



Enlightening Tourism.

A Pathmaking Journal



Universidad
de Huelva

Editorial Team

Editor in Chief

Alfonso Vargas-Sánchez, University of Huelva, Spain

Associate Editor

T.C. Huan, National Chiayi University, Taiwan

Books Review Editor

Brendan Paddison, York St. John University, United Kingdom

Secretariat

Elena García de Soto, University of Huelva, Spain

Cinta Borrero-Domínguez, University of Huelva, Spain

Style reviewer and text editor

Anestis Fotiadis, I-SHOU University, Taiwan, Province of China

Editorial Board

José Manuel Alcaraz, Murdoch University, Australia

Mario Castellanos-Verdugo, University of Seville, Spain

José Antonio Fraiz-Brea, University of Vigo, Spain

José Manuel Hernández-Mogollón, University of Extremadura, Spain

Shaul Krakover, Ben Gurion University, Israel

Jean Pierre Levy-Mangin, University of Quebec, Canada

Tomás López-Guzmán, University of Córdoba, Spain

Yasuo Ohe, Chiba University, Japan

Mirko Perano, University of Salerno, Italy

María de los Ángeles Plaza-Mejía, University of Huelva, Spain

Nuria Porras-Bueno, University of Huelva, Spain

João Albino Silva, Algarve University, Portugal

Advisory Board (Spanish Members)

César Camisón-Zornoza, University of Valencia, Spain

Enrique Claver-Cortés, University of Alicante, Spain

María Teresa Fernández-Alles, University of Cádiz, Spain

José Luis Galán-González, University of Seville, Spain

Félix Grande-Torrales, University of Jaén, España

Antonio Leal-Millán, University of Seville, Spain

Inmaculada Martín-Rojo, University of Málaga, Spain

Antonio Manuel Martínez-López, University of Huelva, Spain

Francisco José Martínez-López, University of Huelva, Rector, Spain

Pablo A. Muñoz-Gallego, University of Salamanca, Spain

Francisco Riquel-Ligero, University of Huelva, Spain

José Miguel Rodríguez-Antón, Autonomous University of Madrid, Spain

Sandra Sanchez-Cañizares, University of Cordoba, Spain

Josep Francesc Valls-Giménez, ESADE, Spain

Advisory Board (Other European Members)

Paulo Aguas, University of Algarve, Portugal

Gustavo Barresi, University of Messina, Italy

Carlos Costa, Aveiro University, Portugal

Salvatore Esposito de Falco, University of Rome "La Sapienza", Italy

Sheila Flanagan, Dublin Institute of Technology, Ireland

Tania Gorcheva, Tsenov Academy of Economics, Bulgaria

Tadeja Jere-Lazanski, University of Primorska, Slovenia

Metin Kozak, Mugla University, Turkey

Álvaro Matias, Lusitana University, Portugal

Alfonso Morvillo, National Research Council, Italy

Alexandru Nedelea, Stefan cel Mare University of Suceava, Romania

Claudio Nigro, University of Foggia, Italy

Angelo Presenza, University "G. D'Annunzio" of Chieti-Pescara, Italy

Kanes Rajah, Royal Agricultural University, United Kingdom

Advisory Board (Members from the rest of the world)

John Allee, American University of Sharjah, United Arab Emirates

Nestor Pedro Braidot, National University of La Plata, Argentina

Roberto Elias Canese, Columbia University, Rector, Paraguay

Luca Casali, Queensland University of Technology, Australia

Nimit Chowdhary, Indian Institute of Tourism and Travel Management, India

Steven Chung-chi Wu, National Pingtung University of Science and Technology, Taiwan

Dianne Dredge, Southern Cross University, Australia Daniel Fesenmaier, Temple University, United States

Babu George, Alaska Pacific University, United States

Dogan Gursoy, Washington State University, United States

Jafar Jafari, University of Wisconsin-Stout, United States

Sanggun Lee, Pai Chai University, Korea Republic of

Albert Yeh Shangpao, I-SHOU University, Taiwan

Pauline Sheldon, University of Hawaii, United States

Germán A. Sierra-Anaya, University of Cartagena de Indias, Rector, Colombia

Xiaohua Yang, University of San Francisco, United States



RESIDENTS' TOURISM SUPPORT BEHAVIOUR: THE ROLE OF SUSTAINABLE TOURISM ATTITUDE

Reyhan A. Ayazlar

Mugla Sitki Kocman University (Turkey)

reyhanayazlar@mu.du.tr

Gökhan Ayazlar

Mugla Sitki Kocman University (Turkey)

gokhanayazlar@gmail.com

ABSTRACT

Sustainability is necessary and a good alternative way to minimize tourism's negative impacts and its long-term success. Residents have an important role for sustainable development in a touristic destination. The purpose of this paper is to examine the structural relationship between residents' sustainable tourism attitude and their support behaviour. Although there has been much research to examine residents' opinions towards tourism impacts, studies about their sustainable tourism have not been profoundly explored in current literature. A total of 403 valid questionnaires were collected to empirically test the measurement and structural model using a structural equation modelling approach. The study sample consists of residents who live in Didim, Turkey. According to the results, four of seven dimensions of sustainable tourism attitude relate to residents' support for sustainable tourism. The results imply that perceived social costs are the most effective dimension affecting support, whereas maximizing community participation has the lowest impact. Theoretical and managerial contributions are discussed.

KEYWORDS

Sustainable tourism; residents' attitude; support for tourism

ECONLIT KEYS

L83; Q01; D10

1. INTRODUCTION

The concept of sustainability has attracted attention for both tourism planners and academic researchers, because its necessity has been raised day by day for the industry. Sustainability in a touristic destination is a set of principles that protects the cultural, environmental and infrastructural resources of the destination for the future of tourism (Lane, 1994). Sustainability of tourism markets is crucial because many countries' economies depend very much on this industry (Shen et al., 2016).

According to stakeholder theory, host residents are one of the stakeholders of the tourism industry and their attitudes impact the success of sustainable tourism development. They play a critical role in the success or failure of the destination (Choi and Sirakaya-Turk, 2005; Nicholas et al., 2009). Their positive perception and attitude towards tourists affect the sustainability of tourism markets (Kitnuntaviwat and Tang, 2008; Shen et al., 2016). The sustainability of tourism relies on the goodwill of local residents (Perez and Nadal, 2005). Therefore, understanding residents' attitude to sustainable tourism development contributes to tourism planners trying to improve residents' support for tourism and for the future of industry in the destination (Choi and Sirakaya-Turk, 2005; Assante et al., 2010).

Much research has been conducted to assess residents' perspectives on tourism impacts (Andereck and Vogt, 2000; Choi and Murray, 2010). These studies have focused on the benefits and costs of tourism impacts (Gursoy and Rutherford, 2004; Dyer et al., 2007; Vargas-Sanchez et al., 2009), economic, socio-cultural and environmental impacts (Yoon et al., 2001; Ko and Stewart, 2002; Oviedo-Garcia et al., 2008; Choi and Murray, 2010; Nunkoo and Ramkissoon, 2011), the relationship between tourism impacts and support for tourism (Vargas-Sanchez et al., 2009; Nunkoo and Gursoy, 2012; Choi, 2013; Styliadis et al., 2014). There are also some initiatives to explain the host residents' attitude toward sustainable tourism (Andritois and Vaughan, 2003; Choi and Sirakaya-Turk, 2005; Kitnuntaviwat and Tang, 2008; Assante et al., 2010; Lee, 2013). These studies have focused on the economic, socio-cultural and environmental impacts of sustainable tourism (Yoon et al., 2001; Ko and Stewart, 2002; Dyer et al., 2007; Oviedo-Garcia et al., 2008; Choi and

Murray, 2010; Nunkoo and Ramkissoon, 2011) and the residents' perception of sustainable tourism benefits and costs (Gursoy and Rutherford, 2004; Dyer et al., 2007; Gursoy et al., 2009; Vargas-Sanchez et al., 2009; Nunkoo and Ramkissoon, 2011). In addition to these studies, some dimensions such as long-term planning (Harrill, 2004), community-centered economy (Liu, 2003; Vargas-Sanchez et al., 2009), ensuring visitor satisfaction (Ko and Stewart, 2002; Liao et al., 2015) and maximizing community participation (Choi, 2013; Kim et al., 2014) have been shown important for the sustainability of tourism in a destination. However, more research is needed to explain the direct impact of these dimensions on the support of residents.

Host residents' attitudes are important for their support for tourism in the destination. It is difficult to develop tourism sustainability in the destination without the participation and support of residents (Fallon and Kriwoken, 2003; Gursoy and Rutherford, 2004; Kitnuntaviwat and Tang, 2008; Nicholas et al., 2009; Assante et al., 2010; Lee, 2013; Riberio et al., 2014). Despite the importance of residents' support behaviour, there has been limited research investigating the effect of residents' attitude on their support (McGehee and Andereck, 2004). These studies have explored direct relationships between residents' attitudes towards sustainable tourism development and support for tourism (Jurowski et al., 1997; Gursoy et al., 2002). Further research is still required in understanding their attitudes and influences on their support for tourism.

Considering the discussion above, the purpose of this study is to examine host residents' attitude toward the sustainability of tourism, as well as its effect on their support for tourism. Better understanding of host residents' attitude will be essential to the future development of touristic destinations. The remainder of this paper is organised as follows. The first section consists of the literature review and hypothesis development. The second section comprises the research methodology and data collection. The third section presents the findings of the research. The last section consists of the discussion and conclusion parts.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

This paper tries to answer the following question: Is there a relationship between residents' attitude to sustainable tourism and their support? If so, how do they perceive these impacts? In the light of these questions, we aim to investigate this relationship between two constructs. Seven sustainability-related variables adopted from Choi and Sirakaya-Turk (2005) were added to the framework to extend the current residents' attitude literature. Although some dimensions such as environmental sustainability, planning, community participation, economic benefits and social costs have been studied before, other dimensions, the community centred economy and ensuring visitor satisfaction dimensions have been added for the first time to explore their impacts on support behaviour. The proposed model is presented in Figure 1.

Sustainable tourism is defined as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" by UNWTO (2005: 12). Sustainable tourism desires and cares about a better future for host residents. It supports the development that is ecologically responsible, socially compatible, culturally appropriate, politically equitable, technologically supportive and economically viable for the host residents (Choi and Sirakaya-Turk, 2005).

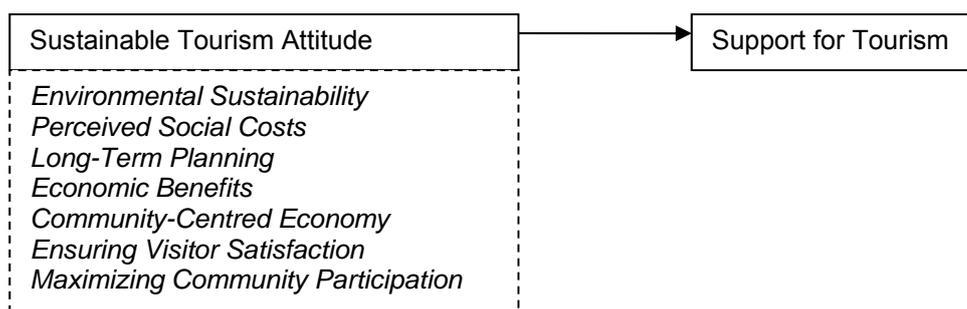


Figure 1. The Proposed Model

Residents play an important role in the development of the destination. Indeed, there is a dual effect between the host residents and the industry. Tourist

destinations have direct and indirect, positive and negative substantial impacts on residents (Murphy, 1985; Ap, 1992; Choi, 2013), whereas their attitudes and support for tourism are crucial factors for tourist satisfaction and the long-term success of tourism development in the destination (Murphy, 1985; Ko and Stewart, 2002; Fallon and Kriwoken, 2003; Gursoy and Rutherford, 2004; Nicholas et al., 2009; Lee, 2013). Tourism means interacting with other places and other people, thus residents' attitude, expectations, opinions and lifestyles may have an influence on tourists' experience (Sharpley, 2008).

Social exchange theory (SET) is widely used in explaining the residents' attitude towards tourism in the literature. According to Ap (1992: 21), "residents seek benefits of tourism in the exchange process for something they consider to be approximately equal to the benefits they received" "If residents fear or resent tourism, their resistance and hostility can destroy the local industry's potential" (Murphy, 1985). Thus, this study has adopted SET as a conceptual framework to explain residents' attitudes toward sustainable tourism development.

Host residents' attitude to tourism is an important element of their support in promoting sustainable tourism development (Gursoy et al., 2002; Nicholas et al., 2009). It may encourage their participation and support for tourism (Kitnuntaviwat and Tang, 2008). Residents' positive perception of tourism impacts their support for tourism development, whereas negative attitudes have an influence on withdrawing their support for tourism (Sharpley, 2014; Rasoolimanesh and Jafari, 2016). In any case, host residents' support for tourism is vital for the successful of the tourism industry in a destination (Liao et al., 2015). Tourism investments cannot succeed without taking into consideration host residents' attitudes and perceptions (Ap, 1992; Gursoy and Rutherford, 2004).

The host residents' attitude towards environmental sustainability may be effective on their support behaviour. According to Ahn, Lee and Shafer (2002), environmental and cultural factors must be protected to keep residents' community satisfaction. Assante et al. (2010) revealed the relationship between residents' satisfaction and their perceptions of the environmental impacts of tourism: the more positive the perception of environmental impacts, the greater the residents' support sustainable tourism. It is also asserted that residents, as one of the major stakeholders of the

destination, are most likely to support the long-term conservation of natural resources because they have the closest direct relationship to these resources (Jurowski et al., 1997). Therefore, it is hypothesised that:

H₁: Residents' environmental sustainability attitude influences their support behaviour.

According to Ap (1992), residents' positive (benefits) and negative (costs) attitudes toward tourism affect their support of exchange. Many studies reported that perceptions of tourism benefits positively affect the residents' support for sustainable tourism, whereas the costs of tourism negatively impact their behaviour (Gursoy et al, 2002; Gursoy and Rutherford, 2004; Nicholas et al., 2009; Nunkoo and Ramkissoon, 2011; Lee, 2013). According to Shen et al. (2016), if host residents have a great economic dependence on tourism, they have a more favourable attitude toward tourism and its further development. They are directly affected by the growth of tourism in their region and this issue affects their lifestyle, too (Kim et al., 2014). Researchers revealed that social costs such as vandalism, public intoxication, disruption of residents' daily life also reduced the residents' quality of life (Ap, 1992; King et al., 1993; McCool and Martin, 1994). Thus, the following hypotheses are presented:

H₂: Residents' attitudes towards social costs influence their support behaviour.

H₃: Residents' attitudes towards economic benefits influence their support behaviour.

Residents' participation in decision-making process is a key element of sustainable tourism (Nelson, 1993). According to Harrill (2004), tourism planners strive to understand how host residents perceive the tourism industry in order to gain support for tourism projects. When they believe in a role in tourism plans they have a positive attitude toward tourism (Çavuş and Tanrısevdi, 2003). They may feel hostility toward tourists without proper planning and management (Harrill, 2004). Thus, they should be involved in planning (Keogh, 1990). In other words, tourism planning should be based on the development of residents' priorities and goals at the local level (Cooke, 1982). Although the participation of residents in tourism planning is an important factor in their support for tourism, the relationship between the two constructs is rarely addressed. Therefore, we formulate the following hypothesis:

H₄: Residents' participation to long-term planning influences their support behaviour.

Previous research findings (Gursoy and Rutherford, 2004; Vargas-Sanchez et al., 2009; Choi and Murray, 2010; Yu et al., 2011) show that overall community satisfaction is a mediator between perceived tourism impacts and support for tourism development. Thereby, community-based tourism has become an important part of providing community support. According to Yu et al. (2011), community-based tourism means community reinvestment funds, local-first policies and promotion of local business and local participation. Compared to other industries, tourism is unique in generating and distributing income in a destination. It promotes regional development and has a multiplier effect. It also improves the quality and selling of local goods and services (Liu, 2003). Accordingly, we hypothesised that:

H₅: Residents' attitude toward a community-centred economy influences their support behaviour.

Some research indicated that residents' attitudes towards tourists influenced tourist experiences and concordantly their satisfaction levels and their future intentions (Crick, 2003; Alcaniz et al., 2005). If residents have a positive attitude towards tourism and show supportive behaviour, this positive perception will be reflected in their behaviour toward tourists. According to Valle et al. (2011), host residents who are more positive to tourism experiences show greater receptiveness towards their destination. In this direction, visitors are more satisfied with their experiences. Both residents and tourists encounter and interact with each other regularly. Hence, understanding host residents' attitudes toward tourism and their affable behaviour to visitors are crucial for the success of tourism in the destination (Ko and Stewart, 2002; Valle et al., 2011; Liao et al., 2015). As a result, this study contains an original hypothesis presented below:

H₆: Residents' attitude towards ensuring visitor satisfaction influences their supportive behaviour.

Community participation is one of the critical elements in residents' attitudes toward sustainable tourism. Active participation and involvement of residents are vital for successful sustainability of tourism planning and development (Kim et al., 2014). If residents are poorly informed, marginalised or alienated about tourism decisions at

the destination they come to have an inhospitable attitude to the current and future development of tourism. Likewise, tourists have an expectation to feel welcome in the destination. Inhospitable residents create a disadvantage in this situation. Hospitality is the social capital of destination. A destination's popularity in the long-term remains only if residents behave hospitably, and are friendly and welcoming to visitors (Choi, 2013). On the other hand, residents have more information than outsiders about the nature and characteristics of their tourism products, such as traditions, history, natural beauty, cultural heritages and meanings. They know what values can be used as a tourism product and which tourism product is appropriate for tourists. Therefore, community participation is crucial for the sustainability of tourism planning and development at a destination (Tosun, 2006). Residents' participation encourages them to identify problems and involve themselves in decision-making processes and this participation contributes to their support behaviour for tourism (France, 1998). "Stakeholder participation and cooperation is a crucial factor of successful sustainable tourism development" (Yu et al., 2011: 57). Hence, we hypothesised that:

H₇: Residents' attitude towards maximizing community participation influences their support behaviour.

3. RESEARCH METHOD

A quantitative research method was used to empirically test the proposed model shown in Figure 1 and evaluate the proposed hypothesis. A self-administration questionnaire was prepared to find out the structural relationships between constructs mentioned in the literature. To capture the information about residents' sustainable tourism attitudes, the questionnaire was designed in three main sections. The first section was designed to ensure the residents' sustainable tourism attitude. The second section was designed to assess their support for tourism. The third part of the questionnaire was designed to capture the information regarding residents' demographic characteristics, such as age, gender and education.

To survey the research constructs, seven dimensions with 44 items were adopted from Choi and Sirakaya-Turk (2005) to measure sustainable tourism attitude; four items were adopted to measure residents' support for tourism borrowing from Choi

(2013). The original questionnaire was translated into Turkish. Back translation was run to reduce translation bias (Van de Vijver and Hambleton, 1996) and ensure equivalence. A five-point Likert scale ranging from strongly disagree to strongly agree was designed. Participants were asked to indicate how they agreed or disagreed with each item on the scale.

The sample was comprised of residents who live in Didim, Turkey. Didim is one of the famous touristic destinations in Turkey. It attracts both local and foreign tourists with the Apollon Temple, Altinkum and other natural and historical resources. The survey was conducted in January and February, 2016. University students as research assistants were trained to administer the survey. 450 questionnaires were distributed among residents, in which a total of 403 valid questionnaires were obtained (response rate= 89.5%) to empirically test the measurement and structural model approach. Table 1 shows the demographic profile of participants.

Demographic Variables (N=403)		n	%
<i>Gender</i>	Female	189	46,9
	Male	214	53,1
<i>Education</i>	Primary	49	12,2
	High school	103	25,6
	Associate degree	216	53,6
	Undergraduate	29	7,2
	Graduate	6	1,5
<i>Occupation</i>	Tourism	227	56,3
	Not Tourism	176	43,7
<i>Age</i>	20 and below	30	7,4
	21-30	50	12,4
	31-40	139	34,5
	41-50	120	29,8
	51 and above	64	15,9

Table 1. Residents' demographic profile.

3.1 COMMON METHOD BIAS

Common method bias, as a problem in behavioural research in social studies, was assessed before structural equation modelling. Because all items were measured from one source measurement, error endangers the validity of the constructs (Podsakoff et al., 2003). This study addresses common method bias at the

questionnaire design stage, using Harman's one-factor test. Because the common latent factor explains less than 50% (20,37%), there is no common method bias in this study.

3.2 STRUCTURAL EQUATION MODELLING

To assess structural relations between the constructs for a casual model, structural equation modelling (SEM) was performed. Structural equation model techniques have increasingly gained popularity and acceptance in tourism and hospitality research since the mid-1990s (Choi and Murray, 2010). It is a frequently preferred analysis in tourism research (Ali and Amin, 2014; Ali, Omar and Amin, 2013; Shahijan et al., 2015). Therefore, AMOS 20 and PASW 19 software programs were employed to empirically test the proposed model (Figure 1).

4. RESULTS

4.1 EVALUATION OF MEASUREMENT MODEL

To test whether the collected data fitted the hypothetical model, confirmatory factor analysis (CFA) was run. The fit indices were firstly checked in this concept. It can be generally said that the closer the fit indices are to 1 the greater the fit indices are, except RMSEA value. RMSEA value must be between 0.03 and 0.08, with 95% confidence (Hair et. al., 2014a). Some fit indices values were not found good in current research. Some items were excluded when re-analysed. The regenerated model fit is good and acceptable ($\chi^2=462.011$, $df=181$, $p=.000$, $\chi^2/df= 2.553$, $RMSEA= .062$, $GFI= .912$, $CFI= .941$).

We assessed factor loadings, composite reliability (CR), Cronbach's Alpha and average variance extracted (AVE) for convergent and discriminant validity and reliability of the measurement model. Table 2 shows that all factor loadings of constructs are well above the minimum criterion value of 0.70, except for five factors. Hair et al. (2014b) suggest that if an outer loading is > 0.40 but < 0.70 , the researchers should analyse the impact of indicator deletion on composite reliability. If a deleted item increases the composite reliability, delete it; if this is not so they suggest to retain the item. Because the deletion of the items did not increase the

composite reliability, we decided to retain them. Composite reliability and Cronbach's Alpha values, which present internal consistency reliability, were also above 0.70 recommended in the literature (Nunnally and Bernstein, 1994; Hair et al., 2014a)

Items	Factor Loadings	Composite Reliability
<i>Environmental Sustainability (Cronbach's Alpha =.846)</i>		.848
I believe that tourism must improve the environment for future generations	.824	
I think that TD should strengthen efforts for environmental conservation	.825	
Tourism needs to be developed in harmony with natural and cultural environment	.768	
<i>Perceived Social Costs (Cronbach's Alpha =.905)</i>		.906
I often feel irritated because of tourism in the community	.883	
My quality of life has deteriorated because of tourism	.807	
Tourists in my community disrupt my quality of life	.928	
<i>Long-Term Planning (Cronbach's Alpha =.712)</i>		.735
TD plans should be continuously improved	.876	
TI must plan for the future	.638	
<i>Economic Benefits (Cronbach's Alpha =.785)</i>		.787
Tourism creates new markets for our local products	.730	
I believe tourism is a strong economic contributor to the community	.694	
Tourism diversifies the local economy	.801	
<i>Community-Centred Economy (Cronbach's Alpha =.701)</i>		.711
TI should be required to obtain at least one half of their goods and services from within the local community	.692	
TI must contribute to community improvement funds.	.792	
<i>Ensuring Visitor Satisfaction (Cronbach's Alpha =.774)</i>		.777
Tourism businesses have responsibility to provide for visitor needs	.695	
TI must ensure good quality tourism experiences for future visitors	.777	
Tourism businesses must monitor visitor satisfaction	.727	
<i>Maximizing Community Participation (Cronbach's Alpha =.714)</i>		.739
Full participation of everyone in the community in tourism related decisions is a must for successful TD	.858	
Tourism decisions must be made by all in my community regardless of a person's background	.662	
<i>Support for Tourism (Cronbach's Alpha =.934)</i>		.935
Willing to be involved in a vital role	.831	
Would support any tourism planning	.902	
Promote and develop tour products	.939	
Want to see more tourists	.866	

Table 2. Overall CFA for the modified measurement model (N=403).

When Table 3 is checked, it is seen that the AVE values are well above the minimum threshold of 0.50 (Fornell and Larcker, 1981). Thus, we demonstrated convergent validity and reliability for all research constructs. To examine discriminant validity, Fornell and Larcker's (1981) criterion was assessed. Accordingly, we compared the AVE values with squared correlations between paired constructs. The

squared roots of AVE values should be 0.90 and lower (Fornell and Larcker, 1981). Besides this, the inter-construct correlations must be lower than the square roots of AVE (Kim, 2010). The results indicate that there is discriminant validity between all constructs shown in diagonal in Table 3.

	Interconstruct Squared Correlations											
	\bar{X}	σ	AVE	1	2	3	4	5	6	7	8	
1. Environmental sustainability	4.541	.510	.650	1,00	.022	.101	.113	.007	.096	.020	.018	
2. Perceived social cost	1.869	.912	.764		1,00	.001	.016	.002	.002	.061	.589	
3. Long term planning	4.292	.537	.587			1,00	.106	.081	.079	.026	.001	
4. Economic benefits	4.328	.572	.552				1,00	.076	.024	.071	.022	
5. Community-centred economy	4.084	.771	.553					1,00	.051	.057	.036	
6. Ensuring visitor satisfaction	4.397	.559	.538						1,00	.007	.001	
7. Max. community participation	3.780	.775	.590							1,00	.075	
8. Support for tourism	4.171	.905	.784								1,00	

\bar{X} : Arithmetic mean, σ : Standard deviation, AVE: Average variance extracted

Table 3. Discriminant validity and descriptive statistics.

4.2 STRUCTURAL MODEL

After we tested the reliability and validity of the measurement model, the structural model was assessed. The structural model was tested for collinearity before we assessed the structural model. The rate of chi-square (X^2) and degree of freedom (df) values were evaluated. The X^2/df rate lower than 3 is considered acceptable (Klem, 2000; Kline, 2005). The results have a level that is recommended in the literature as acceptable (Table 4). The R^2 value of support for tourism (0.739) was also found to be strong.

Hypothesis path	β	SE	CR	p	Results
H ₁ Environmental Sustainability \longrightarrow Support for Tourism	.037	.089	.765	.444	Not Supported
H ₂ Perceived Social Costs \longrightarrow Support for Tourism	-.762	.046	-15.703	***	Supported
H ₃ Economic Benefits \longrightarrow Support for Tourism	.001	.094	.017	.987	Not Supported
H ₄ Long-Term Planning \longrightarrow Support for Tourism	.208	.122	4.092	***	Supported
H ₅ Community-Centred Economy \longrightarrow Support for Tourism	.229	.067	4.334	***	Supported
H ₆ Ensuring Visitor Satisfaction \longrightarrow Support for Tourism	.016	.076	.340	.734	Not supported
H ₇ Max. Community Participation \longrightarrow Support for Tourism	.120	.062	2.379	.017	Supported

$x^2=251.645$, $df=124$, $p=,000$, $x^2/df= 2.029$, $RMSEA= ,051$, $GFI= ,939$, $CFI= ,967$

β : Standardized beta coefficient, SE: Standard error, CR: Critical ratio

Table 4. Results of testing hypothetical model.

Table 4 depicts the structural model results. H₁, which proposes the positive relationship between environmental sustainability and support, was not supported

with beta coefficient of 0.037, standard error of 0.089 and critical ratio (CR) of 0.765. This implies that residents' attitude to environmental sustainability does not influence their support behaviour. As shown in Table 4, the H₂ (perceived social costs - support for tourism) with beta coefficient of -0.762, standard error 0.046 and CR values of -15.703 was supported. According to this result, there is a negative relationship between residents' perceived social costs and support for tourism. However, the H₃ (perceived economic benefits - support for tourism) was not supported ($\beta=0.001$, $se=0.094$, $CR=0.017$). The H₄, implying a relationship between long-term planning with a beta coefficient of 0.208, standard error of 0.122 and CR of 4.092 and H₅, implying a relationship between community-centred economy and their support behaviour, with beta coefficient of 0.229, standard error of 0.067 and CR value of 4.334, were supported. According to the findings, the H₆ (ensuring visitor satisfaction - support for tourism), with beta coefficient of 0.016, standard error of 0.076 and CR value of 0.340, wasn't supported. The H₇ (maximizing community participation – support for tourism), with beta coefficient of 0.120, standard error of 0.062 and CR of 2.379, was supported.

5. DISCUSSION

Host residents' attitude toward support for tourism is an important part of the sustainable tourism development in a destination. As one of the major stakeholders of the industry, residents' support behaviour depends on their perception of the sustainability of tourism. This paper provides significant understanding of residents' attitude towards sustainable tourism and their support for tourism. This empirical study contributes to the existing support literature by using a sustainable tourism attitude scale. It highlights the importance of a sustainable tourism attitude of host residents that influences their support for tourism. The findings of this research will be useful for tourism planners and destination marketers.

This paper used a sustainable tourism attitude scale which has seven dimensions: environmental sustainability, perceived social costs, perceived economic benefits, long-term planning, community-centred economy, maximizing visitor satisfaction and maximizing community participation, respectively. Four of seven dimensions

(perceived social costs, long-term planning, community-centred economy and maximization of community participation) were supported. The results partially reinforce the broadened literature of residents' attitudes, which suggest that the sustainable tourism attitude of residents is a key element to influence their support behaviour.

This study didn't support the H_1 implying a relationship between residents' environmental sustainability perception and their support for tourism. This finding contradicted previous studies (Choi and Murray, 2010; Zhang and Lei, 2012). Despite the importance of natural resources for the sustainability of tourism, host residents may not be aware of the importance of natural resources. In addition, they may only focus on the local economy and they don't consider environmental sustainability. There are some studies in the literature (Laroche et al., 2001; Breiting and Wickenberg, 2010) explaining people's environmental behaviour via their socio-demographic characteristics. Their common findings show that educational level is an important issue in environmental behaviour. When the demographic findings of this study have been looked at, participants' educational level (just 8.7% of them have undergraduate or graduate status) show the reason for the rejection of H_1 .

The results of this study found that perceived social costs have a significant and negative relationship on the host residents' support behaviour (H_2). They also have the highest relationship between the host residents' attitudes towards sustainable tourism and their support behaviour. This finding overlaps with previous research (Choi and Sirakaya-Turk, 2005; Yu et al., 2011, Scaccia and Urioste-Stone, 2016). This negative impact of social costs may end up affecting residents' positive perception of sustainable tourism development and their support. Therefore, these social costs must be minimized and positive perceptions of sustainable tourism attitude must be used as key tools to encourage residents' support more. Tourism planners and managers can also play an important role in managing negative attitudes and making efforts to generate more benefits of sustainable tourism for Didim residents. Tourism planners must consider this sensitivity of residents about their regions.

However, H_3 , which expects a relationship between perceived economic benefits and support for tourism, were not supported in this study. Based on social exchange

theory, much research has found that the perceived economic benefits of tourism significantly and positively influence residents' support for tourism, whereas the perceived costs significantly and negatively affect their support behaviour. According to Zhang et al. (2015), while the perceived economic benefits dimension is a part of perceived tourism impacts, it is not a part of expected tourism sustainability. Similarly, Sirakaya-Turk and Gursoy (2013) explain the residents' willingness to pay tax to sustainable tourism development because of the high expectancy of economic benefits. According to another researcher - Pham's - (2011) foundation, host residents' support for tourism is not for its economic benefits, but rather for its socio-cultural and environmental benefits. Therefore, this study partially (H₂ supported, H₃ not supported) confirmed the social exchange theory.

Choi and Murray (2010) found a strong relationship between long-term tourism planning and support for tourism. This study confirmed the researcher's findings (H₄). This finding is consistent with the previous studies. For example, Kitnuntaviwat and Tang (2008) found a strong relationship between sustainability attitudes and sustainable development strategies. According to Choi (2013), sustainable tourism should protect local culture, improve community well-being and preserve the destination environment for the long-term viability of the community and the future of the tourism industry. The long-term planning dimension, as well as other studies, is one of the top factors having a high attitude toward sustainable tourism development. According to Muresan et al. (2016), development plans should contain the desire of the host residents for sustainable tourism development.

The results of the current study indicate that the community-centred economy directly and positively correlates with support for tourism (H₅). Although previous studies didn't report residents' attitude towards the community-centred economy (Choi and Sirakaya-Turk, 2005; Yu et al., 2011; Scaccia et al., 2016), this study confirmed a positive attitude of residents. According to these results, host residents in Didim place importance on local tourism income, otherwise there is no meaning of the economic benefits for them. Muresan et al. (2016) found that rural residents believe that tourism should be encouraged and become an important part of the community. This can be attained by providing job alternatives for the local economy. Tourism presents entrepreneurial opportunities for local women in the destinations.

No relationship has been found between ensuring visitor satisfaction and residents' support behaviour (H_6). In other words, ensuring visitor satisfaction is not an effective predictor of support for tourism. This result coincides with early papers that had been found to show an less attitude of residents toward ensuring visitor satisfaction (Choi and Sirakaya-Turk, 2005; Yu et al. 2011). The rejection of H_6 can be explained by the development of the stage of Didim destination. According to Ko and Stewart (2002), the host residents' attitudes towards tourism are directly related to the stage of development of the host community.

The last hypothesis (H_7), which claims a relationship between maximizing community participation and support for tourism, was supported. This finding coincides with previous studies. According to Sirakaya-Turk et al. (2008), residents' participation can affect the success or failure of the tourism industry. In other words, the successfulness of tourism is based on the residents' greater participation in tourism development plans for the destination. The more residents participate in the development process, the more they perceive tourism positively (Choi and Murray, 2010).

6. CONCLUSION

This paper reviews the role of residents' sustainable tourism attitude in their support for tourism, extending social exchange theory. A questionnaire survey was conducted to determine the major variables of sustainable tourism attitudes toward residents' support behaviour. To test this relation between two constructs, a structural equation modelling was utilized. The questionnaire survey was carried out in Didim, which is one of the famous touristic destinations for the tourism industry in Turkey. These results are beneficial for understanding what are the key issues concerning the sustainable tourism factors for residents in Didim. These issues may help to develop a tourism plan according to residents' attitude and implement it successfully for a long time.

The Berlin Declaration on Biological Diversity and Sustainable Tourism (1997) stated that "tourism should be developed in a way so that it benefits the local communities, strengthens the local economy, employs a local workforce and,

wherever ecologically sustainable, uses local materials, local agricultural products and traditional skills. Mechanisms including policies and legislation should be introduced to ensure the flow of benefits to local communities. Tourism activities should respect the ecological characteristics and capacity of the local environment in which they take place. All efforts should be made to respect traditional lifestyles and cultures.

Sustainable tourism development should meet the needs of society in the destination. In this case, host residents may enhance tourists' satisfaction as well as support sustainable tourism development in their region. Local planners play an important role in this process. They may consider the environmental, social and economical tourism impacts to promote residents' support of tourism. However, these dimensions are not sufficient in the challenge of sustainable tourism development. In addition, long-term planning, community centered-economy and maximizing community participation have been found as effective dimensions in this study. These approaches also point out the important of residents' involving to the process and the achieving the goals of sustainable tourism development. Therefore, these findings of this paper may help the local planners to evaluate the current situation of the tourism in the region and enhance the cooperation of the residents' and planners

To generalize the results, future research should consider the limitation of this study. One of the limitations relates to the collecting of data. This study used a self-administrated questionnaire to collect data from residents. Other studies may utilize qualitative techniques to have a deep understanding of residents' attitudes towards sustainable tourism and their support behaviour. This study was concluded in a sample of Didim. Future studies should apply the proposed model to other cultures. Furthermore, researchers should test the proposed model in different destinations that serve different types of tourism products, such as medical tourism and adventure tourism rather than Didim, which is a mass tourism destination. The proposed model can also be applied to other stakeholders like tourists and tour operators. Finally, future studies should determine the antecedents of sustainable tourism attitudes and their outcomes.

References

Ahn, B.Y.; Lee, B.; Shafer, C.S. Operationalizing sustainability in regional tourism planning: an application of the limits of acceptable change framework. *Tourism Management*, Volume 23, 2002, 1-15.

Alcaniz, E.B.; Garcia, S.I.; Blas, S.S. Relationships among residents' image, evaluation of the stay and post-purchase behaviour. *Journal of Vacation Marketing*, Volume 11, Issue 4, 2005, 291-302.

Ali, F.; Omar, R.; Amin, M. An examination of the relationships between physical environment, perceived value, image and behavioural intentions: a SEM approach towards Malaysian resort hotels. *Journal of Hotel and Tourism Management*, Volume 27(2), 2013, 9-26.

Ali, F.; Amin, M. The influence of physical environment on emotions, customer satisfaction and behavioural intentions in Chinese resort hotel industry. *Journal for Global Business Management*, Volume 7(3), 2014, 249-266.

Ap, J. Residents' perceptions of tourism impacts. *Annals of Tourism Research*, Volume 19(4), 1992, 665-690.

Assante, L.M.; Wen, H.I.; Lottig, K. An empirical assessment of residents' attitudes for sustainable tourism development: a case study of O'ahu, Hawai'i. *Journal of Sustainability and Green Business*, 2010, 1-27.

Berlin Declaration on Biological Diversity and Sustainable Tourism, <http://www.gdrc.org/uem/eco-tour/berlin.html> (data accessed: 18-08-2016).

Brackenbury, M. Trends and challenges beyond 2000. *WTO round table on beyond the year 2000: Tourism trends and challenges*. Madrid: WTO, 1993, 14-20.

Breiting, S.; Wickenberg, P. The progressive development of environmental education in Sweden and Denmark. *Environmental Education Research*, Volume 16, Issue 1, 2010, 9-37.

Choi, H-S.; Sirakaya-Turk, E. Measuring residents' attitude toward sustainable tourism: development of sustainable tourism attitude scale. *Journal of Travel Research*, Volume 43, 2005, 380-394.

Choi, H-C.; Murray, I. Resident attitudes toward sustainable community tourism. *Journal of Sustainable Tourism*, Volume 18, Issue 4, 2010, 575-594.

Choi, S.H. The impacts of tourism and local residents' support on tourism development: a case study of the rural community of Jeongseon, Gangwon province, South Korea. *Assumption Journal*, Volume 6, Issue 1, 2013, 73-82.

Cooke, K. Guidelines for socially appropriate tourism development in British Columbia. *Journal of Travel research*, Volume 21(1), 1982, 22-28.

Crick, A.P. Internal marketing of attitudes in Caribbean tourism. *International Journal of Contemporary Hospitality Management*, Volume 15(3), 2003, 161-166.

Çavuş, Ş.; Tanrısevdi, A. Residents' attitudes toward tourism development: a case study in Kusadasi, Turkey. *Tourism Analysis*, Volume 7, 2003, 259-269.

Dyer, P.; Gursoy, D.; Sharma, B.; Carter, J. Structural modeling of resident perceptions of tourism and associated development on the Sunshine Coast, Australia. *Tourism Management*, Volume 28, 2007, 409-422.

Fallon, L.D.; Kriwoken, L.K. Community involvement in tourism infrastructure-the case of the Strahan Visitor Centre, Tasmania. *Tourism Management*, Volume 24, 2003, 289-308.

Faulkner, B.; Tideswell, C. A framework for monitoring community impacts of tourism. *Journal of Sustainable Tourism*, Volume 5, Issue 1, 1997, 3-28.

Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, Volume 18, Issue 1, 1981, 39-50.

France, L. Local participation in tourism in the West Indian islands, In E. Laws, B. Faulkner & G. Moscardo (Eds), *Embracing and managing change in tourism: International case studies*. London: Routledge.

Gursoy, D., Jurowski, C.; Uysal, M. Resident attitudes a structural modeling approach. *Annals of Tourism Research*, Volume 29, Issue 1, 2002, 79-105.

Gursoy, D.; Rutherford, D.G. Host attitudes toward tourism an improved structural model. *Annals of Tourism Research*, Volume 31, Issue 3, 2004, 495-516.

Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*, Seventh Edition, England: Pearson New International Edition, 2014a, ISBN 978-1-292-02190-4.

Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, California: Sage Publications Inc. 2014b, ISBN 978-1-4522-1744-4.

Harrill, R. Residents' attitudes toward tourism development: a literature review with implications for tourism planning. *Journal of Planning Literature*, Volume 18(3), 2004, 251-266.

Jurowski, C.; Uysal, M.; Williams, D.R. A theoretical analysis of host community resident reactions to tourism. *Journal of Travel Research*, Volume 36, Issue 2, 1997, 3-11.

Keogh, B. Public participation in community tourism planning. *Annals of Tourism Research*, Volume 17(3), 1990, 449-465.

Kim, B. An empirical investigation of mobile data service continuance: Incorporating the theory of planned behaviour into the expectation-confirmation model. *Expert Systems with Applications*, Volume 37, 2010, 7033-7039.

Kim, S.; Park, E.; Phandanouvong, T. Barriers to local residents' participation in community-based tourism: lessons from Houay Kaeng village in Laos. *SHS Web of Conferences*, Volume 12, 2014, 1-8.

King, B.; Pizam, A.; Milman, A. Social impacts of tourism host perceptions. *Annals of Tourism Research*, Volume 20, 1993, 650-665.

Kitnuntaviwat, V.; Tang, J.C.S. Residents' attitudes, perception and support for sustainable tourism development. *Tourism and Hospitality Planning & Development*, Volume 5, Issue 1, 2008, 45-60.

Klem, L. Structural equation modelling. In L.G. Grim and P.R. Yarnold (Eds.) *Reading and understanding more multivariate statistics*. Washington DC: American Psychological Association, 2000, 227-260. ISBN 978-1557986986.

Kline, R.B. Principles and practice of structural equation modelling 2nd Edition, New-York: Guilford, 2005. ISBN 1-57230-690-4.

Ko, D-W.; Stewart, W.P. Structural equation model of residents' attitudes for tourism development. *Tourism Management*, Volume 23, 2002, 521-530.

Lane, B. Sustainable rural tourism strategies: a tool for development and conservation. *Journal of Sustainable Tourism*, Volume 2, 1994, 102-111.

Laroche, M.; Bergeron, J.; Barbaro-Forleo, G. Targeting consumers who are willing to pay more environmentally friend products. *Journal of Consumer Marketing*, Volume 18, Issue 6, 2001, 503-520.

Lee, T.H. Influence analysis of community resident support for sustainable tourism development. *Tourism Management*, Volume 34, 2013, 37-46.

Liao, X.Y.; So, S-L.; Lam, D. Residents' perceptions of the role of leisure satisfaction and quality of life in overall tourism development: case of a fast-growing tourism destination-Macao. *Asia Pacific Journal of Tourism Research*, doi: 10.1080/10941665.2015.1107111, 2015, 1-19.

Liu, Z. Sustainable tourism development: a critique. *Journal of Sustainable Tourism*, Volume 11(6), 2003, 459-475.

McCool, S.F.; Martin, S.R. Community attachment and attitudes toward tourism development. *Journal of Travel Research*, Volume 32(2), 1994, 29-34.

McGehee, N.G.; Andereck, K.L. Factors predicting rural residents' support of tourism. *Journal of Travel Research*, Volume 43, 2004, 131-140.

Muresan, I.C.; Oroian, C.F.; Harun, R.; Arion, F.H.; Porutiu, A.; Chiciudean, G.O.; Todea, A.; Lile, R. Local residents' attitude toward sustainable rural tourism development. *Sustainability*, Volume 8, Issue 100, 2016, 2-14.

Murphy, P.E. *Tourism: a community approach*, New York: Methuen, 1985.

Nelson, J.G. An introduction to tourism and sustainable development with special reference to monitoring. In J.G. Nelson, R. Butler & G. Wall (Eds), *Tourism and*

sustainable development: Monitoring, planning and managing. Waterloo: Department of Geography Series, 1993, 3-23.

Nicholas, L.N.; Thapa, B.; Ko, Y.J. Residents' perspectives of a world heritage site the Pitons Management Area, St. Lucia. *Annals of Tourism Research*, Volume 36, Issue 3, 2009, 390-412.

Nunkoo, R.; Ramkissoon, H. Developing a community support model for tourism. *Annals of Tourism Research*, Volume 38, Issue 3, 2011, 964-988.

Nunkoo, R.; Gursoy, D. Residents' support for tourism an identity perspective. *Annals of Tourism Research*, Volume 39, Issue 1, 2012, 243-268.

Nunnally, J.C.; Bernstein, I.H. *Psychometric theory*, 3rd Edition, New York: McGraw-Hill. 1994.

Oviedo-Garcia, M.A.; Castellanos-Verdugo, M.; Martin-Ruiz, D. Gaining residents' support for tourism and planning. *International Journal of Tourism Research*, Volume 10, 2008, 95-109.

Perez, E.; Jaume, N. Host community perceptions a cluster analysis. *Annals of Tourism Research*, Volume 17(4), 2005, 925-941.

Pham, L.H. Perceptions of tourism impact and tourism development among residents of Cuc Phuong National Park, Ninh Binh, Vietnam. *Journal of Ritsumeikan Social Sciences and Humanities*, Volume 3, 2011, 75-92.

Podsakoff, P.M.; MacKenzie, S.B.; Lee, J-Y.; Podsakoff, N.P. Common method biases in behavioural research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, Volume 88(5), 2003, 879-903.

Prayag, G.; Dookhony-Ramphul, K.; Maryeven, M. Hotel development and tourism impacts in Mauritius: hoteliers' perspectives on sustainable tourism. *Development Southern Africa*, Volume 27, Issue 5, 2010, 697-712.

Rasoolimanesh, S.M.; Jafari, M. Sustainable tourism development and residents' perceptions in World Heritage Site desitnations. *Asia Pacific Journal of Tourism Research*, doi: 10.1080/10941665.2016.1175491, 2016, 1-15.

Riberio, M.A.; Silva, J.A.; Valle, P.O. Measuring residents' attitude towards sustainable tourism: the validity of sustainable tourism attitude scale (SUS-TAS) in Cape Verde islands. *TTRA 2014 International Conference: Tourism and the New Global Economy*, 2014, 282-294.

Scaccia, M.; Urioste-Stone, S.D. Resident perceptions of sustainable tourism in Maine. *International Journal of Sustainable Development Planning*, Volume 11(3), 2016, 375-384.

Shahijan, M.K.; Rezaei, S.; Preece, C.N.; Ismail, W.K.W. International medical travelers' behavioural intention: an empirical study in Iran. *Journal of Travel & Tourism Marketing*, Volume 32(5), 2015, 475-502.

Sharpley, R. *Tourism, tourists and society*. Huntingdon: Elm Publications, 2008.

Sharpley, R. Host perceptions of tourism: A review of the research. *Tourism Management*, Volume 42, 2014, 37-49.

Shen, H.; Luo, J.; Zhao, A. The sustainable tourism development in Hong Kong: an analysis of Hong Kong residents' attitude towards mainland Chinese tourist. *Journal of Quality Assurance in Hospitality Tourism*, doi: 10.1080/1528008X.2016.1167650, 2016, 1-24.

Sirakaya-Turk, E.; Ekinci, Y.; Kaya, A.G. An examination of the validity of Sus-Tas in Cross-Cultures. *Journal of Travel Research*, Volume 46, Issue 4, 2008, 444-421.

Sirakaya-Turk, E.; Gursoy, D. Predictive Validity of SUSTAS. *Tourism Analysis*, Volume 18, Issue 5, 2013, 601-605.

Stylidis, D.; Biran, A.; Sit, J.; Szivas, E.M. Residents' support for tourism development: the role of residents' place image and perceived tourism impacts. *Tourism Management*, Volume 45, 2014, 260-274.

Tosun, C. Expected nature of community participation in tourism development. *Tourism Management*, Volume, 27, 2006, 493-504.

UNWTO - Sustainable Development of Tourism, <http://sdt.unwto.org/content/about-us-5> (data accessed: 21-05-2016).

Valle, P.O.; Mendes, J.; Guerreiro, M.; Sivla, J.A. Can welcoming residents increase tourist satisfaction? *International Journal of Tourism and Hospitality Research*, Volume, 22(2), 2011, 260-277.

Van de vijver, F.J.R.; Hambleton, R.K. Translating tests: some practical guidelines. *European Psychologist*, Volume 1, 1996, 89-99.

Vargas-Sanchez, A.; Porrás-Bueno, N.; Plaza-Mejía, M.A. Understanding residents' attitudes toward the development of industrial tourism in a former mining community. *Journal of Travel Research*, Volume 47, Issue 3, 2009, 373-387.

Yap, B.W.; Khong, K.W. Examining the Effects of Customer Service Management (CSM) on Perceived Business Performance via Structural Equation Modelling. *Applied Stochastic Models in Business and Industry*, Volume 22, 2006, 587-605.

Yoon, Y.; Gursoy, D.; Chen, J.S. Validating a tourism development theory with structural equation modelling. *Tourism Management*, Volume 22, 2001, 363-372.

Yoon, Y. *Development of a structural model for tourism destination competitiveness from stakeholders' perspectives*. Doctoral dissertation, Virginia Polytechnic Institute and State University, 2002.

Yu, C-P.; Chancellor, H.C.; Cole, S.T. Measuring residents' attitudes toward sustainable tourism: a re-examination of the sustainable tourism attitude scale. *Journal of Travel Research*, Volume 50, Issue 1, 2011, 57-63.

Zhang, H.; Lei, S.L. A Structural Model of Residents' Intention to Participate in Ecotourism: The Case of Wetland Community. *Tourism Management*, Volume 33, Issue 4, 2012, 916-925.

Zhang, Y.; Cole, S.T.; Chancellor, C.H. Facilitation of the SUS-TAS Application with Parsimony, Predictive Validity, and Global Interpretation Examination. *Journal of Travel Research*, Volume 54, Issue 6, 2015, 744-757.

Article info: Received 29/06/16. Accepted 28/09/16. Refereed anonymously.