TOURISM IMPACTS and SUPPORT FOR TOURISM DEVELOPMENT: THE CASE OF PAMUKKALE IN TURKEY

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This study examines the relationship between residents' perceived tourism impacts and their support for tourism development. The study was conducted on local residents of Pamukkale, an ancient resort town in the Aegean region of Turkey that is renowned for its thermal tourism resources in the world. To examine the relationship between variables, tourism impact domains were regressed against the support for tourism. The findings revealed positive relationship between tourism impacts and residents' support for tourism development.

Keywords: *Tourism Impacts, Tourism Development, Pamukkale, Denizli, Turkey.*

JEL Classification: *L83, M1, O1*

INTRODUCTION

Pamukkale is located in the southwestern part of Turkey and borders the city of Denizli. It is considered as one of the most spectacular places in the world with its natural beauty and archeological values (Dilsiz, 2002; Yüksel et al., 1999; Şimşek et al., 2000; Lasaponara et al., 2008). Accordingly, Pamukkale made the UNESCO's World Heritage List in 1988 (Şimşek et al., 2000; Dilsiz, 2002; Yüksel et al., 1999). To protect and preserve this world heritage site, several projects and scientific studies were initiated by the Ministry of Culture and Tourism of Turkey,

the International Research and Application Center for Karst Water Resources and the Governorship of Denizli (Dilsiz, 2001; Şimşek et al., 2000). Two decades ago, scientists from various fields, tourism investors, local authorities and planners participated in an international meeting for the preservation of Pamukkale (Dilsiz, 2001; Yüksel et al., 1999); the resulting report of this meeting was published as the *Pamukkale Preservation and Development Plan* by the Governorship of Denizli, Ministry of Culture and Tourism and UNESCO (Dilsiz, 2001; Yüksel et al., 1999). The purpose of *Pamukkale Preservation and Development Plan* was to reverse the color change of originally white travertines by creating activities compatible with Pamukkale's original natural and archeological environments (Dilsiz, 2001). Moreover, the International Research and Application Center for Karst Water Resources has developed and enacted a strategic action plan to protect the travertines from further pollution by increasing the amount of fresh water flowing to the travertines (Şimşek et al., 2000). Residents' stand on resource use issues and receptiveness to both visitors and tourism industry are an integral part of any destination planning and paramount in creating a sustainable tourism industry (Davis, et al., 1988). Accordingly, the growth and the direction of the tourism development is affected by residents' reciprocal interaction with visitors and the industry (Ap, 1992; Murphy, 1985; Sirakaya, et al., 2008).

There seems to be a renewed interest by the scientific community to study resident attitudes in emerging destinations, to revisit established models and theories, or study them within parameters of new paradigms like the *Sustaincentric Tourism Development* (see for example Sirakaya-Turk and his colleagues' studies 2005, 2008, 2010). Not long time ago, Harrill & Potts (2003) argued that understanding attitudes toward tourism development projects and initiatives is the most important initial step in gaining public support for tourism (Harrill & Potts, 2003). Although, it is perhaps challenging to contribute to theory-development in a substantive manner, emerging destinations like the Pamukkale, manifestation of contemporary developmental paradigms, mixed findings of resident-attitudes studies combined with newly developed sophisticated statistical tools will continue to create an upsurge of empirical studies (Sirakaya, Teye, & Sonmez, 2002; Smith & Krannich, 1998; Weaver & Lawton, 1999).

This empirical study examines the relationship between residents' perceived environment, economic, cultural, social and travertine impacts and their support for tourism development. The study was conducted on local residents in Pamukkale. The research population consisted of

residents those lived in Pamukkale district of Denizli province in Turkey. Factor analysis was run to determine the underlying constructs of environment, economic, cultural, social and travertine impacts domains followed by a multiple regression analysis.

LITERATURE REVIEW

Studies of the effects of tourism are becoming more prevalent in the past decade (Ko and Stewart, 2002; Spanou, 2007). Thus far, extant studies reveal that the tourism industry creates increases employment opportunities, income, tax revenues, improves infrastructure and quality of life of many communities around the globe (Gursoy et al., 2002; Hsu, 2000; Jurowski et al., 1997; King et al., 1993; Lankford and Howard, 1994; Liu and Var, 1986; Milman and Pizam, 1988; Ross, 1992; Ige and Odularu, 2008). The effects of tourism on the attitudes of local people have become an interesting subject for tourism scholars (Pappas, 2008). Recent tourism research reveal that tourism has positive and negative effects, some studies conclude that it has negative effects on socio-cultural environment but has positive effects on the economics of region and thus it is implied that the opinions of local people are different from each other (Yoon et al., 2001).

In tourism literature, local peoples' reactions for the developments of tourism are searched in so many researches (Jurowski et al., 1997; Yoon et al., 2000; Usal 1990). As far as the comprehended advantages of tourism pass costs, it is probable for local people to agree on supporting the developments of tourism (Yoon et al., 2000). It is intended for the conceptual models and theories to explain the relationship between local peoples' comprehensions of tourism and its effects since the beginning of 1990's (Teye et al., 2002). These models are value-attitude, value-attitude-behavior models (Lindberg and Johnson, 1997; Madrigal, 1995; Madrigal and Kahle, 1994), social representation theory (Madrigal, 1993) and growth machine theory (Madrigal, 1995). A lot of studies were interested in the subjects about the relationship between local peoples' comprehensions of tourism developments and its effects (Williams and Lawson 2001; Teye et al., 2002). Most of the studies have focused on the key factors describing the effects on the attitudes and comprehensions of local people for tourism since 1980 (Amuquandoh, 2010). Described factors are indicated as the situation of region economy community attachment (Gursoy and Rutherford, 2004; Lankford, 1994), vicinity of touristic area (Faulkner and Tideswell, 1997; Weaver and Lawton, 2001)

and socio-demographic characteristic features (Teye et al., 2002; Weaver and Lawton, 2001).

Researches about the attitudes of local people for tourism spread over a wide area; as effects on the environment, socio-cultural effects and economic effects (Kuvan and Akan, 2005; Choi and Murray, 2010, Yoon et al., 2001). In literature, increasing advantages of tourism for environment are also described (Choi and Murray, 2010; Yoon et al., 2001; Kuvan and Akan, 2005). It is concluded by the researchers that local people think that tourism has both positive and negative effects (Liu and Var, 1986; Liu et al., 1987; Puczko and Ratz, 2000). The negative effects of tourism on the environment can be classified as the pollution of natural, cultural and historical remains, destroying or abolishing and positive effects are the protection of cultural and historical remains, supplying better ways and increase of recreation activities (Yoon et al., 2001). It is necessary to focus on especially specific environmental problems from many and varied environmental problems (Kuvan and Akan, 2005). Local peoples' approach for the effects of tourism on environment is described as the attitude dimension depending on the variety and number of the subjects about environment in many studies (Kuvan and Akan, 2005). In so many studies, effects are reported as reduction of life quality, parking problems, commercialization of cultural activities, damage of daily life, increase of alcohol consumption, accession of garbage, damage of values, increase of individual or organizational crime and increase of traffic for local people in destination (Ap, 1992; King et al., 1993; Lindberg and Johnson, 1997; Liu et al., 1987; Liu and Var, 1986; McCool and Martin, 1994; Milman and Pizam, 1988; Ross, 1992). Sustainable Tourism Attitude Scale (SUS-TAS) evaluating the attitudes of local peoples' intended for tourism has got seven factors such as economic factors, visitor satisfaction, long term planning, community inputs, economic gains, social costs and environment (Choi and Sirakaya, 2005) and especially validity and structural evidences are presented (Sirakaya et al., 2008).

Studies held about the attitudes of local people in tourism are mainly concentrated on economic effects. (Kuvan and Akan, 2005; Choi and Murray, 2010, Yoon et al., 2001; Kuvan and Akan, 2005). Developments in tourism emphasize the importance of economic activities to enhance the economic development of the area (Ko and Stewart, 2002). Researchers -while inspecting the attitudes of local people on the effects of tourism emphasize comprehension of economic effects more (Yoon et al., 2001). Financial effects have positive relations through total effects of tourism (Yoon et al., 2001). When other studies are inspected, people

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working in jobs related to tourism substantially confirm the positive tendency of tourism (Kuvan and Akan, 2005).

The effect of tourism over national economy is limited (Yan and Wall, 2001). Tourism effects the economies of local people mostly (Jurowski et al., 1997; Yoon, 2002; Avcıkurt, 2007). The most important advantage of tourism expansion is indicated that it creates jobs and decreases unemployment (Jurowski et al., 1997; Yoon, 2002; Avcıkurt, 2007; Srivastava, 2011). The change of investments and expenses (Akis et al., 1996), economic expansion (Milman and Pizam, 1995), increase of real estate and house costs, product and service prices and increase of income for the region and government (Perdue et al., 1987), maintenance and improvement of infrastructure and increase of the cost of living can be given as an example of economic effects of tourism development (Yoon, 2002).

Increase of positive economic and social profits of tourism might change the ideas of local people rating economic and cultural gains obtained from tourism industry as insufficient (Yoon et al., 2001).

Profits of tourism can be indicated as follows; increase of life quality, protection of cultural and historical values, increase of shopping opportunities, giving attention to hygiene, giving more places to recreation activities and renovation in recreation activities (Ap, 1990, 1992; Gursoy et al., 2002; Jurowski et al., 1997; Madrigal, 1995; McCool and Martin, 1994; Perdue et al., 1990; Ross, 1992). Social and cultural effects of tourism developments might influence the opinions of local people as negative (Yoon, 2002; Perdue et al., 1987; Özgüç, 2003).

Studies show that tourism presents characteristics of local culture and changes traditional culture and advances local services (Liu and Var, 1986). The effects of tourism on socio-cultural values are bounded to the factors as the level of development and the number of tourists (Brunt and Courtney 1999; Soykan, 2004).

Besides the problems created by tourism, local people are also aware of the profits of tourism (Kuvan and Akan, 2005). Participants in the less income category think that tourism has negative economic effects, only a few people take the advantage of tourism and it reduces forest area in the region (Kuvan and Akan, 2005).

The term of "tourism development" is about tourism attractions and service-related improvements like accommodation and infrastructure supporting tourism (Sharma and Dyer, 2009). Different theories and models about the development of tourism in researches are the sources of the studies (Pappas, 2008). In a lot of studies, it is concluded that the comprehension of the effect by local people has a strong relation with the

support of tourism (Ap, 1992; Gursoy et al., 2002). The development of tourism for the purpose of economic profits is supported by local people (Gursoy et al., 2002).

In this study, the relationship between the effects of tourism and tourism support of local people is analyzed. With this study analyzing the relationship between the tourism support of local people in Pamukkale and the effects of tourism such as the comprehended positive and negative effects of tourism on environment, economic effects, cultural effects, social effects and effects on travertines; the vacancy of this subject about Pamukkale is tried to be filled.

This study examines the relationship between residents' perceived environment, economic, cultural, social and travertine impacts and their support for tourism development. The study was conducted on local residents in Pamukkale. The research population consisted of residents those lived in Pamukkale district of Denizli province in Turkey. Factor analysis was run to determine the underlying constructs of environment, economic, cultural, social and travertine impacts domains followed by a multiple regression analysis.

The purpose of this study was to understand the relationship between residents' perceived tourism impacts and support of tourism development. For this purpose the study was conducted on local residents in Pamukkale, a resort town on the Aegean region of Turkey.

METHODOLOGY

The data was collected via a combination of two methods: self-reported questionnaires and face-to-face interviews with residents of Pamukkale. The questionnaires were distributed to 3565 households of Pamukkale 538 residents with an effective response rate of 15%. The survey instrument consists of two parts. The first part contained six questions related to tourists' demographic background. The second part consisted of 35 Likert-type scale items that asked participants to indicate their level of agreement with each scale item anchored at 5 (strongly agree), 4 (agree), 3 (neither agree nor disagree), 2 (disagree), and 1(strongly disagree) Environment, economic, cultural, social, and travertine impacts are independent variables and the support for tourism development is the dependent variable.

Again the research population consisted of residents of Pamukkale district of Denizli province in Turkey. Data was entered into and analyzed by SPSS program. Descriptive statistics were obtained on socio-demographic variables. Factor analysis was run to determine the

reliability, reduce the number of variables into meaningful domains, and to determine the internal validity. Reliability test was conducted by examining the Cronbach's alpha for each domain.

During the analysis process, first, the questionnaires were evaluated in terms of the distribution of responses, outlier values and missing values. Concerning the missing values, Listwise and All Values methods were applied to check any significant differences between the two groups based on the complete list of questionnaires. No significant differences were found between these two groups. Then, the data set was evaluated for normality by taking into account the kurtosis and skewness values. "Z" normal distribution, tailbox graphics and Kolmogorov-Smirnov test were also applied on the data set.

The dependent variable was operationalized as the support for tourism and independent variables as "tourism impacts". Factor analysis with varimax rotation was run to reduce the dimensions of attitudinal items, to determine the reliability, and establish internal validity of the domains. As commonly done, the Factors with Eigenvalues greater than 1 were kept for further analysis; KMO statistics and Barlett's Test of Sphericity indicated that the data was suitable for factor analysis. Factor analysis was run several times by excluding, each time item that loaded on more than one factor and/or had items with low factor loadings until six clean factors were obtained. Factor scores were obtained for individual domains and were used in subsequent.

The Following hypotheses were tested using multiple regression analysis.

H1: There is a positive direct relationship between residents' perceived negative environment impacts and support for tourism.

H2: There is a positive direct relationship between residents' perceived positive environment impacts and support of tourism.

H3: There is a positive direct relationship between residents' perceived economic impacts and support of tourism.

H4: There is a positive direct relationship between residents' perceived cultural impacts and support of tourism.

H5: There is a positive direct relationship between residents' perceived social impacts and support of tourism.

H6: There is a positive direct relationship between residents' perceived travertine's impacts and support of tourism.

DATA ANALYSIS AND RESULTS

A pilot testing of the study was realized by interviewing residents. In reciprocal interviews, how residents showed reaction to questions was inspected, where they hesitated and if there were inarticulate parts were asked and residents' levels in perceiving questions were taken into account. After the pilot testing the last shape was given to the survey form and this survey was applied on residents living to Pamukkale. Surveys were tried to be made by interviewing face-to-face.

Questionnaire technique was used to collect data with face-to-face. 14 questionnaires were eliminated because of bad data quality, and in consequence 524 questionnaires were used for data analysis.

Demographic findings are shown in Table 1.

Table 1 Demographic factors

Demographic Factors	Number	Percent (%)	Demographic Factors	Number	Percent (%)
Gender	168	31.7	Marital status	345	66.7
Female	362	68.3	Married	172	33.3
Male	530		Single	517	
Total			Total		
Education Level	183	35.7	Income level (TL)		
Primary-secondary	220	42.9	600 and below	191	38.2
High school	110	21.4	601-1499	239	47.8
University	513		1500 and above	70	14.0
Total			Total	500	
Age	123	23.3			
25 years old and below	122	23.1			
26-30	97	18.3			
31-35	54	10.2			
36-40	56	10.6			
41-45	85	14.5			
46 years old and above	537				
Total					

31.7% of participants were female and 68.3% of participants were male. When we look at the education level 35.7% are primary school graduates, 42.9% are high school graduates, and 21.4% have university. 23.3% of the participants are 25 years old and younger, 23.1% are between 26-30 years old, 18.3 % are between 31-35 years old, 10.2% are between 36-40 years old, 10.6% are between 41-45 years old and 14.5% are 46 years old and older. 66.7% of participants were married and 33.3% of participants were single. When monthly income level inspected it is seen that 38.2% of participants' income is 600 TL and below, 47.8% is between 601-1499 TL, and 14% is 1500 TL and more than that.

Table 2 Exploratory Factor Analysis

Factor Number and Name	Factor Loading	Eigen value	Defined Difference percentage
Negative Environment impacts		23.03	12.93
Tourism is damaging to the local.	.63		
Tourism has resulted in trafic congestion, noise and pollution.	.71		
Construction of hotels and other tourist facilities have destroyed the natural environment.	.68		
Tourism provides more parks and other recreational areas for local residents.	.53		
Tourism has serious negative increase environmental impacts.	.71		
Tourism has created significant environmental pollution.	.72		
Tourism has negative impacts on the natural resources.	.68		
Economic impacts		17.11	10.38
Tourism has created more jobs for your community.	.72		
Tourism has attracted more investment to your community.	.77		
Tourism has led to more spending in your community.	.67		
Our standard of living has increased considerably because of tourism.	.60		
Tourism has increased price of goods and services.	.49		
Tourism has given economic benefits to local people and small businesses.	.73		
Tourism revenues are more important than revenues from the other industries for local government.	.49		
Positive Environment impacts		4.63	9.45
Tourism helps to increase local awareness and appreciation of the environment.	.69		

Preserves environment and improves the appearance (and images) of an areas.	.74		
Improves living utilities infrastructure (supply of water, electric, and telephone, etc.).	.65		
Improves public facilities (pavement, traffic network, and civic center.	.68		
Because of the increased awareness generated by tourism, more measures are now being taken to protect the travertines in the area.	.64		
Cultural impacts		4.55	8.81
Owing to tourism development, local people now have more recreation opportunities.	.61		
Tourism has encouraged a wide variety of cultural activities like crafts, art, and music in a community.	.65		
Tourism has resulted in more cultural exchange between tourists and residents.	.65		
Meeting tourists from other regions is a valuable experience to better understand their culture.	.64		
Tourism has resulted in positive impacts on the cultural identity of our community.	.49		
Social impacts		3.52	7.22
High-spending tourists have negatively affected our way of life.	.55		
Tourism has changed our precious traditional culture.	.76		
Local residents have suffered from living in a tourism destination area.	.68		
Tourism has increased the crime rate.	63		
Travertine impacts		3.14	7.19
Travertine in and around Pamukkale have been seriously damaged by tourism.	.65		
The construction of tourism facilities in Pamukkale has created serious damage to the travertines in Pamukkale.	.67		
The use of water resources from tourism facilities has caused considerable damage to the travertines in Pamukkale.	.72		
The use of travertines for recreational activities by tourists has harmful effects on the travertines.	.70		

N= 538. Kaiser-Meyer-Olkin sampling value=0.90; Barlett test= 6359.24 (p<.001); Total variance explained in the data=55.63%

The result of reliability test indicated that the overall scale was fairly reliable with an alpha value of, 0.84. Alpha values is over 0.8 are considered to be reliable (Nunnally, 1967). Barlett test result was 6359.24

and p<.001 level and Kaiser-Meyer-Olkin sample value was 0.89 indicating that data is suitable for factor analysis.

After the initial elimination, 32 items loaded saliently within six domains. Table 2 displays the domain descriptors, the number of items in each domain, Eingenvalues, a percentage of variances explained and the result of KMO and Barlett tests. Six factors were labeled as follow: factor 1= negative environment (seven items; alpha = .84); factor 2 = economic (seven items; alpha = .82); factor 3 = positive environment (five items; alpha = .81); factor 4= cultural (five items; alpha = .77); factor 5 = social (four items; alpha = .72); and factor 6= travertine impacts (four items; alpha = .80).

According to Table 2, the factor loading range from a low of 0.49 to a high of 0.77. Variables evaluated under factor that factor load is bigger, equal factor loads removed.

The first factor explains 12.9% of the variance in the data set. This factor includes variables such as; "Tourism is damaging to the local", "Tourism has resulted in traffic congestion, noise and pollution", "Construction of hotels and other tourist facilities have destroyed the natural environment", "Tourism provides more parks and other recreational areas for local residents", "Tourism has serious negative increase environmental impacts", "Tourism has created significant environmental pollution", and "Tourism has negative impacts on the natural resources . When the content of these variables are inspected, this factor seems to indicate Negative Environment Impacts. The second factor, Economic impacts, explains 10.3% of the variance and include variables such as "Tourism has created more jobs for your community"; "Tourism has attracted more investment to your community"; "Tourism has led to more spending in your community"; "Our standard of living has increased considerably because of tourism"; "Tourism has increased price of goods and services"; "Tourism has given economic benefits to local people and small businesses"; and "Tourism revenues are more important than revenues from the other industries for local government.". The third factor, Positive Environment Impacts, explains 9.4% of the variance in the data and includes variables such as "Tourism helps to increase local awareness and appreciation of the environment"; "tourism preserves environment and improves the appearance (and images) of an areas"; "tourism improves living utilities infrastructure (supply of water, electric, and telephone, etc.)" and so on. The fourth factor, Cultural impacts, explains 8.8% of the variance and includes variables such as "Owing to tourism development, local people now have more recreation opportunities"; "Tourism has encouraged a wide variety of cultural

activities like crafts, art, and music in a community"; "Tourism has resulted in more cultural exchange between tourists and residents" and so on. The fifth factor, Social impacts , explains 7.2% of the variance and includes variables such as High-spending tourists have negatively affected our way of life"; "Tourism has changed our precious traditional culture"; "Local residents have suffered from living in a tourism destination area" and so on. The six factor, Travertine impacts defines 7.1% of the variance and includes variables such as "Travertine in and around Pamukkale have been seriously damaged by tourism"; "The construction of tourism facilities in Pamukkale has created serious damage to the travertines in Pamukkale"; "The use of water resources from tourism facilities has caused considerable damage to the travertines in Pamukkale" and so on.

To determine the effects of independent variables on the dependent variable which is the support for tourism, regression analysis was used. Multiple regression analyzes the relationship between a dependent variable (the support for tourism) and multiple independent variables (e.g., Negative environmental, economic, positive environmental, cultural, social and travertine impacts). Table 3 below illustrates the results of the regression analysis.

Table 3 Regression analysis of factors that affect destination loyalty

Variables	Beta	t	Sig
(Fixed)	.99	3.33	.001[*]
Negative Environment impacts	-.12	-2.28	.023[*]
Economic impacts	.16	3.53	.001[*]
Positive Environment impacts	.30	6.32	.001[*]
Cultural impacts	.19	3.85	.001[*]
Social impacts	.01	.19	.853
Traverten impacts	.14	2.89	.004[*]

Multi regression = .55 *R Square = .30*

Adjusted R Square = .29 *F: 37.99*

According to the findings, the model is significant at 5% alpha level (F=37, p=.001) and explained 30% of the error variance in the model (R^2

= 0.30). Out of the six variables, five collectively affect the support for tourism significantly. These variables are negative environmental impacts, economic impacts, positive environmental impacts, cultural impacts and travertine impacts.

Based on the findings of the regression analysis, positive environmental impact contributed the most to the model with a β= .30 (t=6.32; p=.001). For a unity increase in perceptions of positive impacts, the support for tourism increased %0.3, hence the H_3 was confirmed. In order of importance the next independent variable was the cultural impacts with a β value of .19 (t=3.85; p=.001), followed by economic impacts β=.16 (t=3.527; p=.023), travertine impacts β=.14 (t=2.89; p=.004), and negative environment β=.12 (; t=2.276; p=.023). Based on these results H_1, H_2, H_3, H_4 and H_6 are supported. H_5 that there is a positive direct relationship between residents' perceived social impacts and support of tourism was not supported.

CONCLUSION

This study examines the relationship between residents' perceived tourism impacts and their support for tourism development. The study was conducted on local residents in Pamukkale, an ancient resort town on the Aegean region of Turkey. To examine the relationship between tourism impacts and residents' support for tourism development, factor analysis was run to determine the underlying constructs of various tourism-impact domains followed by a multiple regression analysis. The findings revealed positive relationship between tourism impacts and residents' support for tourism development.

The questionnaires were applied to 538 residents Pamukkale destination in Denizli to find out the relationship between residents' perceived tourism impacts and support of tourism development.

The research population consisted of residents those lived Pamukkale district of Denizli province in Turkey. The result of reliability test, alpha value was found as 0.84. Alpha value is over 0.8 (Nunnally, 1967), hence the scale is reliable. Dependent variable is the support for tourism and independent variables are tourism impacts. Factor analysis was used to obtain mutually exclusive groups of variables and multiple regression analysis was used in order to test hypotheses.

32 variables were regrouped under 6 domains and explained .55 of the variance. Six factors were labeled as follow: factor 1= negative environment (seven items); factor 2 = economic (seven items); factor 3 =

positive environment (five items); factor 4= cultural (five items); factor 5 = social (four items); and factor 6= travertine impacts (four items).

For the purpose of determining the effects of independent variables ("Negative environment, economic, positive environment, cultural, social and travertine impacts) on the dependent variable which is the support for tourism, The findings revealed that five variables affect the support of tourism significantly. These are negative, economic, positive environment and cultural and travertine impacts.

The independent variable that explains the most variance in the dependent variable is "positive environmental impacts", followed by cultural impacts, economic impacts, travertine impacts, and negative environment.

The findings of this research indicate that there is a direct relationship between residents' perceived negative-positive environment impacts and support of tourism, there is a positive direct relationship between residents' perceived economic impacts and support of tourism, there is a positive direct relationship between residents' perceived cultural impacts and support of tourism, there is a positive direct relationship between residents' perceived travertine's impacts and support of tourism. But there is no positive direct relationship between residents' perceived social impacts and support of tourism.

This research has been focused in the residents in Pamukkale and does not examine the perception of the residents in Denizli. Due to the limitation of this study, the finding can only be generalized to a similar population. Future studies on tourism impacts may explore different groups local government and tourism business.

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