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# Examining the Impacts of Tourism on Gumushane Residents According to the Doxey Index\*

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#### **Abstract**

Tourism is a versatile activity that can have both positive and negative impacts on touristic destinations and local people. Reducing the negative impacts of tourism on touristic destinations depends on the development of a planned tourism. Accordingly, it is primarily required to determine the level of present tourism activities in destinations in order to achieve the planned tourism development. In this context, the 'Doxey Irritation Index', presented by Doxey (1975) based on the stages of euphoria, apathy, irritation and antagonism, is an important guide in determining the level of tourism development in destinations. In this direction, the purpose of this study is to determine the stage of Gumushane in terms of tourism development level according to the "Doxey Irritation Index" by revealing the opinions of Gumushane residents about Gumushane tourism. Accordingly, the opinions of Gumushane residents about tourism were consulted via face-to-face interviews. As a consequence, it was determined that tourism in Gumushane was at the stage of euphoria (beginning) according to the "Doxey Irritation Index". Besides, the vast majority of Gumushane residents stated that tourism would not have negative social, cultural, economic and environmental impacts on Gumushane.

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#### **INTRODUCTION**

Tourism has a special position in the economies of countries due to its impact on sustainable development. In this context, tourism has great economic contributions to countries and local destinations because it is a dynamic and growing sector, and provides a special relationship and interaction between visitors, sector, environment and local communities (UNEP & UNWTO, 2005).

It is known that tourism has both positive and negative impacts on social, cultural, economic and environmental aspects in all systems that it interacts with (UNWTO, 2004). What matters at this point is that the precautions that would reduce the negative impacts of tourism even further are taken in the beginning of tourism. In this context, it is primarily required to determine the awareness and perception levels of local people who live in touristic destinations that have just been open to tourism regarding tourism activities. According to Long, Perdue & Allen (1990), it is also very important to determine the possible social, cultural, economic and environmental impacts of tourism on the local people and to prepare and implement tourism development plans in accordance with the needs of touristic destinations. These plans should have the flexibility and dynamism to adapt to the sensitive and dynamic structure of tourism.

Besides, it is of vital importance to make tourism activities sustainable in touristic destinations in the long term, in other words extend its lifetime for protecting the present tourism resources and continuning of the economic contributions of tourism at long term in touristic destinations (Liu, 2003; Choi & Sirakaya, 2006). In this sense, tourism plannings should be grounded on the preparedness of local people for tourism and their awareness levels especially in destinations where tourism has just begun to develop, as well as the possible impacts of tourism on the region.

Accordingly, the 'Doxey Irritation Index', which was developed by Doxey (1975) for determining the stage of destinations in tourism, could be used as a guide (Faulkner & Tideswell, 1997). In this context, this study aims to determine the stage of Gumushane province in terms of the tourism development level on the basis of the Doxey model. In order to determine the development level of Gumushane province, statements that were generated according to twenty 5-point likert scales aiming to measure each stage of the Doxey model and questions aiming to determine the demographic information of participants were addressed to Gumushane residents and the acquired results were evaluated. This research is important because it is the first study conducted for Gumushane with a scale

developed according to 'Doxey Irritation Index'. It is aimed to make suggestions to relevant stakeholders in line with the tourism development level determined according to 'Doxey Irritation Index' of Gumushane. Thus, it is thought that this research will guide relevant stakeholders at the point of providing a planned and healthy tourism development in Gumushane.

#### LITERATURE REVIEW

#### **Impacts of Tourism**

Tourism activities need the support of local people in order to develop in destinations (Yoon, Gürsoy & Chen, 1999; Andereck & Vogt, 2000; Gürsoy, Jurowski & Uysal, 2002; Gürsoy & Rutherford, 2004). On the other hand, the form of economic, social and environmental impacts of tourism on local people determines whether or not they support tourism (Jurowski, Uysal & Williams, 1997). Some studies suggest that tourism education plays an important role for local people to support tourism (King, Pizam & Milman, 1993). Gradual progress of tourism activities in a destination may gradually increase the positive and negative impacts of tourism on local people (Long, Perdue & Allen, 1990). There are internal and external environmental factors that affect the perceptions of local people regarding tourism. Internal environmental factors involve the characteristics and life conditions of individuals who constitute local people. External environmental factors, on the other hand, involve a broader impact area of tourism outside of internal environment (Faulkner & Tideswell, 1997; Fredline & Faulkner, 2000). This impact area involves factors like; development stage of tourism, proportion of the number of tourists to the number of local people, tourist types and seasonality of tourism. The impact form and level of the aforementioned internal and external environmental factors on local community may determine the viewpoint of local people toward tourism and the place of touristic destinations in the life cycle. In this sense, the Doxey Irritation Model may be used as a guide (Faulkner & Tideswell, 1997).

Tourism has positive impacts in three different dimensions in general. These positive impacts are observed in; economic, socio-cultural and environmental dimensions. *Positive economic impacts* of tourism involve; direct contribution of inflow of foreign currency provided from foreign visitors as an export item to the currency account of the national balance of payments, indirect income acquired from tourism revenues in other sectors and increase of household income, employment and internal revenues by dint of tourism (Archer, Cooper & Ruhanen, 2005; Bahar & Kozak, 2010; Ünlüönen, Tayfun & Kılıçlar,

2014; Filiz & Yılmaz, 2017). Positive socio-cultural impacts of tourism involve; development of mutual sensibility and good relations between different nations, protection of the traditional culture of touristic destinations and motivation of local community to increase the educational and wealth level (Gürbüz, 2002; Archer, Cooper & Ruhanen, 2005). In addition, tourism is influential in increasing the quality of life in touristic destinations, encouraging the participation of local people, and building self-esteem and pride in the community (Filiz & Yılmaz, 2017). Another positive impact of tourism is observed in the environmental dimension. In this sense, tourism may contribute to the protection of tourism resources and removal of factors that might damage these resources by developing a point of view regarding the protection of holiday areas in both local community and international environment. Besides, tourism enables idle historical buildings and other tourism resources to be put under protection and become usable. Thus, it becomes possible to evaluate present country resources that have a tourism potential in a way to create added-value (Archer, Cooper & Ruhanen, 2005; İçöz, Var & İlhan, 2009; Cetin, 2009).

tourism may cause a number of negative changes in local community. Negative impacts of tourism may occur in the cultural values of local community and crime rates may increase especially in the tourism season (McCool & Martin, 1994). Besides, bad presentation and commercialization of local culture in the tourism market may cause more negative results especially in developing countries. Modern tourism gradually evolves into a conception where artificial experiences are presented for the purpose of compensating the inadequacy of real cultural experiences (Haralambopoulos & Pizam, 1996). On the other hand, tourism is an opportunity for undeveloped countries to integrate economically and socially into the developments in the world and politically and culturally into other countries in the upcoming process (Pérez & Nadal, 2005). Tourism has negative impacts on touristic destinations in three different dimensions. The first impact is the physical and environmental impact of tourism on touristic destinations, which is encountered as excessive increase of population density in touristic destinations especially in tourism seasons, negatively affected transportation conditions

**Table 1:** The Stages of Doxey Irritation Index

	Stages	Features						
1.	Euphoria	The small-scale tourism movements provide that local people tend to accept						
		tourism and tourists, and have a sense of extreme happiness. For this reason,						
		it can be said that local people have a positive approach to tourism and						
		tourists at this stage.						
2.	Apathy	Increasing tourism activities make marketing more important and effective.						
		As a result, a commercial relationship between local people and tourists is						
		beginning to develop. At this stage, the local people don't care about the						
		increase in the number of tourists, because the relationship between loca						
		people and tourists is monetary sourced.						
3.	Irritation	With the increasing concentration of tourism, the local people are beginning						
		to feel uncomfortable and suspicious about the tourism sector.						
4.	Antagonism	It is observed that the local people are beginning to express their anger and						
		to see tourists as responsible for everything at this stage.						

Source: Doğan & Üngüren, 2010: 399.

It is seen that as the impact of tourism on the carrying capacity of a region increases, local people have a higher tendency of showing a negative approach to tourism. For that reason; it is recommended to aim increasing the economic contributions of tourism and decreasing its social, cultural and environmental destructions and develop plannings in the process of developing the tourism activities (Liu, Sheldon & Var, 1987). Allowing the interaction of communities that have different social and cultural properties; tourism has the potential of making a behavioral change in society (Öztürk, Akdu & Akdu, 2007). In this sense,

and opening of tourism resources to excessive use. *The second* impact is the economic impact of tourism, which is encountered as the rise of inflation in touristic destinations, fluctuations in employment and excessive economic dependence on a single industry. *The third* impact is the socio-cultural impact of tourism, which is encountered as involvement of activities that would cause gambling, alcohol addictions within tourism activities and commoditization of tourism resources that would cause local people to lose their cultural identity (Pizam, 1978).

#### **Doxey Irritation Index**

In his irritation index developed in 1975; Doxey suggested that local people who had positive perspective of tourism in the beginning started to have negative perspective of tourism activities due to the rapid development of the tourism industry and negative aspects of tourism. Doxey models this process in four basic stages. In the first stage, local people meet tourism with euphoria. In the second stage, local people perceive tourism activities that begin turning into an economic activity as a routine activity and develop an apathy towards tourism. In the third stage, local people who are exposed to negative social, cultural, economic and environmental impacts of tourism begin to develop an irritation towards tourism activities and tourists. In the final stage, the aforementioned negative impacts of tourism on local people gradually increase. In this stage, local people develop an antagonism towards tourism activities and tourists (Faulkner & Tideswell, 1997). Doxey Irritation Index is explained in detail in Table 1.

In this model that was presented by Doxey (1975), it is stated that negative impacts of tourism gradually increase especially in the maturation stage. According to the Doxey Index; local people are among the stakeholders that are mostly affected by positive and negative impacts of tourism. Within the frame of this model; it may be suggested that people may have different perspective of tourism in regions where tourism has different levels of development (Cohen, 1984; Brunt & Courtney, 1999; Sharpley, 2014).

In some studies in the literature, it is stated that there is a relationship between Doxey's (1975) Irritation Index and Butler's (1980) Tourism Area Cycle of Evolution (Faulkner & Tideswell, 1997; Beeton, 2006; Vargas-Sánchez et al., 2015; Filiz & Yılmaz, 2017). Butler's (1980) "Tourism Area Cycle of Evolution" consists of six stages including "Exploration" stage that the touristic destination is discovered by the visitors; "Involvement" stage that the local people living in destination have increased their support and participation in the tourism; "Development" stage in which marketing activites are intensified and the number of visitors in the destination is increasing; "Consolidation" stage which increase in the number of visitors decreases; "Stagnation" stage that the number of visitors has reached its peak, the carrying capacity has begun to be exceeded and the negative impacts of tourism have begun to emerge; "Decline" stage in which the attractiveness of the destination and the number of visitors starts to decrease after the stagnation stage or "Rejuvenation" stage that the destination has been completely renewed and started to be popular again (Butler, 1980). When Doxey's (1975) "Doxey Irritation Index" and Butler's (1980) "Tourism Area Cycle of Evolution" are compared; while the social impacts of tourism are at the forefront in "Doxey Irritation Index", the economic, social and cultural impacts of tourism are at the forefront in the "Tourism Area Cycle of Evolution". In case of these two models are matched; periodically, it can be expressed that "Exploration" and "Involvement" stages correspond to "Euphoria" stage, "Development" stage corresponds to "Apathy" stage, "Consolidation" and "Stagnation" correspond to "Irritation" stage, "Decline" and "Rejuvenation" stages correspond to "Antagonism" stage. The main aim of these two models is to reduce the potential negative impacts of tourism and to provide that tourism activities are sustainable in order to ensure that businesses, local people and visitors see the least harm from the negative impacts of tourism with the attracting attention of tourism planners, local and national authorities and tourism decision makers (Filiz & Yılmaz, 2017).

#### **METHODOLOGY**

The Doxey Irritation Index is a model to reveal the point of view of the local people's tourism and it is thought that it will contribute to the in-depth examination of determining whether the demographics of local people make a difference in their perspective to tourism activities. For example, long-stay residents in Gumushane can have more information about Gumushane and the tourism activities performed in the province. There may also be differences in the occupations of the people living in the province. For example, the opinions of those working in jobs related to tourism sector and those working in different areas outside the tourism sector may not show similarities.

The basic questions of the research determined in this direction are as follows:

- 1. Is there a difference between participants' duration of residing in Gumushane and their thoughts on tourism?
- 2. Is there a difference between the occupations of the participants and their thoughts on tourism?
- 3. Is there a difference between the ages of the participants and their thoughts on tourism?
- 4. Is there a difference between the gender of the participants and their thoughts on tourism?

#### Population and Sample

population of the study consists of Gumushane residents in the central Gumushane.

Gumushane has many touristic attractions that are natural, cultural and historical. According to data of Gumushane Provincial Culture and Tourism Directorate (2018), Gumushane's number of visitors in 2015 is 130.633 people. So it is difficult to say that tourism is developed in Gumushane. In summary, it can be said that tourism is beginning period in Gumushane. It is thought that effective planning is easier in regions where tourism is starting to develop. For this reason, it has been decided to carry out the research in Gumushane in order to make recommendations to tourism planners and decision makers in Gumushane.

According to the latest data of the Turkish Statistical Institute (TURKSTAT); 52.628 people lived in the central Gumushane in 2014. Thus, target population of the study was determined as 52.628 people. A sample that would represent the population was selected from the aforementioned population. In this study, convenience sampling method, one of the non-probability sampling methods, was used. In this method, the data can be collected from within the universe very quickly, easily and economically (Aaker et al., 2007: 394; Haşıloğlu et al., 2015: 20). In this study, the formula for determining the number of samples  $[n = \pi (1-\pi) / (e / Z) 2]$  which is frequently preferred by researchers in determining the number of samples was used. Standard error (e) was set at 0,05; standard deviation (Z) was set at 0,95 confidence interval. While calculated of  $\pi$  and  $(1-\pi)$ , the highest variance value was accepted as 0,5. As a result of this process, the number of samples that can represent the universe composed of 52.628 persons was determined as 382. Also, Krejcie & Morgan (1970) suggest a general table regarding the population volume in studies that would carry out evaluations according to proportions. The sample size was determined as 381 according to the significance level of 0,05 and error rate of  $\pm 0,05$  in case of having a sample of 50.000; and 381 in case of having a sample of 75.000 (Ural & Kılıç, 2006). Accordingly; the sample size was taken as 382 since the population of the central Gumushane was 52.628.

#### **Data Collection Technique and Data Analysis**

A questionnaire was used in the study as the data collection technique for the purpose of reaching a larger mass. The questionnaire being used in this study was partially adapted from the questionnaire used by Robert Madrigal (1995) in the study, "Residents' Perceptions and the Role of Government" and the questionnaire used by Bill Faulkner & Carmen Tideswell (1997) in the study "A Framework for Monitoring Community Impacts of Tourism" for the purpose of determining the dimensions of 'Euphoria, 'Apathy', 'Irritation' and 'Antagonism' specified in the

Doxey irritation model. The questionnaire consists of two parts. In the first part of the questionnaire are questions for determining the gender, age range, educational background of participants and their duration of residing in Gumushane. In the second part of the questionnaire are 20 statements about the dimensions of 'Euphoria', 'Apathy', 'Irritation' and 'Antagonism', prepared according to the five point likert scale as 5 questions in each dimension.

The questionnaire was applied in October and November, 2016. The targeted number of participants, 381, was exceeded in this extent and the questionnaire was applied to 520 participants. Among the questionnaires being collected; 20 questionnaires that were not applicable for statistical analysis were excluded and the study data were analyzed with 500 questionnaires. Streiner (1994) stated that the validity of statistical analyses could be provided through 10 individuals per item and at least 100 samples (Çepni, 2010; Akdu, 2014: 85). From this point of view, it might be suggested that the acquired data (n=500) will meet the efficiency for the analyses to be conducted within the scope of the study.

The acquired data were analyzed in the spss package software. In this context; t-test, arithmetic mean and One-Way Analysis of Variance (ANOVA) were used for determining the percentage and frequency distribution, stage according to the Doxey Index and the differences between the participants for the descriptive information about the participants; and bonferroni test for determining the difference between the groups. Cronbach's Alpha model was used for attaining the reliability of the questionnaire and exploratory factor analysis for comprehending the relationship between the study variables, determining the basic factors in the data set that was generated in parallel with the Doxey Irritation Index, as well as the extent of these factors to explain the variables and the relevant results were involved in findings.

#### **FINDINGS**

This part of the study involves findings acquired as a result of data analysis. Cronbach's Alpha Coefficient was used for testing the reliability of the scale. As a result of the analysis, the Cronbach's Alpha value was determined as 0,674 (N of Items=20). The reliability of the scale was in the interval of 0,80≥0,674>0,60. From this point of view, it may be suggested that the scale is quite reliable.

It is identified that 69% are men and 31% women of participants in the study. It is also identified that 39,2% are in the age range of 18-28, which is respectively

followed by the age groups of 29-38 (24,8%) and 39-48 (16,6%) of participants. The highest numbers of participants were obtained from high school graduates according to the educational background (70%), workers according to the occupation (22,4%) and those that had resided for more than 10 years according to the duration of residing in Gumushane (69,4%).

#### **Factor Analysis**

Before the factor analysis, Kaiser-Meyer Olkin (KMO) test was applied to the scale for the purpose of determining whether or not the sample size was convenient for factorability. According to Sharma (1996), the KMO value of 0,80 and 0,90 is interpreted as 'Very Good' and 0,90 and above 'Excellent' (Eroğlu, 2008: 322). As a result of analysis, KMO value is 0,865 (Barlett Test). Thus, it may be suggested that the scale is convenient for factorability.

because, after a varimax rotation, each original variable tends to be associated with one (or a small number) of factors, and each factor represents only a small number of variables. In addition, the factors can often be interpreted from the opposition of few variables with positive loadings to few variables with negative loadings' (Abdi, 2003).

As Hair et al. (1998) suggested, factor components were formed by gathering variables that had a factor load above 0,50. At the end of the factor analysis, no cyclicalload question was encountered. While preparing the scale, the 15. question projected for the dimension of 'Irritation' was placed in the dimension of 'Antagonism'. The fact that there is no severe distinction between the two dimensions poses no problem for evaluating the question, 'Tourism activities in Gumushane have begun annoying me' in the dimension of 'Antagonism'.

Questions	Antagonism	Euphoria	Apathy	Irritation
Q18	,807			
Q17	,716			
Q16	,658			
Q19	,653			
Q20	,601			
Q15	,490			
Q3		,756		
Q2		,716		
Q1		,689		
Q5		,633		
Q4		,602		
Q9			,788	

Table 2: Rotated Component Matrix

**Factors** 

,752

,715

,607

,520

Factor analysis was performed for components that were rotated via Varimax rotation. Varimax, 'which was developed by Kaiser (1958), is indubitably the most popular rotation method by far. For varimax a simple solution means that each factor has a small number of large loadings and a large number of zero (or small) loadings. This simplifies the interpretation

Q7

O8

Q6

Q10

Q13

Q12

Q11

Q14

Questions that are gathered under totally four factors show a parallelism with the 'Doxey Irritation Index' and the questions '1', '2', '3', '4' and '5' are named as 'Euphoria'; the questions '6', '7', '8', '9' and '10' 'Apathy'; the questions '11', '12', '13' and '14' 'Irritation' and the questions '15', '16', '17', '18', '19' and '20' 'Antagonism'. The scale explains 54,079% of the total variance.

,749

.743

,699

,516

**Table 3:** Responses of the Participants According to the Doxey Irritation Index

	Euphoria	Apathy	Irritation	Antagonism
Mean	4,5096	1,5488	1,7290	1,3415

**Table 4:** Questions of the Doxey Irritation Index and Arithmetic Mean of the Responses of the Participants

Dimension	No	Statements	Mean	Std. Deviation
	1	We should work more for the development of tourism in Gumushane.	4,8080	,58636
	2	I would like the increase of the number of both domestic and foreign tourists in Gumushane.	4,6980	,74828
Euphoria	3	Tourism will increase the social and cultural interaction in Gumushane.	4,6320	,78601
	4	Tourism may soon become one of the most important sources of income in Gumushane.	3,8500	1,21757
	5	I think that tourism is important for the development of a region.	4,5600	,81469
	6	As Gumushane, we have sufficient number of tourists.	1,4140	,78475
	7	We are almost satisfied in terms of the development of tourism in Gumushane.	1,3920	,68357
Apathy	8	As Gumushane, we are able to compete with other touristic regions.	1,4860	,90523
	9	Tourism has become an important source of income in Gumushane.	1,4920	,79195
	10	I think that necessary efforts (like publicity, advertisement) are made for the development of tourism in Gumushane.	1,9600	1,12469
	11	I think that tourism may have both positive and negative impacts.	2,4020	1,30837
Irritation	12	I think that tourism may harm the social and cultural values of the region dwellers.	1,8240	1,12764
iiiitation	13	I have doubts that tourism may have negative environmental impacts.	1,8880	1,16712
	14	I think that relations with domestic and foreign tourists have begun spoiling in a disturbing way.	1,7280	1,01196
	15	Tourism activities in Gumushane have begun annoying me.	1,2860	,71919
	16	I do not like the sustainment of tourism in Gumushane anymore.	1,2460	,75274
Antagonism	17	Domestic and foreign tourists unsettle me.	1,2360	,61078
Antagonism	18	Tourism has increased the tendency to violence and consequently crime rates in our region.	1,3000	,67743
	19	Tourism harms our moral and cultural values.	1,4960	,87837
	20	I think that tourism causes environmental pollution in Gumushane.	1,3340	,75338

Table 3 shows arithmetic means of the responses of the participants according to the Doxey Irritation Index. Examining the table; it is seen that the participants mainly participate in the dimension of 'Euphoria' with an average of 4,50. Evaluating according to the Doxey Irritation Index; it may be suggested that the thoughts of Gumushane residents about tourism activities are in the stage of 'Euphoria', which means that they support tourism in Gumushane and have positive thoughts about this issue. Table 4 shows the dimensions, questions about the dimensions and arithmetic mean of the responses of the participants to these questions in detail.

result of the One-Way Analysis of Variance (ANOVA) that was performed for determining the difference between the educational background of the participants and stages of the Doxey Irritation Index, no difference was observed either. In conclusion, it may be suggested that participants' perspective of tourism activities does not change according to their gender and educational background in parallel with the Doxey Irritation Index.

Table 6 shows results of the One-Way Analysis of Variance (ANOVA) that was performed for determining the difference between the age of the

**Table 5:** Results of the T-Test Regarding the Difference between the Gender of the Participants and Stages of the Doxey Irritation Index

Stages	Gender	n	Mean	t	D.F.	Significance (2-Directional)	
Euphorio	Man	345	4,5246	,853	498	204	
Euphoria	Woman	155	4,4761	,033	498	,394	
Anothr	Man	345	1,5414	-,416	498	,678	
Apathy	Woman	155	1,5652			,076	
Irritation	Man	345	1,7329	,188	498	,851	
IIIIation	Woman	155	1,7204	,100	470		
Antagonism	Man	345	1,3464	,281	498	,779	
Antagonism	Woman	155	1,3306				

Table 5 shows results of the t-test regarding the difference between the gender of participants and stages of the Doxey Irritation Index. Examining the table; no significant difference was determined between the gender of the participants and their perspective of tourism activities according to the Doxey Index. As a

participants and stages of the Doxey Irritation Index. Examining the table; no significant difference was determined between the age of the participants and stages of 'Apathy', 'Irritation' and 'Antagonism', however, there was a significant difference between their age and the stage of 'Euphoria' at the level of

**Table 6:** Results of the One-Way Analysis of Variance (ANOVA) Regarding the Difference between the Age of the Participants and Stages of the Doxey Irritation Index

		Sum of Squares	D.F.	Mean of Squares	F	Sig.
	Between group	3,735	4	,934	2,742	,028
Euphoria	Within group	168,579	495	,341		
	Total	172,314	499			
	Between group	2,810	4	,703	2,039	,088
Apathy	Within group	170,519	495	,344		
	Total	173,329	499			
	Between group	2,907	4	,727	1,563	,183
Irritation	Within group	230,178	495	,465		
	Total	233,085	499			
	Between group	,779	4	,195	,579	,678
Antagonism	Within group	166,472	495	,336		
	Total	167,251	499			

p<0,005 (0,028). Examining the results of the bonferroni test that was applied for figuring between which groups the difference was; it was observed that the difference (p=0,027 and average difference=-,25465) was between the participants aged 18-28 and the participants aged 49-58. Comparing the averages; it may be suggested that participants in the age group of 49-58 (ave. = 4,67) show the highest participation in the stage of Euphoria.

participants' duration of residing and stages of 'Irritation' and 'Antagonism', however, there was a significant difference between their duration of residing and the stage of 'Apathy' at the level of p<0,005 (0,011) and the stage of 'Euphoria' at the level of p<0,005 (0,001). Homojenity of variance test applied and showed that the variance are equal. Thus bonferroni tests is applied for examine the difference between groups. Examining

**Table 7:** Results of the One-Way Analysis of Variance (ANOVA) Regarding the Difference between the Participants' Duration of Residing in Gumushane and Stages of the Doxey Irritation Index

		Sum of Squares	D.F.	Mean of Squares	F	Sig.
Euphoria	Between group	5,299	3	1,766	5,246	,001
	Within group	167,015	496	,337		
	Total	172,314	499			
Apathy	Between group	3,855	3	1,285	3,760	,011
	Within group	169,475	496	,342		
	Total	173,329	499			
Irritation	Between group	,487	3	,162	,346	,792
	Within group	232,598	496	,469		
	Total	233,085	499			
Antagonism	Between group	,297	3	,099	,294	,830
	Within group	166,954	496	,337		
	Total	167,251	499			

Table 7 shows results of the One-Way Analysis of Variance (ANOVA) that was performed for determining the difference between the Participants' Duration of Residing in Gumushane and Stages of the Doxey Irritation Index. Examining the table; no significant difference was determined between the

the results of the bonferroni test that was applied for figuring between which groups the difference in the stage of 'Euphoria' was according to the Doxey Index; it was observed that the difference (p=0,007 and average difference=-,35367) was between the participants

**Table 8:** Results of the One-Way Analysis of Variance (ANOVA) Regarding the Difference between the Occupation of the Participants and Stages of the Doxey Irritation Index

		Sum of Squares	D.F.	Mean of Squares	F	Sig.
Euphoria	Between group	3,289	5	,658	1,922	,089
	Within group	169,025	494	,342		
	Total	172,314	499			
Apathy	Between group	,774	5	,155	,443	,818,
	Within group	172,556	494	,349		
	Total	173,329	499			
Irritation	Between group	11,009	5	2,202	4,898	,000
	Within group	222,076	494	,450		
	Total	233,085	499			
Antagonism	Between group	3,499	5	,700	2,111	,063
	Within group	163,752	494	,331		
	Total	167,251	499			

residing for 6-10 years and the participants residing for 10 years and above. Comparing the averages; it may be suggested that participants residing in Gumushane for 10 years and above (ave. = 4,5666) show the highest participation in the stage of Euphoria.

Examining the results of the bonferroni test that was applied for figuring between which groups the difference in the stage of 'Apathy" was according to the Doxey Index; it was observed that the difference (p=0,027 and average difference=,38090) was between the participants residing for 6-10 years and the participants residing for less than 2 years and (p=0,017 and average difference=,37679) the participants residing for 6-10 years and the participants residing for 2-5 years. Comparing the averages; it may be suggested that participants residing for 6-10 years (ave. = 1,8129) show the highest participation in the stage of Apathy.

Table 8 shows results of the One-Way Analysis of Variance (ANOVA) that was performed for determining the difference between the occupation of the participants and Stages of the Doxey Irritation Index. Examining the table; no significant difference was determined between the occupation of the participants and stages of 'Euphoria', 'Apathy' and 'Antagonism', however, there was a significant difference between their occupation and the stage of 'Irritation' at the level of p<0,005 (0,000). Examining the results of the bonferroni test that was applied for figuring between which groups the difference in the stage of 'Irritation' was according to the Doxey Index; it was observed that the difference (p=0,000 and average difference=,41506) was between the civil servant and worker participants and (p=0,018 and average difference=,40338) the civil servant and pensioner participants. Comparing the averages; it may be suggested that the civil servant participants (ave. = 1,93) show the highest participation in the stage of Irritation.

#### CONCLUSION AND SUGGESTIONS

In this study, it is aimed to determine the stage of the thoughts of Gumushane residents about tourism activities, which are conducted and planned to be improved in the province, according to the Doxey Irritation Index. Examining the findings; it may be suggested that the thoughts of Gumushane residents about tourism activities are in the stage of 'Euphoria', which means that they support tourism in Gumushane and have positive thoughts about this issue. In this context, it is seen that the development of tourism in Gumushane requires more work and Gumushane residents are eager for increasing the number of domestic and foreign tourists who visit the city and they think that; tourism activities will increase the social

and cultural interaction in Gumushane and may soon become one of the most important sources of income in the city and additionally, tourism is important for the development of a region.

Examining the findings; it is seen that the participants' perspective of tourism activities does not change according to their gender and educational background in parallel with the Doxey Irritation Index; however, their perspective of tourism activities changes according to their age, occupation and duration of residing in Gumushane in parallel with the Doxey Irritation Index. In this context, comparing the age averages of the participants; it may be suggested that participants aged 49-58 (ave. = 4,67) show the highest participation in the stage of euphoria and thus, this age group supports tourism activities in Gumushane more than other age groups. Comparing the participants' duration of residing in Gumushane and perspective of tourism; it may be suggested that participants residing in Gumushane for 10 years and above (ave. = 4,5666) show the highest participation in the stage of euphoria. Comparing the averages regarding the difference between the occupation of the participants and stages of the Doxey Irritation Index; it is seen that there is a difference in the stage of 'Irritation' and civil servant participants (ave. = 1,93) show the highest participation in this stage even if it is at a lower level.

In the data collection process, the community stated that tourism did not make sufficient progress in terms of facility, infrastructure and number of tourists in the region and additionally, outside of present tourism destinations, there were places that were not opened to tourism yet. As tourism is still in progress in Gumushane; positive or negative impacts of tourism are not socially, culturally, economically and environmentally felt by Gumushane residents at a high rate and thus, they have a positive perspective of tourism due to its impact on increasing the income.

Transportation and urbanization problems caused by the geographical structure of Gumushane significantly affect the economic development of the region. Thus, the province needs alternative economic resources. Considering from this point of view; transforming the tourism resources in the province into a touristic centre of attraction with an efficient planning might be an alternative economic resource for the province. Development of a participative conception in tourism planning will extend especially the stage of 'Euphoria' in four stages involved in the Doxey Index for the community and decelerate their disinterestedness and transition to the stages of irritation and antagonism. Researchers that investigate this issue (Özdemir & Kervankıran, 2011; Duran, 2013) support this view and

emphasize the importance of especially involving the community in the tourism development process. As a matter of fact, G. Ö. Türker & A. Türker (2014) suggest that unless the local community supports tourism in the region, tourism activities will probably not be sustained. On the other hand; Renda, da Costa Mendes & do Valle (2014) generally emphasize the importance of providing the participation of all stakeholders for a sustainable development of tourism in a destination.

In this context, the following suggestions are offered for the development of a planned, efficient and sustainable tourism in the province of Gumushane:

- •It is recommended to inform the youth and school children who constitute an important part of Gumushane residents about the general tourism and tourism potential of Gumushane. It will be an important progress to establish a tourism training center in the region with the support of academicians and tourism professionals in order to provide this.
- governorships, Municipalities, universities and non-governmental organizations should inform the local community (organize activities like congresses and conferences in public spaces, place relevant banners at attractive points, use visual elements like banners and brochures, as well as informing in the local press and official internet sites of the region, and distribute brochures and informing scripts to the community) in order to increase their environmental sensitivity. These information should emphasize that the sustainability of tourism depends on the protection of the natural environment, as well as historical and cultural assets.
- •It is important to complete the infrastructure and superstructure activities of present tourism destinations with the support of improvement works and additionally, bring the unexplored natural, cultural and historical values in tourism within the scope of sustainable tourism.
- •It is important to inform the local community about the necessity of displaying positive attitudes and behaviors toward tourists, being ethical especially in business instead of using irrevocable unethical behaviors (which would bring a negative image in both Turkey and the region in the long term) as tourism is not a source of income that requires short-term consideration for the sake of a sustainable tourism.

- •It is recommended to encourage the investors, primarily Gumushane residents for tourism activities in Gumushane in order to individually involve the people in tourism. It is also recommended to motivate investors with applications like special credit and grant so that tourism investments in the region will be permanent.
- •It is recommended to inform the intended population about the tourism potential in Gumushane within the frame of a planned publicity and marketing strategy.

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