



Resident perceptions toward tourism development in Nui Coc Lake, Vietnam: A social exchange theory approach

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Abstract

This study explores local resident's perceptions of tourism impacts on their society and their support for tourism development in Nui Coc Lake, Thai Nguyen Province, Vietnam. Social Exchange Theory (SET) was employed in this study to explore the perceptions of Nui Coc Lake residents toward the impacts of tourism development on their lives. Data were collected from residents in five communes around Nui Coc Lake. The results of factor analysis of tourism impacts indicated five factors, Personal Economic Benefits, Positive Impacts, Negative Impacts, Support for Tourism, and Social and Cultural Benefits. Results revealed that Personal Economic Benefits were considered the most important factor influencing residents' support for tourism development in Nui Coc Lake. T-test analysis indicated that there were no differences between gender and personal economic benefits, social and cultural benefits. ANOVA analysis shows that there are differences in the perception of education levels and social and cultural benefits concerning the negative impacts of tourism. The findings suggest that SET can be utilized in explaining the perceptions of Nui Coc residents toward the impacts of tourism development. Implications for tourism planners and policy makers and suggestions for future research are also discussed

Keywords: residents' perceptions, tourism impacts, SET, Nui Coc, Thai Nguyen

Introduction

Tourism involves many stakeholders and requires a significant amount of resources. It also has both positive and negative impacts on economy, society, and the culture of host communities (Gade & Ankathi, 2016). Additionally, tourism creates many employment opportunities and generates income for a host country (Turner & Sears, 2013). Because tourists spend money, this directly contributes to a destination's economy and many tourism businesses have an ongoing demand for staff to work in hotels, restaurants, and resorts. In Vietnam, travel and tourism contributed USD \$22.4 billion to GDP and accounted for 9.2% of GDP in 2018 (Knoema, 2019). Tourism involves many stakeholders and requires a significant amount of resources. It also has both positive and negative impacts on economy, society, and the culture of host communities (Gade & Ankathi, 2016). To obtain the support of the population for tourism projects and initiatives, many planners now attempt to understand how residents perceive the impacts of tourism development. Therefore, research on attitudes and perceptions towards tourism impacts become an essential step of tourism planning, aiming at the provision of an enjoyable tourism product for both tourists and residents.

SET has been extensively employed as theoretical framework to analyze resident's perceptions of tourism development in many studies (Ap, 1992; Choi & Murray, 2010; Dyer et al, 2007; Jurowski & Gursoy, 2004). The SET has been applied in many tourists' destinations; however, each destination has its own characteristics and resident's perceptions are not homogeneous. The SET is popular to study on residents' support for tourism because it recognizes the heterogenous nature of local communities, where different individuals and groups display different reactions to tourism (Nunkoo et al, 2013). Furthermore, although the considerable number of researches using SET to explain local resident's perceptions to tourism development, the variability of findings observed across studies. Therefore, there is a need of further study to test the credibility of SET in tourism context where the economy is



shifting from being predominantly agriculture to rapid growth tourism in Vietnam. Most of previous studies of residents' perceptions of tourism development have been undertaken in developed countries (Sharples, 2014). Hence, results of this investigation in a developing country could significantly differ from those in developed countries.

Research interests in residents' perceptions and attitudes towards tourism began in developed countries such as in the United States (Boley et al, 2014; Garcia et al, 2015) and in countries where tourism has developed more intensely for instance, Australia, New Zealand, Canada and United Kingdom (Dyer et al, 2007; Ilbery et al, 2007; Lawson et al, 1998; Sharma & Dyer, 2009). By contrast, in Vietnam, a lack of research has been applied in SET to explain residents' perceptions and support for additional tourism development (Adongo et al, 2017; Huong & Lee, 2017; Pham Hong, 2012; Pham Hong & Kalsom, 2011). Therefore, this study adds more to current literature by exploring the residents' perceptions in rapid development of tourist destination in Vietnam. Moreover, tourism development does not occur in isolation, it occurs within specific environments with distinct characteristics (Almeida-García et al, 2016). Within these specific environments local residents' support is a crucial factor in tourism management (Dyer et al, 2007). Thus, there is a need to include the local residents in early planning stages of tourism development (Liu et al, 1987). Understanding residents' perceptions is necessary to assess residents' feelings, and such understanding should be incorporated into tourism plans. It would help planners and policy makers focus on what residents consider important. There is no doubt that residents' perceptions and attitudes toward impacts of any proposed tourism plan should be considered in the planning processes (Ap, 1992).

The focus of this paper is on Nui Coc Lake, Thai Nguyen Province, Vietnam, the region has been a tourist destination since 1970s (Le, 2017)., Tourism has however brought many positive and negative impacts to communities' surround Nui Coc Lake. Therefore, it is very important to understand the way in which Nui Coc Lake residents perceive the outcomes of tourism development because their perceptions have a direct impact on attitudes toward tourism development and support for the tourism industry. In view of its significance, the objective of this paper is to understand Nui Coc host community perceptions of the impacts of tourism development. To make sure that these perceptions are clearly understood, SET is utilized in this study. Therefore, this study sheds light on whether SET is valid in explaining resident perceptions of tourism development in Vietnam context.

Theoretical Background

Social Exchange Theory (SET)

SET firstly was introduced in early 1960s, and widely accepted in several disciplines such as sociology, anthropology and social psychology. SET can be defined as "The exchange of activity, tangibly or intangible, and more or less rewarding or costly, between at least two persons" (Homans, 1961, p. 13). The notion of this theory is that individuals act in a rational way in their social relations and accumulate the benefits and cost that they encounter. Furthermore, in the perspective of economics, under free competition and open markets, human could rationally measure and pursue maximum utility from a transaction or exchange. In the field of tourism SET could be understood as "A general sociological theory concerned with understanding the exchange of resources between individuals and groups in an interaction situation" (Ap, 1992, p. 668). Therefore, residents interpret the impacts of tourism within the context of costs or benefits that they expect in return for the resources they provide for tourism.

SET suggests that attitudes of individuals towards tourism and their subsequent level of support for its development will likely be influenced by their evaluations of the outcomes of tourism for themselves and their communities (Ward & Berne, 2011). If individuals are



appreciating the impact of tourism regarding economic, environmental and socio-cultural issues, they tend to have more favorable attitudes toward tourism. In other words, the more dependent a person or community is on tourism development, the more positive their attitudes are toward tourism development and vice versa (Weaver & Lawton, 2013, p. 168).

SET helps to explain the attitudes of residents as key stakeholders in tourism, personal benefit, and tourism impacts when taking part in tourism development (Perdue, Long, & Allen, 1990). Furthermore, social exchange theory also explained why residents support for tourism which depends on its impacts (Jurowski, Uysal, & Williams, 1997b). Local residents who perceive themselves as benefiting from tourism, they are likely to view it positively, while residents who perceive themselves as incurring costs are likely to view tourism negatively (Jurowski, Uysal, & Williams, 1997a; McGehee & Andereck, 2004; Perdue et al., 1990; Wang & Pfister, 2008). This view is supported by study of (Ap, 1992; Látková & Vogt, 2012), residents get personal value from tourism and believe that the costs associated with tourism do not exceed the benefits are likely to support tourism development (Vargas-Sánchez, de los Ángeles Plaza-Mejía, & Porrás-Bueno, 2009). SET is the most frequently used as theoretical framework to explain attitudes of locals toward tourism development. The theory has been so popular because it helps to recognize different groups of individuals in a community may have different perceptions of tourism development (Nunkoo, Smith, & Ramkissoon, 2013).

Personal Benefit and Support for Tourism Development

Personal benefits from tourism and support for additional tourism development have been comprehensively examined by (Ko & Stewart, 2002; McGehee & Andereck, 2004; Perdue et al, 1990; Vargas-Sánchez et al, 2009; Wang & Pfister, 2008). Personal benefit can be understood as economic values, such as tax revenues, employment, personal income, consumer spending, and the level of economic dependency, etc. (Wang & Pfister, 2008). Other personal benefits such as relaxation, the educational benefit, understanding of other people and culture, environmental conservation is also reported, etc. (McIntosh, 2002). Personal benefits are recognized to directly affect perceptions of tourism impact in the research models of (Perdue et al. 1990; McGehee and Andereck 2004). Moreover, Ribeiro et al (2017) reveal that personal economic benefits from tourism are a significant predictor of pro-tourism development behavior in the Cape Verde Islands. When individuals or their family members work in the tourism industry, economic value domains are often conceived clearly and are identifiable (Jurowski et al, 1997b; Wang & Pfister, 2008). Nevertheless, (Ko & Stewart, 2002) suggest that personal benefits from tourism positively influence the perception of positive tourism impacts and did not significantly result in the perception of negative tourism effects in Jeju Island, Korea. Therefore, personal benefit from tourism predicted support for additional tourism among residents in communities (Andereck et al, 2005; Gursoy et al, 2002; McGehee & Andereck, 2004; Perdue et al, 1990). There is also evidence of support for tourism, if local residents derive economic benefits from tourism (Allen et al, 1993; Chen, 2000; Nicolaidis, 2020; Yoon et al, 2001).

Site Description

Nui Coc Lake is located in the west of Thai Nguyen City, Vietnam and is part of Tam Dao National Park. The lake comprises 2500 hectares with maximum depth of 35 meters deep water capacity of 175 million cubic meters. A large tourism sector has been built around Nui Coc area, mostly in Van Tho Commune, Phuc Xuan, Phuc Triu, Binh Thuan and Tan Thai which comprise eight ethnic groups (Thai, 2011). Nui Coc Lake includes 89 islets and recognized scenic area and about 40 species of birds, and 15 species of mammals have been listed in the reservoir area. Nui Coc is related to the legend of the romantic love between the girl named Cong and the man named Coc (Gursoy et al, 2002). Tourism in Nui Coc Lake is divided into two areas, one on the northern bank of the reservoir and the other on the southern.



The northern area has many mini-guest houses built on the side of a hill shaded with trees, along with water parks and an artificial dinosaur park. Tourism development in Nui Coc Lake has been developing in recent years. In 2016, for example 945.000 tourists arrived, generating up 55.8 billion VND in revenue. Furthermore, in the first 3 months of 2017, tourist arrivals in Nui Coc Lake accounted for 362.413, and contributed to 64.6 billion VND to the economy (Pham, 2017).

Tourism activities in Nui Coc Lake consist of fishing for specialties of the lake such as chub, shrimps and bamboo rats which called by locals as Dui. Visitors can rent a small boat to travel around, contemplate the view of overall Nui Coc Lake, visit Co Island covered with tree, and discover the 200-year old house on Cai Island. (Le, 2012).

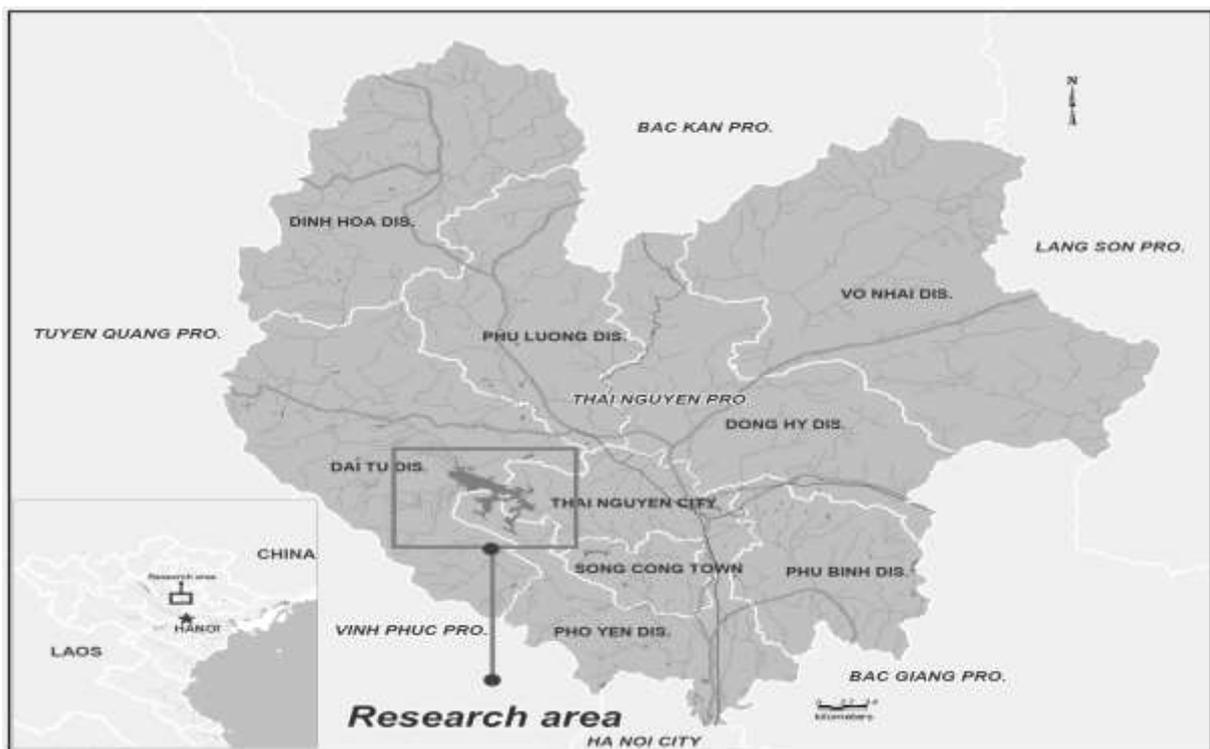


Figure 1. Location of Nui Coc Lake in Vietnam.

Source: Design by author

Currently, US\$65.9M of tourism related investment is being supported by the Xuan Truong Construction Company to expand Nui Coc Lake area and expand tourism in this area. Key tourism products in Nui Coc Lake are resorts, sporting activities, community tourism, tea culture, and ecotourism, which are focused on nearby Tam Dao National Park. Additional tourism products are to include cultural - spiritual tourism, camping, picnicking weekend vacations, shopping, and culinary and entertainment activities. By 2025 Nui Coc Lake is targeted to meet all the criteria setting by Vietnam Tourism Administration to become a national tourism site. By 2030, the plan is for Nui Coc Lake to become a center of ecotourism in Vietnam containing modern facilities and infrastructure. In addition, Thai Nguyen will diversify its tourism products and develop the Thai Nguyen tea brand, which will then be able to compete with other tea brands in the region (VNA, 2016). The goal is for the Nui Coc Lake national tourism site to welcome 4 million tourists by 2030 with predicted revenue of US\$87.9M per annum (Nhi, 2016).



Methodology

Survey Instrument

The primary data for this research was collected by asking the local community to complete survey questionnaires. Questionnaires were designed based on the literature that considered the attributes relating to the impacts of tourism. Questions relating to negative and positive impacts of tourism were also reviewed by academics in Thai Nguyen University of Economics and Business Administration. The purpose of this was to exclude some items which may not have been suitable for the people in the Nui Coc Lake area. The questionnaires comprised three parts. Part I collected personal information, Part II was used to derive the information about the resident's perception of tourism development in Nui Coc area. Part III was designed to obtain the local resident's perception about the impact of tourism whether it be positive or negative.

Part III of survey instrument contained nine items about the positive impacts of tourism; five items pertaining to the negative impacts of tourism, four questions relating to personal economic benefits and support for tourism development in Nui Coc Lake respectively. The scale was anchored with a 5-point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree." The questionnaires were distributed in September and October 2016.

Population and Sampling Technique

The population comprised residents, living in 5 communes around Nui Coc area, namely Van Tho Commune, Phuc Xuan, Nam Phuong, Binh Thuan and Tan Lap communities, who might be affected? by proposed tourism development plan in Nui Coc Lake, Thai Nguyen. According to Son (2017) 2500 households located in five of the above communes are affected by the plan to expand tourism in Nui Coc Lake. It was decided that the representative sample size would comprise 10% of total population of the study, equal to 250 households (Jennings, 2001). A combination of systematic and stratified sampling technique was applied. According to (Long, 2011) a decision in relation to the number of samples in each commune can be based on the following formula:

$$\begin{aligned} \text{Communes (k=5)} \\ n &= 250 \text{ households} \\ n/k &= 250/5 = 50 \end{aligned}$$

The research team consisted of a researcher and a lecturer in Thai Nguyen University of Economics and Business Administration. Both have experience in interviewing skills, survey instrument design and techniques and the application of self-administered, door-to-door, pen and paper questions. When arriving in each commune, the research team distributed questionnaires to households, which were widely dispersed. Within the household, one adult was asked to participate in the study. Surveys were explained orally, and questionnaires completed. For each commune, 50 households took part in the survey; the research team delivered 250 questionnaires of which 223 were completed and usable for analyses. Local residents completed questionnaires in the presence of the researcher and colleague.

Results

In terms of demography, respondents were mostly female accounting for 61% of people surveyed, it could be contextual explanation that when arriving to household, female preferred to answer the questionnaire because they have participated more than male in tourism activities (Table 1). The majority of respondents were 30 – 39 years old since most of participants in this study were in the average age of the workforce. In terms of education level,



a large section of the sample, 26.9%, had graduated from high school. Ethnic representation was 70.4% from the Kinh Group which is the majority group in Thai Nguyen Province accounting for 73.1% of the total population (Nong, 2009). Most of the respondents in this study were involved in the tourism industry (58.7%). Length of residence of respondents at Nui Coc Lake was from 11 to 15 years (66.4%, Table 1).

Table 1. Demographic profile of respondents.

Gender	Frequency (N=223)	Percent
Male	87	39.0
Female	136	61.0
Age		
<20	9	4.0
20-29	51	22.9
30-39	86	38.6
40-49	44	19.7
50-59	25	11.2
>=60	8	3.6
Education Obtained		
Primary School	15	6.7
Secondary School	49	22.0
High School	60	26.9
Vocational School	25	11.2
College	23	10.3
University Degree	38	17.0
others	13	5.8
Ethnic Groups		
Kinh	157	70.4
Tay	35	15.7
Nung	10	4.5
Dao	8	3.6
Mong	7	3.1
others	6	2.7
Years of residency		
<1	10	4.5
1-5	4	1.8
6-10	8	3.6
11-15	148	66.4
16-20	20	9.0
>20	33	14.8
Job status		
Tourism-related	131	58.7
Not tourism related	85	38.1
Retired	7	3.1

Part II of the survey revealed that most of the respondents agreed that they derived personal benefits from tourism. Their income also largely depended on tourism. Such results are consistent with inquiring about the positive impact of tourism (Table 2). Local residents strongly agreed that tourism contributes to their income (51.57%). Secondly, participants in this study also shared their opinions that tourism also contributes to the local economy (56.5%) in some way. When asked about the negative impacts of tourism, the majority of respondents



responded that tourism often results in traffic congestion in Nui Coc Lake (39.91%). However, most local residents did not agree that the increasing number of tourists to Nui Coc Lake had led to conflict between local residents and tourists. Finally, regarding support for additional tourism development in Nui Coc Lake, 62.78% of respondents agreed with "In general, tourism brings more benefit than negative impacts to local residents". In addition, 56.5% of them responded, "I believe that Nui Coc Lake Tourism should be actively encouraged". The item with the most agreement among residents was "Support for additional tourism development" and is consistent with the findings of (Huong & Lee, 2017; Perdue et al, 1990).

Table 2. Frequencies of local resident attitudes and perceptions about tourism impacts in Nui Coc Lake.

	Values (%)					Mean	SD
	1.0	2.0	3.0	4.0	5.0		
Personal Benefit from Tourism							
Tourism help me pay my daily bills	10.8	23.3	19.3	39.0	7.6	3.09	1.16
Part of my income comes from tourism	8.1	26.0	10.8	41.7	13.5	3.26	1.21
I have more benefits from tourism development in Nui Coc Lake	5.4	22.9	13.9	40.8	17.0	3.41	1.17
Income of my family depend on Nui Coc Lake tourism	6.3	13.0	17.9	46.6	16.1	3.53	1.1
Positive Impact of Tourism							
Tourism development in Nui Coc Lake helps improve the landscapes	0.0	0.0	2.2	65.9	31.8	4.3	0.50
Tourism increase the recreational opportunities for local residents	0.0	4.5	8.1	61.4	26.0	4.09	0.72
Tourism helps preserve the culture and history of Nui Coc Lake	0.0	0.5	20.2	50.2	29.2	4.08	0.71
Restaurants and entertainment options are better when tourism development	0.0	5.4	14.4	52.5	27.8	4.03	0.8
Tourism contributes to the income for local residents	0.0	0.5	5.8	42.2	51.6	4.45	0.63
Tourism contributes the local economy	0.0	0.0	3.1	40.4	56.5	4.53	0.56
Tourism helps increase public investment in local	0.0	0.9	7.2	46.2	45.7	4.37	0.66
Tourism helps increase living standard in Nui Coc Lake	0.9	1.4	10.8	55.2	31.8	4.16	0.73
Tourism helps protect and conserve natural resources	0.9	1.8	14.8	54.7	27.8	4.07	0.76
Negative Impacts of Tourism							
The increasing number of tourists to Nui Coc Lake lead to conflict between local residents and tourists	10.8	30.0	43.5	14.8	0.9	2.65	0.89



Tourism results in an increase in living cost	9.4	30.5	23.3	34.5	2.2	2.9	1.05
Tourism results in traffic jams in Nui Coc Lake area		7.6	37.2	39.9	15.3	2.63	0.83
Tourism leads to increase social evils	10.8	27.4	36.3	23.8	1.8	2.78	0.99
Tourism leads to damage natural environments.	1.8	22.9	35.0	35.4	4.9	3.19	0.91
Support for Tourism Development in Nui Coc Lake							
In general, tourism brings more benefit than negative impacts to local residents	0.0	1.8	4.0	62.8	31.4	4.24	0.61
I believe that Nui Coc Lake Tourism should be actively encourage	0.0	0.0	2.7	56.5	40.8	4.38	0.54
Tourism development in Nui Coc Lake will be an attraction for tourists coming to Thai Nguyen City	0.0	0.0	2.7	55.2	42.2	4.39	0.54
Local authority should support to develop more tourism in Coc Lake	0.0	0.9	8.1	48.9	42.2	4.32	0.66

Notes: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree

Table 3 depicts the results of an exploratory factor analysis conducted to identify the underlying dimensionality of the 23 items connected with local resident's perception of tourism. Also, in Table 3 are the results of factor analysis regarding personal benefits derived from tourism, positive tourism impacts, negative tourism impacts, and support for additional tourism development. Result of Bartlett's Test of Sphericity and KMO measure the degree of inter-correlation among the items suitable for the EFA procedure with (KMO = 0.66 > 0.5, Sig = 0.00). Cronbach's Alpha measures the reliability of all items which is higher than 0.05. Factor analysis generated two new variables namely local benefit (LB), social and cultural benefit (SCB).

Table 3. Factor analysis of tourism impact perceptions.

	Factor loading					Reliability	
	PEB	LB	ST	NI	SCB	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
Impact and support for tourism							
Personal Economic Benefits (PEB)							
I have more benefits from tourism development in HNC	0.89					0.82	0.877
Part of my income comes from tourism	0.89					0.81	
Tourism help me pay my daily bills	0.86					0.89	
Income of my family depend on Nui Coc Lake tourism	0.75					0.84	
Local Benefits (LB)							
Tourism helps increase public investment in local		0.74				0.66	0.726
Tourism helps protection and conservation natural resources		0.70				0.67	
Tourism contributes to the income for local residents		0.69				0.70	



Tourism helps increase living standard in Nui Coc Lake.		0.67				0.67	
Tourism contributes the local economy.		0.64				0.69	
Support for Tourism (ST)							
Tourism development in Nui Coc Lake will be an attraction for tourists coming to Thai Nguyen City.			0.81			0.66	0.750
I believe that Coc Lake Tourism should be actively encourage			0.81			0.64	
Local authority should support to develop more tourism in Coc Lake			0.74			0.71	
In general, tourism brings more benefit than negative impacts to local residents			0.63			0.75	
Negative Impacts (NI)							
Tourism leads to increase social evils.				0.84		0.61	0.743
Tourism results in an increase in living cost				0.84		0.62	
Tourism results in traffic jams in Nui Coc Lake area				0.69		0.70	
The increasing number of tourists to Nui Coc Lake lead to conflict between local residents and tourists				0.51		0.77	
Social and Culture Benefits (SCB)							
Restaurants and entertainment options are better when tourism development.					0.83	0.68	0.789
Tourism increase the recreational opportunities for local residents					0.82	0.71	
Tourism helps preserve the culture and history of Nui Coc Lake.					0.80	0.74	
Eigen value	3.30	3.00	2.52	1.96	1.87		
Percentage of Variance	16.50	31.53	44.10	53.89	63.23		
Total variance explained	63.23						
KMO value	0.66						
Sig. of Barlett's Test of Sphericity	0.00						

Notes: Extraction Method: Principal Component Analysis, Rotation Method: Varimax with Kaiser Normalization.

PEB: Personal Economic Benefit

LB: Local Benefit

ST: Support for Tourism

NI: Negative Impacts

SCB: Social and Culture Benefit

Results of multiple regressions identify the factors affecting support for tourism development (Table 4). Firstly, there are four independent variables which are a personal economic benefit, local benefit, negative impact, social and culture benefits. Support for tourism development is a dependent variable. The multiple regression model with all 4 predictors produce $R^2 = .65$, $F = 37,76$ ($P=0.00$).

Secondly, Personal Economic Benefit had significant positive regression weights, indicating that local residents with higher economic benefit from tourism were expected to have support for tourism, after considering other variables in the model.

Thirdly, the local benefit also had a significant positive weighting, indicating that local residents having local benefit were expected to have more support for tourism. The equation for factor influencing on support for tourism development in Nui Coc Lake is as follows;

$$ST = 3.41 + 0.14 PEB + 0.13 LB$$



Table 4. Results of multiple regression analysis of support for tourism development in Nui Coc Lake.

Independent Variables	B	Std Beta	t-value	P
Constant	3.41		9.35	0.00 [*]
Personal Economic Benefit (PEB)	0.06	0.14	2.15	0.03 [*]
Local Benefit (LB)	0.13	0.13	1.98	0.04 [*]
Negative Impact (NI)	-0.06	-0.10	-1.42	0.16
Social and Culture Benefit (SCB)	0.08	0.12	1.71	0.09
R ² = .65, F = 37,76 (P=0.00)				

Note: *P is significant at the 0.05 level

a. Dependent Variable: Support Tourism (ST)

Table 5 depicts the results of an independent sample t-test which was performed to compare PEB, ST, NI, LB, SCB respectively for males and females. The outcome variable was found to be normally distributed and equal variances are assumed based upon results of Levene's test (F = 0.09, p = 0.76). The Levene's F Test for equality of variances which is the most commonly used statistic is used to test the assumption of homogeneity of variance. Second, there was no significant difference in scores for males (M=3.25, SD = 0.97) and females (M=3.38, SD = 1.00; t = -0.92, p = 0.36, two-tailed) in term of personal economic benefits.

Furthermore, there was no significant difference in scores for males and females for other research variables including ST, NI, LB, and SCB. There was statistically significant difference in mean scores between related tourism jobs related (M = 3.89, SD = 0.8) and non-tourism related jobs (M = 2.53, SD = 0.9) in term of derived personal economic benefits from tourism.

Table 5. T-test for perception of research variables according to resident's characteristics.

Job Status	PEB		ST		NI		LB		SCB	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Tourism Related	3.89	0.8	4.36	1.2	2.82	0.7	4.32	1.2	4.07	0.9
Non-tourism related	2.53	0.9	4.31	0.8	2.59	0.8	4.28	1.0	4.08	1.1
T value	2.30	1.1	0.97	0.7	2.38		3.70	0.7	0.29	
Sig. (2-tailed)	0.00 [*]		0.34		0.02		0.49		0.78	

Note: *P is significant at the 0.05 level

One-way analysis of variance was conducted to evaluate if there is no difference PEB, ST, NI, LB, SCB with age-groups and education-obtained (Table 6&7). The independent variables are age and level of education; each included six groups. The assumption of homogeneity of variances was tested and found tenable using Levene's Test, p = 0.00, 0.00, 0.00 and 0.03 respectively. The ANOVA was significant (F = 3.13, 3.38). Therefore, there is a significant difference in age groups regarding perception of the negative impacts of tourism and social, culture benefits derived from tourism. Regarding to educational level of respondents, the ANOVA was significant (F=2.43, 8.85). Therefore, there is a significant difference between education-obtained with PEB and SCB. Post hoc comparison evaluates pairwise differences among group means, which were conducted with the use of Tukey HSD test. The test indicated that the mean score for a college-degree group was significantly different from other groups regarding education-obtained. In the age of 60 and more than, there was a significant difference in perception as compared with other age-brackets about negative impacts of tourism.



Table 6. ANOVA for perception of research variables according to age groups.

Age	PEB		ST		NI		LB		SCB	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Less than 20 (A)	3.2	0.8	4.4	0.4	2.3	0.5	4.3	0.3	4.6	0.3
20-29 (B)	3.1	0.9	4.5	0.5	2.7	0.9	4.3	0.5	4.1	0.5
30-39 (C)	3.3	1.2	4.3	0.5	2.6	0.7	4.3	0.5	4.0	0.8
40-49 (D)	3.6	0.9	4.4	0.4	2.9	0.4	4.3	0.4	4.1	0.6
50-59 (E)	3.4	0.8	4.3	0.4	2.9	0.5	4.4	0.4	3.9	0.5
>=60 (F)	2.9	0.9	4.2	0.3	3.3	0.7	4.3	0.1	4.6	0.3
Levene Statistic Sig	0.00		0.36		0.00		0.00		0.03	
F-value	1.37		1.86		3.13*		0.2		3.38*	
Tukey's test					F>A					

Note: *P is significant at the 0.05 level

Table 7. ANOVA for perception of research variables regarding education-obtained. Note: *P is significant at the 0.05 level

Education Obtained	PEB		ST		NI		LB		SCB	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Primary school (G)	2.7	0.8	4.3	0.4	2.2	0.4	4.2	0.4	4.5	0.3
Secondary school (H)	3.1	1.1	4.4	0.3	2.4	0.6	4.3	0.4	4.1	0.6
High School (I)	3.5	1.1	4.3	0.4	2.7	0.7	4.3	0.5	4.2	0.6
College (K)	3.5	0.9	4.5	0.4	3.3	0.5	4.4	0.5	3.9	0.5
University (L)	3.4	1.1	4.2	0.5	2.9	0.7	4.4	0.4	3.5	0.6
Others (M)	3.4	0.6	4.3	0.6	3.0	0.7	4.3	0.5	4.2	0.5
Levene Statistic Sig	0.00		0.00		0.14		0.06		0.10	
F-value	2.43*		13.34		0.48*		0.48		8.85*	
Tukey's test					K>M					

Discussion

Previous studies have indicated that local residents would support tourism development if they think tourism brings positive impacts to their communities (Ko & Stewart, 2002; McGehee & Andereck, 2004; Perdue et al, 1990; Pham Hong, 2012; Pham Hong & Kalsom, 2011). In this study, the findings indicate that local residents in Nui Coc Lake support tourism development when personal and local benefits can be derived. Such results are also in agreement with (Andereck et al, 2005). The findings of this study are thus consistent with existing research which indicates that people employed in the industry or benefited from it, have more positive attitudes toward tourism (Jurowski et al, 1997b; McGehee & Andereck, 2004; Nunkoo & So, 2016; Vargas-Sánchez et al, 2011). In addition, Kuvan & Akan (2005) also show that residents who have their main source of income from tourism are more welcoming of the positive changes in tourism. In addition, residents perceived positive economic impact factor has the



largest influence on residents' support for further tourism development in Sunshine Coast, Queensland, Australia (Dyer et al, 2007). Accordingly, this study confirms that SET could be applied to explain resident's perceptions to the impacts of tourism development in Vietnamese tourism context.

Local residents in Nui Coc Lake generally support in term of tourism planning and development (Table 2). This result is in line with a study of (Mason & Cheyne, 2000), there was general support for proposed tourism development plan, but community was not homogeneous in its views which women were more oppose than men to development on the grounds of perceived negative impacts. However, in this study, there is no difference in perception between men and women in term of tourism support.

One prominent finding of this study is that local residents in Nui Coc Lake would support tourism development when more personal economic benefits can be derived, such findings are not consistent with study of (Pham Hong & Kalsom, 2011) who found that positive socio-cultural and environmental impacts of tourism to be more important than positive economic impacts of tourism in their Cuc Phuong National Park study. This is because tourism in Cuc Phuong National Park depends on natural forest and habitat, and the integrity of wildlife. Furthermore, the majority of respondents in this study was mainly Kinh Group (CIA, 2018) who had tourism-related jobs (Table 1). Ethnic minority groups were not beneficial from tourism, such result supported by (Hoa & Lan, 1999) who indicated that ethnic minority groups in Sapa, Vietnam got little benefits from tourism.

Residents' attitudes have been the subject of many studies, with focus on identifying the factors that influence or determine them (Bujosa Bestard & Nadal, 2007; Huong & Lee, 2017). Factors influencing resident attitudes towards tourism can be classified as demographic, personal, socioeconomic, spatial, and factors of economic dependence (Jackson & Inbakaran, 2006; Vargas-Sánchez et al, 2009). This study also attempts to find out whether or not there are differences among residents' demographic characteristics with respect to perception of support for tourism development (ST), negative impacts of tourism (NI), local benefits (LB), social and cultural benefits (SCB). Findings reveal that there was no significant difference in scores for males and females for other research variables including ST, NI, LB, and SCB. This result is contrary to Mason & Cheyne (2000) who found that women were more opposed to tourism development than men because of negative impacts of tourism.

In term of demography, results showed that older residents were more worried about negative impacts of tourism (Table 6). These results are in line with (Haralambopoulos & Pizam, 1996; Tomljenovic & Faulkner, 2000; Vareiro et al, 2013). Education obtained by respondents was found to be the major single factors affecting the attitudes of residents (Andriotis & Vaughan, 2003). ANOVA (Table 6) results also indicated that more educated residents had more concerned about negative impacts of tourism. These results are inconsistent with the findings of (García et al, 2016; Haralambopoulos & Pizam, 1996; Teye et al, 2002; Vareiro et al, 2013).

In regard to tourism-related jobs, t-test results indicate that residents working in tourism-related jobs gained more support and also perceived more personal economic benefits and local benefits. The findings are in agreement with (García et al, 2016). Such results provide useful information for policymakers and planners in Nui Coc Lake when implementing proposed tourism plans. They could involve aged-residents in the plan to listen their concerns about negative impacts of tourism. Moreover, when developing tourism in Nui Coc Lake, more training courses should provide to local residents thus they could get more employments. In general, the findings support the principles of social exchange theory that applied to destinations (Almeida-García et al, 2016; Andereck et al, 2005; Ap, 1992; Perdue et al, 1990).



Conclusion

The results of this study contribute to not only tourism theory but also tourism practice. Regarding theory, the findings of this study provide support for the suitability of applying Social Exchange Theory, because at an individual level, social exchange theory offers an explanation in the tourism sector. Those who get more direct benefits from tourism have more positive attitudes toward tourism development (Haralambopoulos & Pizam, 1996). The results showed that local residents' perception of personal economic benefits and local benefits are more significant than their perception of social and cultural aspects in support of tourism development. This is consistent with various authors (Jurowski et al, 1997a; McGehee & Andereck, 2004; Perdue et al, 1990) on the role of economics in attitudes to tourism development. A possible explanation for this result is that most of the respondents taking part in this survey have tourism-related jobs (Table 1). The regression results indicates that social and cultural benefits derived from tourism do not help to support tourism development in Nui Coc Lake area (Table 4). Having a better understanding of residents' perceptions about tourism impacts, benefits, and support for tourism could however, assist tourism planners in Nui Coc Lake in their important decision-making processes.

Results of this study are significant for tourism planners in Nui Coc Lake because local residents would support tourism development when personal economic gain is derived. When planning to develop this area, the benefits accruing, and the livelihood of local residents must be taken into account. Tourism planners should also be aware that residents would be willing to enter an exchange process by supporting tourism development if they would be likely to get more personal economic benefits. Thus, tourism planning and decision-making processes should consider benefits to local residents and involve them in this process.

However, in Vietnam, the political system and communist party are top-down management; all decision making is from the top. Local residents normally are excluded in the planning process (Powell et al, 2017). To achieve sustainable tourism, it is important to consider the perspectives of residents perceptions towards tourism and to include them in decision-making processes and tourism activities as these arise. So, this research provides tourism planners in Nui Coc Lake with valuable information to formulate plans and policies not only to gain residents support for tourism, but also to successfully implement sustainable tourism development. It is also very important for tourism planners to ensure that tourism benefits are shared across individuals from all communities in Nui Coc Lake area. Local government and tourism organizations should strive to engage more local residents and tourism businesses in meetings to listen to their concerns and feelings towards tourism development and establish a place where residents share their concerns about tourism development. Moreover, to get more support for tourism, personal and local benefits should be emphasized for local residents. Furthermore, the majority of respondents was mainly from the King group, so the tourism benefits do not come to a minority group as such. Policymakers should engage more diverse ethnic groups in tourism activities by giving them more training courses and skills provision, and of course, jobs, so that income from tourism can be distributed relatively equally to people.

The implications of this study can be valuable for future studies to apply research instruments to test local residents' attitudes in similar geographical areas. Such information could provide a more comprehensive ground for needed future studies, which compare a variety of residents' perceptions and support tourism development.

This study has some limitations. Because, there are not enough studies about tourism impacts, residents' perceptions and support for tourism development in Vietnam in general and in Nui Coc Lake, Thai Nguyen in particular, the literature review for this study was biased in term of studies from developed countries. Further study should focus on longitudinal studies,



which could help to compare local residents' perceptions before and after implementing proposed tourism development plans incorporating the local community.

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