

# Analysis of Demographic Factors Affecting Purchasing Decisions of Recreational Tourism among Tourists after the COVID-19 Crisis

In term of H1, 2, 3, 5, and 6, upon testing the sexual factors, generation factors, marital status, occupational factors, and average income factors that influence the decision to purchase recreational tourism activities after the COVID-19 crisis, the H<sub>0</sub> acceptance test showed that all of them did not affect decision making at a significant level of 0.05. (H1: T = -1.421, P = 0. 156, H2: F = 1.265, P = 0.286, H3: F = 0.460, P = 0.632, H5: F = 2.048, P = 0.087, H6: F = 0.738, P = 0.566).

Table 1 A COMPARISON OF THE TO PURCHASE RECREATIONAL TOURISM ACTIVITIES CRISIS THAT CLASSIFIED BY EDUCATION LEVEL										
Marketing mix	Below bachelor's degree		Educational Level Bachelor's degree		(N = 400) Higher than bachelor's degree		Total		F	Р
	$\overline{x}$	S.D.	$\overline{x}$	S.D.	$\overline{x}$	S.D.	$\frac{-}{x}$	S.D.		
Product	4.28	0.541	4.43	0.613	4.38	0.525	4.38	0.590	2.339	0.098
Price	4.01	0.599	4.32	0.661	4.11	0.637	4.22	0.657	8.995	0.000*
Place	4.24	0.527	4.40	0.550	4.16	0.508	4.34	0.547	5.585	0.004*
Promotion	4.14	0.579	4.32	0.617	4.15	0.532	4.26	0.604	3.655	0.027*
Total	4.17	0.470	4.37	0.517	4.20	0.453	4.30	0.507	6.547	0.002*

Note: \*p < 0.05 ( $F_{2.397} = 2.996$ )

On the contrary, Hypothesis 4, upon testing educational factors that influence the decision to purchase recreational tourism activities after the COVID-19 crisis, the  $H_0$  rejection test showed that different levels of education affected the decision making at a significant level

of 0.05 (F=6.547, P=0.002) as Table 1, and that respondents with a lower bachelor's degree had different decisions from those with a bachelor's degree.

#### **Analysis of Factors in Marketing Mix**

#### Analysing suitability of independent variables using factor analysis method

KMO (Kaiser-Meyer-Olkin) and Bartlett's Test of Sphericity was employed to test the suitability of independent variables on their appropriateness to be used in factor extraction methods (Kaiser & Rice, 1974). The results showed that the KMO value was 0.941. Bartlett's Test of Sphericity found that chi-square=4126.00 and Sig. =0.000 as shown in Table 2. Therefore,  $H_0$  is rejected, indicating that the 21 independent variables are related to each other, thus concluding that they are appropriate to use in factor analysis techniques and can be used to analyse the following factors.

Table 2					
KMO AND BARTLETT'S TEST VALUES OF INDEPENDENT VARIABLES					
Kaiser-Meyer-Olkin Measure of Sampling Adequacy. 0.941					
	Approx. Chi-Square	4126.000			
Bartlett's Test of Sphericity	df	210			
	Sig.	0.000			

#### **Factor clustering (Factor analysis)**

In conclusion, based on the above tests, all variables are suitable to use in factor analysis techniques. The researchers extracted the Principal Component Analysis (PCA) and to make the weight of the elements in the extractable factors clearer. Therefore, varimax spindle rotation method is used and the criteria for determining the appropriate number of factors was based on the Eigenvalue value of more than 1 and that the factor loading value of the variable in the factor must not be less than 0.2 (Kerlinger, 1986).

When extracting the Principal Component Analysis (PCA), Initial Eigenvalues were found to contain a total of 21 independent variables, all of which could be grouped into four new factor groups, which accounted for 60.996% of the variance of all original independent variables; and when combined with the weight value of the element after the axis of the spindle rotation, the factors can be grouped into 4 groups, the marketing mix factors affecting the purchasing decisions of recreational tourism among tourists after the COVID-19 crisis (4S's) and new factors obtained from the factor analysis.

The analysis results suggested that four factors affect the purchasing decision of recreational tourism activities among tourists after the COVID-19 (4S's) crisis, as shown in Table 3. In accordance with the results obtained from the grouping, the following factors were inferred to have an effect on the research hypothesis.

- $H_{11}$  Sanitary Product factors affect the Thai tourists' decision to purchase recreational tourism activities after the COVID-19 crisis.
- $H_{12}$  Sincere Promotion factors affect the Thai tourists' decision to purchase recreational tourism activities after the COVID-19 crisis.
- $H_{13}$  Satisfied Price and Communication factors affect the Thai tourists' decision to purchase recreational tourism activities after the COVID-19 crisis.
- $H_{14}$  Sudden Distribution factors affect the Thai tourists' decision to purchase recreational tourism activities after the COVID-19 crisis.

Table 3 FACTOR GROUPS OBTAINED FROM FACTOR ANALYSIS						
Factor 1 Sanitary Product	Factor 2 Sincere Promotion					
<ol> <li>Tourist recreation agencies have a good and reliable safety image.</li> <li>Tourist recreation agencies have managed to reduce the risk of spreading COVID-19 appropriately.</li> <li>The tourist recreation agencies have adapted the activity model accordingly for the new normal.</li> <li>Tourist recreational agencies have appropriately improved the location or/and landscape according to COVID-19 prevention measures.</li> <li>Tourist recreation agencies provide materials and equipment to prevent spread of COVID-19.</li> <li>The personnel who take care of recreational activities have knowledge about preventing the spread of COVID-19.</li> </ol>	<ol> <li>Tourist recreation agencies regularly promote real information to customers.</li> <li>Tourist recreation agencies have a marketing promotion model suitable for the COVID-19 pandemic.</li> <li>Tourist recreation agencies are encouraged in accordance with the government's Thai tourism stimulus in good faith.</li> <li>Salespeople can advise on how to behave in recreational activities after the COVID-19 crisis clearly</li> <li>Tourist recreation agencies are deploying strategies in the appropriate marketing communications technology strategies.</li> </ol>					
Factor 3 Satisfied Price and Communication	Factor 4 Sudden Distribution					
<ul> <li>(1) The price of recreational activities is reasonable compared to the quality of the activity.</li> <li>(2) The price of recreational activities is worth it compared to other recreational activities in the same category last year.</li> <li>(3) The price of recreational activities is negotiable.</li> <li>(4) Tourist recreation agencies have accurate advertising and public relations through various media following the COVID-19 crisis in a comprehensive and interesting way</li> <li>(5) Tourism recreation establishments organize promotions or privileges after the crisis COVID-19.</li> </ul>	<ol> <li>(1) There are many distribution channels</li> <li>(2) Distribution channels have modern payment methods suitable for preventing the spread of COVID-19</li> <li>(3) Distribution channels are easily and conveniently accessible.</li> <li>(4) Distribution channels are fast and accurate.</li> <li>(5) The duration of the distribution channels are appropriate.</li> </ol>					

# Linear Regression Analysis to study factors affecting the decision to purchase recreational tourism activities of Thai tourists after the COVID-19 crisis

Linear regression analysis equations were used to study factors affecting the recreational tourism activities among tourists after the COVID-19 crisis. The four new market factors obtained from the analysis of the factors were used to analyse the correlation. Correlation, the relationship between independent variables together and the relationship between independent variables and variables was followed to prove that independent variables do not have a significant correlation with each other.

Factor Score based on analysing the factors and scores of opinion levels affecting the decision to purchase Thai tourists' recreational tourism activities after the COVID-19 crisis, was gathered for multiple linear regression equations using data from 400 completely examined questionnaires and to set a significant implication of 0.05 when determining the regression coefficient by all entries. The results of the analysis are as follows;

Table 4 MODEL SUMMARY							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	0.234 <sup>a</sup>	0.055	0.045	1.42918			

According to Table 4, the R Square coefficient is 0.055, meaning that all 4 variables can explain the Thai tourists' decision to purchase recreational tourism activities after the COVID-19 crisis by 5.5%. The remaining 94.5% is due to the influence of other variables.

From Table 5, linear regression equations can be analysed by defining the following assumptions:

- $H_0$  The four factors that were analysed did not significantly affect the tourists' decision to purchase recreational tourism activities after the COVID-19 crisis.
- $H_1$  At least one factor was analysed for factors that significantly affected the tourists' decision to purchase recreational tourism activities of tourists after the COVID-19 crisis.

A test at a significant level of 0.05 showed that the test results rejected  $H_0$  and accepted  $H_1$ . In conclusion, there is at least one factor that can be analysed for the tourists' decision to purchase recreational activities after the COVID-19 crisis with a value of P=0.000.

Table 5           OVERALL HYPOTHESIS TEST RESULTS IN THE REGRESSION EQUATION							
ANOVA <sup>a</sup>							
Model		Sum of Squares	df Mean Square		F	Р	
	Regression	46.784	4	11.696	5.726	$0.000^{b}$	
1	Residual	806.813	395	2.043			
	Total	853.598	399				

	Table 6 MULTIPLE REGRESSION ANALYSIS RESULTS								
Coefficients <sup>a</sup>									
Model		Unstandardized Coefficients Standardized Coefficients		Т	Р				
		В	Std. Error	Beta					
	(Constant)	2.811	0.639		4.397	0.000			
	Safety Product	0.695	0.170	0.280	4.092	0.000			
1	Sincere Promotion	-0.634	0.206	-0.269	-3.075	0.002			
	Satisfied Price and Communication	-0.102	0.202	-0.042	-0.505	0.614			
	Sudden Place	-0.035	0.183	-0.013	-0.192	0.848			

According to Table 6, the results of the regression equation analysis of the multiplication of the market mix factors obtained from the analysis of factors affecting the tourists' decision to purchase recreational tourism activities after the COVID-19 crisis were statistically significant at 0.05. Thus test results accept H<sub>0</sub>. There are 2 factors that influence the decision to purchase recreational tourism activities namely Sanitary Product factors (T=4.092, P=0.000) and Sincere Promotion factors (T=-3.075, P=0.002).

# **DISCUSSION AND CONCLUSION**

Tourists showed that different demographic characteristics influenced their decision to purchase recreational tourism activities after the COVID-19 crisis; except for those with different levels of education, which affects the decision. After the COVID-19 crisis, tourism has learned from the changes in human society. Tourists will begin to adapt to a new trajectory so that they can protect themselves and help prevent the virus from spreading to others. Tourism after the COVID-19 pandemic requires more learning experience than the past, in areas like personal hygiene care, advancing the cashless society in Thailand, new normal of traveling, etc. If tourists have a high level of education, they will experience social opportunities as adaptation affects the decision to purchase recreational activities more than tourists with lower levels of education. Education levels affect the global tourism industry positively and negatively (Khan et al., 2020). Education level is thus related to the decision-making process. It is especially important for

creation of a marketing platform with promotional activities adjusted to different market segments differentiated by education levels (Djeri et al., 2017)

Sanitary Product and Sincere Promotion factors positively affect the Thai tourists' purchase of recreational tourism activities after the COVID-19 crisis significantly. After months of cleanliness and germ-free treatment, attention to pathogens will become the new normal. Tourism will face the same changes. Tourists will choose attractions and accommodations depending on factors like cleanliness, safety, germs first, based on cleaning system, guest care measures, etc. Health and hygiene are of crucial importance for many tourists choosing the destination and planning to visit a country. Health care of tourists, sanitation and a safety guarantee for disease prevention are important factors to attract tourists (Jovanović et al., 2015). Additionally, increasing the level of quality, engagement, happiness, and affective experiences is a fundamental advancement in the purpose generation process because these factors enhance the effect of its predecessors on behavioral goals (Chienwattanasook & Jermsittiparsert, 2019).

On Sincere Promotion factor, marketing after the COVID-19 crisis will focus on fairness to customers and creating credibility that will become the basis of new tourism marketing strategies, rather than traditional marketing that focuses on creating the value of tourism goods and services. The COVID-19 crisis has contributed to tourists' behavior in that they are now learning to check if the product and service information is accurate. Therefore, travel marketing communications to attract the attention of tourists in this era do not require fair and trust marketing promotion to change the truth. The New Normal customer behavior is the affinity for the truth because they always have access to the product information online (Pattaratanakun, 2020). The influence of tourism information sources habitually depends on how trustworthy they become (Brogan & Smith, 2009). Fongtanakit et al. (2019) also argued that the element of trust is critical in establishing long-term supply chain collaboration among medical tourism supply chain members. Trust in a destination brand also has a high influence in developing loyalty towards that destination. When a visitor trusts a destination brand and is willing to rely on it, they may form a positive visiting intention towards the brand (Chatzigeorgiou & Christou, 2016).

#### **Limitation of This Study**

This research is limited to conducting research from the global situation of the coronavirus infection (COVID-19) epidemic, causing many countries to adopt a lock-down measure, including Thailand. In order to prevent travel to spread the disease, the researcher has to change the format of research data collection.

#### Recommendations

- 1. The government should formulate policies to promote the post purchase crisis of Thailand's tourism industry. In addition, the government should build up the confidence of domestic tourists.
- 2. The government sector should set policies to assist business operators, recreational tourism, or related activities, such as legal measures to aid SMEs and maintain the stability of the national tourism market, Measures for soft loans, debt moratoriums due to the COVID-19 crisis, etc.
- 3. The private sector adjusts marketing activities where appropriate, such as changes in tourism behavior. Update customer information regularly. Implementation of safety measures and quality service standards to ensure safety.

#### ACKNOWLEDGMENT

This research was financially supported by the research grant of Faculty of Environmental Culture and Ecotourism, Srinakharinwirot University. (Grant no. 449/2563).

#### REFERENCES

Brown, M. (2015). *Visa global travel intentions study*. Retrieved September 25, 2019 from https://bit.ly/20QQPb9 Bureau of Transportation Statistics. (2020). *First quarter 2020 U.S. airline financial data*. Retrieved September 20,

2019 from https://www.bts.gov/newsroom/first-quarter-2020-us-airline-financial-data

- Chatzigeorgiou, C., & Christou, E. (2016). Destination branding and visitor brand loyalty: Evidence from mature tourism destinations in Greece. *Tourismos: An International Multidisciplinary Journal of Tourism*, 11(5), 102-123
- Chienwattanasook, K., & Jermsittiparsert, K. (2019). Factors affecting art museum visitors' behavior: A study on key factors maximizing satisfaction, post-purchase intentions and commitment of visitors of art museums in Thailand. *International Journal of Innovation, Creativity and Change*, 6(2), 303-334. Countries. *Procedia Economics and Finance*, 19(2015), 373-382.
- Djeri, L., Bozic, S., Stamenkovic, P., & Nagy, I. (2017). The influence of education level on choosing coastal regions as tourist destinations. *Geographica Pannonica*, 21, 96-105.
- Fongtanakit, R., Somjai, S., Prasitdumrong, A., & Jermsittiparsert, K. (2019). The determinants of the medical tourism supply chain of Thailand. *International Journal of Supply Chain Management*, 8(6), 291-300.
- Jovanović, S., Janković–Milić, V., & Ilić, I. (2015). Health and hygiene importance for the improvement of tourism sector competitiveness in Serbia and the South-Eastern Europe
- Kaiser, H.F., & Rice, J. (1974). Little Jiffy, Mark IV. Educational and Psychological Measurement, 34(1), 111-117.
- Kerlinger, F.N. (1986). Foundations of Behavioral Research (3<sup>rd</sup> ed.). Holt, Rinehart and Winston, New York.
- Khan, N., Hassan, A.U., Fahad, S., & Naushad, M. (2020). Factors affecting tourism industry and its impacts on global economy of the world. *Available at SSRN 3559353*.
- Kieanwatana, K., Kitjachanchaikun, K., Rabriab, C., Ponchana, M., Charam, B., Chaloemwan, N., Lueangon, N., Pinturong, P., Krongsuk, P., & Phornphrompakdi, W. (2019). Tourists' responses towards marketing communications of infl ight magazine. *Rmuti Journal Humanities and Social Sciences*, 6(2), 76-91.
- Kieanwatana, K., Pharsuk, U., Srithong, S., Saynaratchai, K., & Panupat, C. (2020). Risk perception of generation Z tourists on hotel and accommodation reservation through the internet. *Business Review*, *11*(2), 25-36
- Kotler, P. (2003). Marketing Management (11th ed.). Upper Saddle River, NJ: Prentice -Hall.
- Kotler, P. (2009). *Marketing management* (5<sup>th</sup> ed.). New Jersey: Pearson Prentice Hall.
- Kotler, P., & Keller, K.L. (2016). *Marketing Management* (15<sup>th</sup> ed.). Pearson Education.
- National Statistical Office. (2020). Summary of domestic tourism situation by province, 2009 2018. Retrieved October 18, 2020 from https://nces.ed.gov/pubs2018/2018017.pdf
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory* (3<sup>rd</sup> Ed). New York: McGraw-Hill.
- Pattaratanakun, A. (2020). *4T new marketing principles for the COVID-19 era*. Retrieved February 14, 2021, https://www.youtube.com/watch?v=x7\_vByn\_t0A
- Prachachat. (2020a). *Turning Point for "Thailand Tourism" covid-19 crisis creates a new balance*. Retrieved February 14, 2021 from https://www.prachachat.net/tourism/news-451825
- Prachachat. (2020b). COVID-19 Thailand Travel Guide Business (required) ready to change .Retrieved February 14, 2021 from https://www.prachachat.net/tourism/news-454147
- Reuters. (2020). Corrected-update 3-cruise ships responsible for jump in Australia coronavirus cases. Retrieved February 14, 2021 https://jp.reuters.com/article/health-coronavirus-australiaidUKL4N2BG5A9
- Rovinelli, R.J., & Hambleton, R.K. (1977). On the use of content specialists in the assessment of criterionreferenced test item validity. *Dutch Journal of Educational Research*, 2, 49-60.
- Sawangmek, T. (2015). The role of tourism recreation in country development. *The Golden Teak: Humanity and Social Science Journal*, 21(1), 39-53.
- Suau-Sanchez, P., Voltes-Dorta, A., & Cugueró-Escofet, N. (2020). An early assessment of the impact of COVID-19 on air transport: Just another crisis or the end of aviation as we know it?. *Journal of Transport Geography*, 86, 102749.
- Swabrooke, J., & Horner, S. (1999). Consumer behavior in tourism. New Delhi: Bulth-Heinemann.
- Wannathanom, C. (2009). Tourism Industry. 3 LADA.

Yamane, T. (1967). Statistics, an introductory analysis (2<sup>nd</sup> Ed). Harper and Row.