## Geography Teacher Candidates' Perceptions of Geotourism

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#### Abstract

This study examines geography teacher candidates' perceptions of geotourism. Qualitative phenomenological method of study has been used to understand the geography teacher candidates' perceptions of geotourism. Semi-structured interviews have been used to report the participants' perceptions about geotourism. Interviews have been carried out with 100 volunteer geography teacher candidates at Marmara University Faculty of Education, Department of Geography in Istanbul in 2013-2014 academic year. At the evaluation stage, an inductive content analysis has been carried out. In order to analyze the data, teacher candidates' definitions have been categorized, and the frequency of each category has been determined.

**Keywords:** Geotourism, geography, teacher candidates' perceptions, qualitative research, content analysis.

### Introduction

Many ideas that have an impact on geotourism have taken their places in the area of sustainable tourism since Bundland Report (WCED, 1987). The purpose of geotourism is to hand down a place to future generations without destroying its character. Geotourism is not only traveling to unspoiled natural areas or people's activity centers but also visiting the destinations where nature and people come together in order to create a landscape that protects and works on its character and features. The realization of this aim mostly depends on the tourists visiting the destination and the local community's taking action in line with the same targets. This will enable the tourist to lead an authentic life with the distinctive characteristics of the visited geotourism center.

Geotourism is a kind of natural area tourism that specifically focuses on geology and landscape. Geotourism promotes tourism activities, protection of geo-sites and geo-diversity, and understanding of earth sciences through appreciation and learning. This has been accomplished through the use of geo-trails and view points, guided tours, geo-activities, conservation of geo-site visitor centers and independent visits to landforms (Newsome and Dowling, 2010).

McIntyre (1993) defines sustainable tourism as providing the visitors with lives of high quality based on host communities' quality of life and maintaining the characteristics of the environment depending on hosts and visitors. In this regard, sustainable tourism can be regarded as an alternative tourism that is thought to get rid of the negative effects of traditional mass tourism (Boley, Nickerson and Bosak, 2011).

Beeton (1998) defines ecotourism as a type of tourism that is based on ecological sustainability and has a protective and sensitive approach towards environmental and cultural values.

The newest discussions aimed at minimizing the negative impacts of mass tourism carry on based on geotourism. Geotourism is the type of tourism that maintains and strengthens its geographical character by including the environment, heritage, culture and the local residents of a place (Boley, Nickerson and Bosak, 2011). Geotourism involves the visits and travel activities that are aimed for examining the nature and geological heritage (Kazancı, 2010b).

Geotourism is a kind of tourism that is mistaken by some people for geological tourism as if "geo" was not the synonym of earth but geology. As one of the pioneers of the concept of modern geotourism, Hose (1995:17) defines geotourism as "the provision of interpretative facilities and services to enable tourists to acquire knowledge and understanding of the geology and geomorphology of a site beyond the level of mere aesthetic appreciation". Geotourism has the feature of integrating the basic concepts of sustainable tourism, which seeks for the ways of protecting and treating the nature, culture and resources with respect (Gladfelter and Mason, 2012).

The concept of geotourism is a quite new concept in Turkey. The first geological conservation district is "Kızılcahamam- Çamlıdere Geopark" with its area of 2000 km² and 250 geosites. During the "Geological Legacy in National Parks Project" which was conducted through the cooperation of Ankara University, the Turkish Association for the Conservation of Geological Heritage (JEMİRKO), Mineral Research & Exploration General Directorate (MTA) and General Directorate of Nature Conservation and National Parks with the support of The Scientific and Technological Research Council of Turkey (TÜBİTAK) between 2006 and 2009, it was seen that many geosites exist around Kızılcahamam, and it was aimed to protect these geosites and provide the region with economic return. However, there are uncertainties about the role of local residents in the areas of geoparks and how their protection and use can be balanced since the works are generally quite new in the area of geotourism (Esengil, 2003).

### Aim of the Research

The aim of the research is to analyze geography teacher candidates' perceptions of the concept of geotourism and their opinions about it.

In accordance with this main purpose, answers have been sought for the following questions:

- 1) What are teacher candidates' perceptions of the concept of geotourism?
- 2) What are teacher candidates' travel habits?
- 3) What are teacher candidates' opinions on the elements of geotourism?

# **Significance of the Research**

Geotourism has been increasing its fame among countries and agencies. Although the importance of geotourism is known by everyone, it is seen that these tourism activities are not

maintained as a tourism policy of the country or region but by some local entrepreneurs. The academic studies about geotourism, a type of sustainable tourism, are still limited in number in Turkey. Therefore, it is hoped that this study will help tourism sector, local tourism administrators and the academicians studying in this field to gain a viewpoint.

This study has been designed depending on all these reasons, and it is thought that identification of geography teacher candidates' perceptions of the concept of "geotourism", which has such a significant place within the system of tourism sector, provides an answer for an important question.

#### Research Method

Qualitative research method has been used in the study. Qualitative research is the research method in which the data are produced without any statistical processes or numerical means (Altunişik, 2005). Qualitative research techniques' enabling sensitivity to the natural environment, the researcher's having the role of a participant, having a holistic approach, enabling the perceptions to come out, the existence of flexibility in the research design and the occurrence of an inductive analysis are important features of qualitative research (Yıldırım and Şimşek, 2000).

Purposeful sampling has been employed in the study. A small sample group is used in qualitative research studies so that the sample can be studied in detail. Thus, purposeful sampling is preferred rather than random sampling (Miles and Huberman, 1994). The important criteria are determined for the sample selection, and it is thought that the sample selected according to these criteria can represent the population of the research with all of its qualities (Tavṣancıl and Aslan, 2001). In this regard, 100 teacher candidates studying Geography Teaching in Atatürk Faculty of Education in Marmara University in 2013-2014 academic year constitute the study group of the research. There are 62 male and 38 female participants in the research. 32 of the participants are second year students, 25 of them are third year students, 29 of them are fourth year students, and 14 of the participants are fifth year students.

The technique of semi-structured individual interview has been implemented in the research. After conducting a pilot study of the interview form, the researchers got an expert opinion from academic staff working in the divisions of Geography Teaching, and Curriculum

and Instruction. The appropriateness of the questions for the interview was discussed. For the interviews to be conducted via the final form of the interview form, the researchers got permission and made an appointment beforehand. The interviews lasted approximately 20-30 minutes. Before starting to code the data, each interview text was read line by line, and the researchers tried to find out a holistic viewpoint about the opinions of the students.

During the analysis of the interview data, inductive content analysis was implemented. The texts written on the papers were coded as sentences according to the identified criteria, and the frequency of the categories was found out by counting the codes. In order to ensure external validity, the research process was explained in detail. In the present study, students' answers have been provided through direct quotations without any changes. The findings have been briefly described in a systematic and explicit way, and the descriptions have been organized and interpreted.

Three themes have been identified in the research. The themes and the questions belonging to these themes are as follows:

## **Theme 1:** What are teacher candidates' perceptions of the concept of geotourism?

- What are teacher candidates' perceptions of the concept of geotourism?
- What are the features of geotourism that make it different from ecotourism?
- Please evaluate the present status of geotourism in Turkey. What are your opinions about geotourism potential of Turkey?

## **Theme 2:** What are teacher candidates' travel habits?

- Have you participated in an activity of geotourism? Where did you go? What kind of activities did you do?
- What kind of activities do you prefer to take part in while traveling?
- What kind of places do you enjoy going around while traveling?
- What do you look for first in the places you travel to?

### **Theme 3:** What are teacher candidates' opinions on the elements of geotourism?

- What do you think about people's attitudes and behaviors regarding the cultural heritage?

- What do you do in your daily life in order to protect the environment?
- What is the role and status of the local residents in tourism regions? How should it be?

### **FINDINGS**

The findings belonging to teacher candidates' perceptions of the concept of geotourism, which constitute the first theme in the interview form, are as follows:

Theme 1: What are teacher candidates' perceptions of the concept of geotourism?

Table 1. Frequencies regarding teacher candidates' perceptions of geotourism

Theme	Codes	f
Definition of geotourism	Seeing the landforms(f:25), examining the structure of the earth(f:17), thermal spring tourism(f:16), site tourism(f:15), Pamukkale travertines(f:15), geological and geomorphological formations(f:15), Cappadocia (fairy chimneys)(f:14), Caves(f:12), Canyons(f:10), Visits to interesting landformsf:8), seeing the landforms that take their sources in the depths of the earth(f:7), examining the formation and development of landforms(f:6), volcanic areas(f:5), Grand Canyon (USA)(f:4), fault lines(f:3), Sinkholes and dolines(f:3), Holes of Heaven and Hell(f:3), Düden waterfall(f:3), seeing the geysers(f:2), Kula volcanoes(f:2), Mount Nemrut(f:2), Saklıkent Canyon(f:1), Ulubey Canyon (f:1), National Park tourism(f:1), Etna volcano(f:1), Gulfs(f:1), Meke saltpan(f:1), the tourism carried out by protecting the landforms(f:1)	194

As can be seen in Table 1, the definition of geotourism has been asked to the teacher candidates in accordance with the first theme. The teacher candidates have given Landforms (f:25) as an example in their answers for the definition of geotourism the most. After this code, it is seen that the codes of "examining the structure of the earth" (f:17), "thermal spring tourism" (f:16), "site tourism" (f:15) and "geological and geomorphological formations" (f:15) come to the fore in terms of the features of geotourism. According to the answers given by the teacher candidates, the concepts of "Cappadocia (fairy chimneys) (f:14), Caves (f:12), Canyons (f:10), Visits to interesting landforms (f:8), seeing the landforms that take their sources in the depths of the earth (f:7), examining the formation and development of landforms (f:6), volcanic areas (f:5), Grand Canyon (USA) (f:4), fault lines (f:3), Sinkholes and dolines (f:3), Holes of Heaven and Hell (f:3), Düden waterfall (f:3), seeing the geysers (f:2), Kula volcanoes (f:2), Mount Nemrut (f:2), Saklıkent Canyon (f:1), Ulubey Canyon (f:1),

National Park tourism(f:1), Etna volcano(f:1), Gulfs(f:1), Meke saltpan(f:1) and the tourism carried out by protecting the landforms(f:1) define geotourism respectively. Samples of teacher candidates' statements are presented below:

**Respondent 20:** It is the type of tourism that is carried out in order to go around and see the landforms that came out on the earth as a result of natural processes, and to get informed about them. For example, karst area trips.

**Respondent 42:** It is the kind of tourism that deals with the formation of landforms and their distinctive features, and turns it into an entertainment activity.

**Respondent 46:** It is the type of tourism that is carried out in order to see an interesting geological structure. For instance; caves, fairy chimneys, canyons, sinkholes, dolines, etc.

**Respondent 75:** It is the use of landforms that are created on the earth via internal and external forces for tourism purposes. For example; Karstic Caves of Heaven and Hell.

**Respondent 95:** It is the type of tourism that is carried out in the areas about the earth and the structure of the earth. For instance; caves in calcareous areas and Pamukkale travertines.

Table 2. Frequencies regarding the features of geotourism that make it different from ecotourism according to teacher candidates

Theme	Codes	f
Geotourism - Ecotourism	Geotourism is the type of tourism that is carried out in order to see the landforms created by geological and geomorphological processes, and Ecotourism is the type of tourism in which the natural environment on the earth (landforms, plants, animals, water, etc.) is visited (f:42), Geotourism is the type of tourism about visiting non-living resources on the earth, and Ecotourism is the tourism activity that is carried out in order to see human and cultural values (f:14),  Ecotourism is a more general concept compared to geotourism. Ecotourism comprises geotourism. The subjects of geotourism concern ecotourism, too. However, geotourism deals with just landforms out of the subjects of ecotourism (f:12),  While geotourism is carried out for scientific research, Ecotourism is done for sightseeing (f:9),  Geotourism is the type of tourism that is carried out for seeing and observing natural formations, and Ecotourism is the type of tourism that is carried out by protecting the environment and conserving natural areas (f3),	100
	I have no idea (f:20)	

As can be seen in Table 2, teacher candidates have been asked about the features of geotourism that make it different from ecotourism in accordance with the first theme. The most prominent answer about this issue is "Geotourism is the type of tourism that is carried out in order to see the landforms created by geological and geomorphological processes, and Ecotourism is the type of tourism in which the natural environment on the earth (landforms,

plants, animals, water, etc.) is visited" (f:42). The answers of "Geotourism is the type of tourism about visiting non-living resources on the earth, and Ecotourism is the tourism activity that is carried out in order to see human and cultural values" (f:14), "Ecotourism is a more general concept compared to geotourism. Ecotourism comprises geotourism. The subjects of geotourism concern ecotourism, too. However, geotourism deals with just landforms out of the subjects of ecotourism" (f:12), "While geotourism is carried out for scientific research, Ecotourism is done for sightseeing" (f:9) and "Geotourism is the type of tourism that is carried out for seeing and observing natural formations, and Ecotourism is the type of tourism that is carried out by protecting the environment and conserving natural areas" (f:3) follow this answer. Samples of teacher candidates' explanations are provided below:

**Respondent 38:** Ecotourism is more general, and it comprises the whole environment. As for geotourism, it only deals with the features regarding the formation of the earth by being more specific.

**Respondent 33:** Landforms are more dominant in geotourism whereas plant varieties are more dominant in ecotourism.

**Respondent 46:** Geotourism is the type of tourism that is carried out to see and observe the natural formations, and ecotourism is the type of tourism involving social and cultural activities besides that and conserving the environment and natural areas.

**Respondent 68:** While geotourism is directly related with the internal structure of the earth, ecotourism is about the natural beauties on the earth.

**Respondent 74:** Geotourism is the type of tourism that is mostly carried out according to the formation of the earth and different landforms. As for ecotourism, it is the type of tourism that is more about climate and vegetation.

**Respondent 75:** Ecotourism is a more general concept compared to geotourism. Ecotourism comprises geotourism. However, geotourism deals with just landforms out of the subjects of ecotourism.

Table 3. Teacher candidates' opinions regarding the present status of geotourism in Turkey and geotourism potential of Turkey

Theme	Codes	f
Status of geotourism in Turkey and geotourism potential of Turkey	Geotourism has not developed in Turkey; however, it is quite rich in terms of geotourism resources (f:43),  Geotourism is not known enough in Turkey, but its geotourism potential is high (f:23),  Geotourism has just come out in Turkey. Its geotourism potential is high (f:13),	100

In Turkey, geotourism is not attached importance, but its geotourism potential is high (f:10),	
I have no idea about this issue (f:11).	

As can be seen in Table 3, the present status of geotourism in Turkey and the geotourism potential of Turkey have been asked in accordance with the first theme. Most of the findings about this issue are in "Geotourism has not developed in Turkey; however, it is quite rich in terms of geotourism resources" (f:43). When the answers are analyzed, prominent answers are "Geotourism is not known enough in Turkey, but its geotourism potential is high"(f:23), "Geotourism has just come out in Turkey. Its geotourism potential is high"(f:13) and "In Turkey, geotourism is not attached importance, but its geotourism potential is high"(f:10). Samples of teacher candidates' statements are presented below:

**Respondent 1:** Although Turkey has a high potential of geotourism, it cannot fully utilize this potential, advertise it enough or make its infrastructural adjustments. Therefore, it is necessary for Turkey to use this potential more.

**Respondent 9:** Geotourism has not developed enough in Turkey. People either have quite a few ideas about this issue or do not have any ideas. It has not been learnt enough. I think that more information should be given about it, and more activities should be organized.

**Respondent 46:** It is a branch of tourism that should be developed. Turkey has a high potential in terms of natural formations.

**Respondent 53:** Since Turkey has a structure of young formations, quite different and interesting landforms have come out as a result of many factors. Thus, geotourism potential is high in Turkey.

**Respondent 76:** In my opinion, it is not so undeveloped. The reason for this is the coastal tourism's being more attractive. However, it has a potential that is open to improvement. There are many places to visit such as Mount Nemrut, Mount Ağrı, thermal springs, Lake Tuz, fairy chimneys and Pamukkale travertines. I think that domestic tourism will develop if the amount of per capita income increases.

### Theme 2: What are teacher candidates' travel habits?

Table 4. Frequencies regarding teacher candidates' participation in geotourism activities

Theme	Codes	f

Participation in geotourism	I participated (f:27),	100
activities	Pamukkale travertines (f:11),	
	Cappadocia (Fairy chimneys) (f:8),	
	Thermal springs (f:5),	
	Field trips under the guidance of the teacher (f: 4),	
	Saklıkent canyon (f:3),	
	Karst forms (f:1),	
	Horsts and grabens in Western Anatolia (f:1),	
	Çoruh valley (f:1)	
	I did not participate (f:73)	

As can be seen in Table 4, teacher candidates have been asked whether they participated in geotourism activities in accordance with the second theme. While 27 of the teacher candidates stated that they have participated in geotourism activities, 73 of them said that they have not participated in these activities. When the interviews conducted with teacher candidates are analyzed in detail, it is found out that the activities which are thought to be geotourism activities by teacher candidates are just field trips of geography or superficial trips with tours indeed. The places visited by teacher candidates within the scope of geotourism activities are "Pamukkale travertines" (f:11), "Cappadocia (Fairy chimneys)" (f:8), "Thermal springs" (f:5), "Field trips under the guidance of the teacher" (f:4), "Saklıkent canyon" (f:3), "Karst forms" (f:1), "Horsts and grabens in Western Anatolia" (f:1) and "Çoruh valley" (f:1). Samples of teacher candidates' statements are provided below:

**Respondent 1:** I went to Saklikent canyon and Pamukkale travertines. I walked on the travertines.

**Respondent 4:** Yes, I did. I participated in an Aegean trip. Starting from Aegean Coastal Area, I saw all the horst and graben structures. Moreover, I saw its geographical features in general terms.

**Respondent 41:** I did not, but I particularly participated in thermal spring trips since the place I live in is rich in terms of thermal springs. Investigation of hot water sources that come out as result of fault lines can be a kind of geotourism.

**Respondent 70:** I participated in a Cappadocia trip organized by our school in the second grade at high school.

**Respondent 91:** Yes, I went to Pamukkale. I wandered around travertines, travertine quarries and ancient city.

Table 5. Frequencies regarding the activity types teacher candidates prefer during the trips

Theme	Codes	f
Activities participated in during the trips	Activities organized in natural and historical places (f:29),  Geographical field trips under the guidance of expert guides (f:14),  Trekking (f:12),  Culture tours (f:10),  Different activities (f:8)  Types of entertainment, meal meetings (f:8),  City tours (f:4),  Sportive activities (f:3),  Sea, sand and sun (f:1),  I have no idea (f:12)	100

As can be seen in Table 5, teacher candidates have been asked about their preferences of activities during the trips in line with the second theme. The most prominent answers for this question are "Natural and historical places" (f:29), "Geographical field trips under the guidance of expert guides" (f:14), "*Trekking*" (f:12), "Culture tours" (f:10), "Different activities" (f:8), "Types of entertainment, meal meetings" (f:8), "City tours" (f:4), "Sportive activities" (f:3) and "Sea, sand and sun" (f:1) respectively. Samples of teacher candidates' statements are provided below:

**Respondent 1:** I particularly prefer participating in trekking activities during the trips. By this way, I have the opportunity to observe the places I wander around in detail.

**Respondent 2:** The place's being far from people and having a natural structure is important for me if I will travel to a place.

**Respondent 4:** While traveling, I prefer participating in activities that involve practices, trips, observations and geographical activities.

**Respondent 40:** Since I am studying geography, I want to travel for cultural tourism more in order to learn different cultural characteristics.

**Respondent 75:** I prefer the places where I can see the historical, geographical differences and the differences about the landforms.

Table 6. Frequencies regarding the places teacher candidates enjoy going around while traveling

Theme	Codes	f
The places preferred for	Natural beauties (f:61),	147
travel	Historical places (f:54),	
	Landforms (f:19),	
	Cultural environments (f:9),	
	I have no idea (f:4)	

As can be seen in Table 6, teacher candidates have been asked about the types of places they enjoy going around while traveling in accordance with the second theme. The issues that the teacher candidates gave the most answers for have been "Natural beauties" (f:61) and "Historical places" (f:54). Most of the teacher candidates mentioned "historical places and natural areas" together. As for the other answers given by teacher candidates, they are "Landforms" (f:19) and "Cultural environments" (f:9) respectively. Samples of teacher candidates' statements are provided below:

**Respondent 9:** I enjoy going to the places where I can visually understand all the concepts of geography, which is in touch with nature.

**Respondent 24:** I enjoy going to the places attracting attention with their formation and appearance.

**Respondent 42:** For me, the places' having different characteristics is a reason for preference. I pay attention to their having cultural and geographical characteristics different from the place I live in.

**Respondent 55:** I enjoy wandering around the places with a historical and cultural heritage.

**Respondent 100:** I enjoy analyzing natural areas and historical textures.

Table 7. Frequencies regarding the things teacher candidates look for first in the places they travel to

Theme	Codes	f
The thing looked for first about travel	Transportation, accommodation and the quality of services (f:52),	124

Level of preserving naturality (f:39),	
Elements of cultural heritage (f:15),	
Attractiveness of the environment (f:10),	
Diversity of landforms (f:5),	
I have no idea (f:3),	

As can be seen in Table 7, teacher candidates have been asked about what they principally look for in the places they travel to in accordance with the second theme. The issues that teacher candidates answered the most have been "*Transportation, accommodation and the quality of services*" (f:52) and "Level of preserving naturality" (f:39). As for the other answers of teacher candidates, they are "Elements of cultural heritage" (f:15), "Attractiveness of the environment" (f:10) and "Diversity of landforms" (f:5) respectively. Samples of teacher candidates' statements are presented below:

**Respondent 3:** First of all, it is necessary to have a good transportation, comfortable accommodation, good opportunities and alternatives.

**Respondent 16:** I look for clean and fresh air first. I look for a natural environment with green areas and a quiet and tranquil place.

**Respondent 48:** First of all, it should be clean. After that, attitudes of the people living there to the tourists are also quite important.

**Respondent 70:** I want the places I travel to have an unspoiled nature, and I want them to protect the cultural structure.

**Respondent 75:** I prefer the places I will travel to be affordable and unspoiled first. I avoid going to crowded touristic regions.

**Respondent 99:** *I prefer a place that gives importance to the cultural values.* 

### Theme 3: What are teacher candidates' opinions on the elements of geotourism

Table 8. Frequencies of teacher candidates' opinions about people's attitudes and behaviors regarding the cultural heritage in Turkey

Theme	Codes	f
Attitudes and behaviors regarding the cultural heritage	There is not enough consciousness and awareness (f:35),  They do no protect it, and they even damage it (f:25),  The level of consciousness is increasing day by day (f:12),	100

The level of education is the determining factor (f:11),	
It is not appreciated. I think that it is protected just for commercial purposes (f:9),	
Most of the people do not attach importance to it (f:4),	
I have no idea (f:8)	
	It is not appreciated. I think that it is protected just for commercial purposes (f:9),  Most of the people do not attach importance to it (f:4),

As can be seen in Table 8, teacher candidates have been asked about their opinions on people's attitudes and behaviors regarding the cultural heritage in accordance with the third theme. The issues teacher candidates answered the most have been "There is not enough consciousness and awareness" (f:35) and "They do no protect it, and they even damage it" (f:25). As for the other answers given by the teacher candidates, they are "The level of consciousness is increasing day by day" (f:12), "The level of education is the determining factor" (f:11), "It is not appreciated. I think that it is protected just for commercial purposes" (f:9) and "Most of the people do not attach importance to it" (f:4) respectively. Samples of teacher candidates' statements are provided below:

**Respondent 3:** I do not think that cultural heritage is given the necessary importance in Turkey. However, people become more conscious day by day and try to be more careful.

**Respondent 21:** *It is not appreciated. It is protected just for commercial purposes.* 

**Respondent 32:** The importance of our cultural heritage was not realized well in previous years, and it was damaged. However, awareness has come out today although it is not adequate. Moreover, many institutions have been making an effort for this.

**Respondent 50:** While people with a high level of education have a more moderate and protective attitude towards cultural heritage together with curiosity, the people with a low level of education in the society remain insensitive to these issues.

**Respondent 59:** With the widespread occurrence of popular culture, cultural heritage has started to vanish rapidly. Old customs and traditions have started to be forgotten. People do not give importance to cultural heritage.

**Respondent 78:** Cultural heritage is regarded as just economic capital, and it is not appreciated morally. Otherwise, historical places could not have been turned into dumps.

**Respondent 88:** People are not knowledgeable enough about cultural heritage. Many cultural heritages are demolished and lost due to the lack of awareness.

Table 9. Frequencies regarding teacher candidates' activities aimed at protecting the environment in their daily lives

Theme	Codes	f
Protecting the	I do not throw trash on the ground (f:55),	147

n the people polluting the environment and try to raise their awareness	
nomically use energy, water, papers, etc. (f:13),	
o protect the nature and green spaces (f:11),	
not use deodorants or smoke (f:4),	
w the trash I see on the ground in the trash can (f:1),	
not make noise (f:1),	
no idea (f:8)	
	o protect the nature and green spaces (f:11), not use deodorants or smoke (f:4), we the trash I see on the ground in the trash can (f:1), not make noise (f:1),

As can be seen in Table 9, teacher candidates have been asked about what they do in order to protect the environment in their daily lives in accordance with the third theme. The issues teacher candidates answered the most have been "*I do not throw trash on the ground*" (f:55) and "I attach importance to recycling and classify the trash" (f:34). As for the other answers of teacher candidates, they are "I warn the people polluting the environment and try to raise their awareness" (f:20), "I economically use energy, water, papers, etc." (f:13), "I try to protect the nature and green spaces" (f:11), "I do not use deodorants or smoke" (f:4), "I throw the trash I see on the ground in the trash can" (f:1) and "I do not make noise" (f:1) respectively. Samples of teacher candidates' statements are provided below:

**Respondent 2:** I particularly act responsibly about throwing trash. In addition, I do not use perfumes or deodorants.

**Respondent 4:** First of all, I try not to pollute the environment, and I properly warn the people who pollute it in my daily life. Moreover, I inform the individuals who behave insensibly.

**Respondent 23:** I save waste oil and batteries, use energy saving light bulbs, and classify domestic wastes according to their recycling features.

**Respondent 40:** First of all, it is not about just the pollution around the environment I live in. All the people want to reach fresh air and natural food sources. Therefore, I became a member of TEMA Foundation (The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats) during my high school years. I worked for raising people's awareness of environmental protection.

**Respondent 70:** I do not leave the wastes in nature anywhere in daily life, and I support recycling the products.

**Respondent 94:** Especially, I try not to throw trash on the sea, and I help for the forestation of the environment.

Table 10. Frequencies regarding teacher candidates' perceptions about the roles and status of local residents in tourism regions

Theme	Codes	f
Local residents' role in tourism	Local residents' attitudes, behaviors and hospitality to the tourists are important (f:54),  Local residents' awareness should be raised regarding the protection of natural and historical values (f:20),  Local residents are passive in tourism sector (f:12),  Local residents regard tourism just as a means to make money (f:10),  Local residents should display the local culture in an effective way (f:8),  If local residents run tourist facilities, they can protect the environment better (f:4),  Local residents should learn foreign languages in order to help tourists (f:2)	100

As can be seen in Table 10, teacher candidates have been asked about the role of local residents in tourism regions in accordance with the third theme. The issues teacher candidates answered the most have been "Local residents' attitudes, behaviors and hospitality to the tourists are important" (f:54) and "Local residents' awareness should be raised regarding the protection of natural and historical values" (f:20). The other answers given by teacher candidates are "Local residents are passive in tourism sector" (f:12), "Local residents regard tourism just as a means to make money" (f:10), "Local residents should display the local culture in an effective way" (f:8), "If local residents run tourist facilities, they can protect the environment better" (f:4) and "Local residents should learn foreign languages in order to help tourists" (f:2) respectively. Samples of teacher candidates' statements are provided below:

**Respondent 10:** Local residents are interested in financial profits and employment opportunities of tourism more. However, local residents should act responsibly and protect it from the detrimental effects of tourism in the first place.

**Respondent 14:** Local residents of the tourism region should preserve natural and historical beauties of the region, and their awareness should be raised about the importance of this issue.

**Respondent 15:** People become more conscious day by day. Especially local residents should adopt the protection of these regions rather than the authorities.

**Respondent 32:** Local residents are the main people to protect tourism regions. Keeping them away from these activities will lead to the loss of the liveliness of tourism. Local residents should actively take part in it.

**Respondent 50:** Local residents' attitudes, behaviors and hospitality towards tourists are so important. Tourism is also an important activity for the place with its provision of employment opportunities to local residents.

**Respondent 93:** Local residents should tell the history of that region to tourists and attract their attention. I think that local residents remain a bit passive about tourism.

#### DISCUSSION AND CONCLUSION

In this part of the research, the conclusions reached through findings have been provided. The results attained through the research have been compared to the other research results in the literature, and the reasons for the findings of the research have been discussed together with these results.

In this research, geography teacher candidates' perceptions of geotourism have been examined. Semi-structured interview forms have been used in the study. The results have been evaluated via text content analysis.

The research results indicate that teacher candidates regard geotourism as the tourism activity that is carried out in order to see on site the landforms, the structure of the earth, geological and geomorphological formations. The examples given by the participants emphasize that landforms, which are a subject of geotourism, should be interesting at the same time. Gray (2008) claims that Grand Canyon is one of the most popular geotourism locations in the world.

Geography teacher candidates regard ecotourism as a more comprehensive type of tourism that also comprises geotourism. While describing ecotourism as the tourism activity that is carried out with a protective approach to all the beauties of the landforms on the earth, plants and animals, they defined geotourism as the tourism activity that is done in order to examine the landforms that come out through geological and geomorphological processes. Rodrigues, Machado and Freire (2011) point out the importance of knowing the concepts of geodiversity, geoheritage and geotourism in order to protect and support the non-living natural heritage, and to be aware of how this value can contribute to sustainable regional development.

Teacher candidates think that geotourism has recently come out in Turkey. They believe that it is not known well, and that it is only carried out by some local administrators amateurishly. They stated that people do not have a protective approach towards the values of geotourism. In addition, almost all of the participants think that Turkey has an extremely high potential of geotourism. Akbulut (2012) asserts that both geopark and geotourism are

concepts that have recently been dealt with in Turkey although Turkey has a rich geological and geomorphological heritage due to its geological evolution.

Whereas 27% of geography teacher candidates stated that they participated in a geotourism activity, 73% of them asserted that they did not. Based on the statements and examples of the participants who stated that they participated in a geotourism activity, it is seen that this was done just by seeing the geological and geomorphological elements superficially or as a part of geography field trips. Akbulut and Gülüm (2012) indicate that Cappadocia is a tourism center that has all the criteria for calling it a geopark area in Turkey.

While geography teacher candidates prefer participating in activities about nature and history more during the travels, some of them prefer the activities in the city and cultural activities. Since the participants are geography teacher candidates, it is also seen that they also prefer field trips under the guidance of expert guides. Geotourism focuses on geological and geomorphological areas, elements, rural landscapes and cultural structure as a type of mainly educational and scientific tourism (Koçan, 2012).

It is seen that approximately 90% of the teacher candidates prefer visiting natural places and historical places that are in touch with nature for travel. Some of the participants have specifically pointed out landforms along with natural and historical places. It is understood that approximately 10% of the participants prefer cultural environments. Geotourism provides an opportunity for living in geological environments and getting acquainted with sceneries and different geological products (Gray, 2008).

Almost all of the geography teacher candidates stated that they firstly look for transportation, accommodation and the quality of service in the places they travel to, and that they look for such factors as the naturality and attractiveness of the destination, and cultural heritage after these issues.

Geography teacher candidates think that people have negative attitudes and behaviors towards cultural heritage in Turkey. They indicate that people do not preserve the elements of cultural heritage, and they sometimes damage these elements. They think that this is due to their not having enough knowledge and awareness about the importance of cultural heritage. They believe that the preserved elements of cultural heritage are protected either by the state or due to their being revenue generating resources. Geological heritage does not have the quality to be collected and protected in the museums as a whole. It is mostly necessary to take it under protection in its own place. Hence, it is essential for everyone from an everyday citizen to the highest authority to have this awareness (Kazanci, 2010).

It is realized that geography teacher candidates firstly pointed out their not throwing trash on the ground in order to protect the environment in their daily lives, and they stated that they take part in such activities as recycling, raising environmental awareness, energy and water saving.

Geography teacher candidates emphasized the importance of local residents' attitudes, behaviors and hospitality towards tourists in tourism regions. Furthermore, they asserted that local residents should actively take part in tourism activities, and wanted them to raise their

awareness more in terms of protecting tourism values and handing down these values to future generations. They also indicated that local residents are passive especially in mass tourism centers in Turkey. Miller and Washington (2009) claim that geotourism provides various benefits to local residents, and that they do not only take pride in the place they live in but also support the principles of protecting natural resources, culture, heritage and traditions. When local residents realize the income generating role of geotourism, the development of geotourism will be much more rapid and successful in the area (Dowling, 2008).

Geotourism practices provide an opportunity for the sustainable development of rural areas. Thus, it is necessary for the management plan to have tourism infrastructure and support of local residents. Within the scope of the project, local guides should be trained, and village ethnography galleries and sales units of village products should be created (Kazancı, 2010).

With the new geotourism vision, new products (like geo-products, geo-menus in restaurants), new works (geo-tours, geo-restaurants and rural hotels) and new recreational activities (geo-sports, geo-monuments, geoparks, etc.) will come out (Farsani, Coelho and Corsa, 2011).

Akbulut (2012) points out that the most important factor for the proper and planned development of geotourism is local residents, and asserts that the people living in the countryside should get informed about geotourism and how they can protect the resources and their economic values. Since geotourism provides various opportunities for local residents, there will be a significant decrease at the rates of unemployment and migration by means of local residents' participation in geotourism activities (Farsani, Coelho and Corsa, 2011).

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