

Obese destinations

Fatih Pektaş

Abstract

Purpose – Whether a human body has a healthy carrying capacity is calculated by body mass index (BMI). The BMI is found by dividing body weight in kilograms by the square of body length. If the person's body weight is more than the heaviness that the body can carry healthily, it is called obesity. Destinations have a specific area, just like a human body. Therefore, any destination whose carrying capacity is exceeded can be called an "obese destination". This study's primary purpose is to reveal the importance of destination carrying capacity through the concept of obesity.

Design/methodology/approach – Content analysis, one of the qualitative research methods, was employed, and graffiti reflecting the feelings of the local people toward tourists were used as data. Graffiti was considered as a social carrying capacity indicator to identify obese destination symptoms. Fifty graffiti obtained from search engines about destinations with obesity problems were analyzed.

Findings – The study's findings reveal that anti-tourist graffiti indicates obese destination symptoms. Furthermore, when the content analysis of graffiti is examined, it is seen that the obese destination's local people have intense anger toward tourists. This is a clear manifestation of the destination's health deterioration.

Originality/value – This study, in which the concept of obese destination is used for the first time, suggests that destinations' health may worsen just like people. If destinations with over-tourism are called obese, a more expansive awareness will be created about the destinations' problems. The study suggests that noncolabel can be used as a mandatory diet tool for obese destinations. Anti-tourist graffiti has been addressed as an obese destination symptom.

Keywords Obesity, Obese destination, Carrying capacity, Over-tourism, Sustainable tourism, Noncolabel

Paper type Research paper

Fatih Pektaş is based at the Tourism and Hotel Management Department, Güzelyurt Vocational School, Aksaray University, Aksaray, Turkey.

Introduction

In addition to the positive impacts of tourism to the destinations, there are also negative impacts (Archer *et al.*, 2005). Tourism, which is welcomed due to its effect on enhancing welfare in the region, may later appear as an undesirable phenomenon. One of the biggest reasons why tourism is not desired in a destination is the problems that occur after exceeding the carrying capacity. Carrying capacities appear as physical, environmental, economic, psychological and social carrying capacities (Hall and Page, 2006; Holden, 2008). Each carrying capacity arises for different reasons. Each of the other forms of carrying capacity can affect the social carrying capacity. After the exceeding social carrying capacity, local people may have a negative attitude to tourists. These attitudes can be seen directly in the behavior of the locals and can manifest themselves by graffiti (Wetzel, 2011; Burgen, 2018; Canellas, 2017; Butcher, 2019). This study aims to show that graffiti, which indicates that the social carrying capacity is exceeded, is one of the indicators indicating the deterioration of destination health and calls these destinations obese.

Names assigned to that problem are used in the definition of health problems. Today, obesity describes people who weigh more than a healthy weight (Obesity, 2020). With the concept of obesity known worldwide, people know what kind of problem they face and know that they should limit their eating and drinking habits. Furthermore, through the obese destination used for destinations that exceed carrying capacity, it will be possible to create strong awareness that the pleasant effects of tourism cause deterioration in the destination.

Received 28 August 2021
Revised 16 June 2022
Accepted 28 December 2022

© Fatih Pektaş. Published in *Journal of Tourism Futures*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

Some destinations may ignore the problems caused by tourism because of its economic contribution. At this point, some obese destinations may not want to diet voluntarily. The concept of obese destination can be used as a noncolabel for destinations that avoid adopting sustainable tourism and demarketing policies to recuperate. Thus, the demand will be reduced by environmentally conscious tourists. Thence, destinations will start a compulsory diet. The obese destination concept contributes to the literature as a new concept for destinations that have problems because of over-tourism. This study makes an obese destination classification based on the obesity classification of the World Health Organization (WHO) and Doxey's irritation index (1975).

Literature review

Each destination does its best to become one of the most preferred destinations. As long as tourism is one of the fastest-growing sectors globally, the increase and diversity in tourism supply seem to increase. Only extraordinary conditions such as economic crisis and epidemic diseases such as COVID-19 can stop this growth. This growth may cause problems besides positive contributions.

Although destinations want to host more tourists, they face a problem: capacity (carrying capacity). If not, we would not have to asked, "How many is too many?"/"What are the appropriate or acceptable conditions?" as [McCool and Lime \(2001\)](#) noted. Exceeding the destinations' carrying capacity can cause a problem such as the obesity problem experienced by people. Like the symptoms seen in people who have health deterioration, health deterioration symptoms are also seen in destinations. It is possible to read these symptoms in graffiti on obese cities' walls; "tourists back home". The graffiti that shows the obesity problem in the destinations is a clear picture of a health deterioration of destination.

Whether a human body has a healthy carrying capacity is calculated by body mass index (BMI). The BMI is found by dividing body weight in kilograms by the square of body length ([Hazell, 2020](#)). If the person's body weight is more than the heaviness that the body length can carry healthily, it is called obesity ([Obesity, 2020](#)). Destinations have a specific area, just like a human body. Therefore, any destination that exceeds carrying capacity is an "obese destination". Overweight and obesity are defined as abnormal or excessive fat accumulation that poses health risks ([Klein et al., 2002](#)). The BMI has been used extensively to measure overweight and obesity in adults ([Khosla and Lowe, 1967](#); [Cole et al., 1995](#)). A BMI above 25 is considered overweight, and over 30 is deemed obese ([Obesity, 2020](#)). WHO classifies obesity as in [Table 1](#) ([James et al., 2001](#)).

Like the human body, destinations can accommodate more than they can carry. This excess load damages the destinations just like the human body. Individuals with obesity problems must adopt a new lifestyle by changing routines to eliminate this problem. Obese destinations should adopt new methods to change the current situation, just like obese people. The best of these methods that can apply will undoubtedly be sustainable tourism policies. Therefore, the concepts of tourism carrying capacity and sustainable tourism become important. The World Tourism Organization (UNWTO) has defined tourism carrying capacity as "The maximum number of people that may visit a tourist destination at the same time, without destroying the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction" ([Kennell, 2014 p. 1](#)). Five types of tourism carrying capacity can be mentioned physical, environmental, economic, psychological and social ([Hall and Page, 2006](#); [Holden, 2008](#)). While some of these carrying capacities can be observed, some of are perceivable characteristics. Therefore, it is possible to divide the carrying capacity into tangible, intangible and perceptual carrying capacity. While tangible carrying capacities are physical, environmental and economical, intangible and perceptual carrying capacities are psychological and social. These five carrying capacities are interrelated. However, limited exceed in any of them may occur without exceeding the other carrying capacity ([Holden, 2008](#)).

Table 1 WHO classification of obesity

Classification	BMI (kg/m ²)	Risk of comorbidities
Underweight	<18.5	Low (but risk of other clinical problems increased)
Normal range	18.5 to 24.9	Average
Overweight	≥25	
Pre-obese	25.0 to 29.9	Increased
Obese class 1	30.0 to 34.9	Moderate
Obese class 2	35.0 to 39.9	Severe
Obese class 3	≥40.0	Very severe

Source(s): James *et al.* (2001)

The physical carrying capacity is the number of tourists that a tourism destination can physically accommodate and is also defined as reaching the destination's physical capacity and not being able to host more tourists in the area allocated for tourism activities (Swarbrooke, 1999). According to another definition, physical carrying capacity is expressed as the maximum number of visitors that can fit into a physically defined area in a given period (Zacarias *et al.*, 2011; Tejada *et al.*, 2009).

The environmental carrying capacity is the starting point of damage to the region or ecosystem in any destination. It is also defined as determining the limits of possible effects on the environment due to tourism activities. Damage to the environment caused by tourism activities means exceeding the environmental carrying capacity (Swarbrooke, 1999; Hall and Page, 2006). Tourism has not only positive but also negative impacts on other sectors. For example, tourism, the driving force of airline transportation in some destinations, can be the killer of agriculture. It may cause the region's agricultural land and agricultural culture to decrease. Cessation of agricultural activities may cause environmental damage. For instance, terrace farming in Vernazza has been abandoned by some farmers due to the boom in tourism. And nature responded with a devastating mudslide and flood to the abandonment of terrace farming, which kept the soil in place (Sievert, 2021).

Although local people have an increased income with increasing tourism revenues, this high income is not at the same level for every local. Therefore, specific segments of the local population's purchasing power is decreasing. Locals can be tolerant of tourists until they face economic problems. The financial problems of local people caused by tourists reveal economic carrying capacity. Increasing prices for housing, land, rent and other consumer goods reduce the local people's purchasing power (Swarbrooke, 1999).

One of the difficulties destinations encounter in their life cycle is losing their attractiveness. The crowd- level tourists can tolerate before a destination begins to lose its beauty is called psychological carrying capacity (Saveriades, 2000). According to another definition, psychological carrying capacity is tourists' satisfaction level with the destination (Holden, 2008). Therefore, the destination's crowd is essential to tourists' satisfaction levels.

The social carrying capacity is the tolerance level of local people to tourists' presence (Lopez-Bonilla and Lopez-Bonilla, 2008). The negative social impacts that will affect exceeding this tolerance level can be listed as follows (Goeldner and Ritchie, 2009 p. 308): starting unwanted activities such as gambling, prostitution, drunkenness and other excesses, the so-called demonstration effect, racial tensions, development of a slave attitude by tourist business employees, loss of cultural pride, very rapid change in local lifestyles, low-wage and simple jobs. One of the best-known theories developed on tourism's socio-cultural effects is Doxey's Irritation Index (Doxey, 1975). Doxey proposed an index to explain residents' irritation toward tourists. The anger level is listed as euphoria, apathy, annoyance and antagonism. These levels are shown in Table 2.

Butler (1980) dealt with the processes happening at the destination similarly to Doxey (1975). According to Butler, when undesired carrying capacity is reached, the increase in number of visitors will decrease, and changes occur in environmental factors, physical facilities and social aspects. With the decrease in destination attractiveness compared to other destinations due to

Table 2 Doxey's irritation index

<i>Level of irritation</i>	<i>Destination responses to tourists</i>
1. Euphoria	The first stage of tourism development, visitors and investors are welcome; there is little planning or control mechanism
2. Apathy	Relationships between hosts and visitors become more formal (commercial), and planning is mostly about marketing
3. Annoyance	Saturation is approaching and local people have concerns about the tourism industry; planners are trying to control by increasing infrastructure rather than limiting growth
4. Antagonism	Clear articulation of discomfort, seeing visitors as the cause of all problems, planning improves, but promotion is increased to compensate for the destination's deteriorating reputation

Source(s): [Doxey \(1975\)](#)

over-tourism, the number of actual visitors may reduce. The stages in this process, the destination's tourism life cycle are as follows ([Butler, 1980](#)):

1. Exploration: Discovering the destination with a small number of visitors.
2. Involvement: The start of the tourism development process, albeit at a small level, realizes the local community's tourism potential.
3. Development: The process of tourism investments begins. Some local people feel that they are excluded from the investments made.
4. Consolidation: The initial phase of mass tourism. Larger businesses are replacing small facilities. As a result, locals begin to feel the effects of the increasing number of tourists.
5. Stagnation: The process where the increase in the number of tourists stops and the destination's carrying capacity is reached. Local people have lost tolerance toward tourists.
6. Decline: Visitors start to move away due to tourism's harmful effects, causing problems in the destination. The anger of the local people is intense.
7. Rejuvenation: It is the process of creating complete change and innovation in tourism attractions to ensure the rejuvenation of the destination.

Locals can have a positive attitude toward tourists. However, tourists, who added color to their lives in the past, may become enemies that make their lives difficult later on. This hostility can be seen in graffiti and protests. There is graffiti on the walls and banners at demonstrations such as: "tourist, go home or die", "this isn't tourism, it's an invasion", "tourists are terrorists", "tourist: your luxury trip my daily misery" ([Wetzel, 2011](#); [Burgen, 2018](#); [Peter, 2017](#); [Butcher, 2019](#)).

The reaction to the unlimited growth of tourism caused the new term over-tourism and terms such as anti-tourism movements, tourism-phobia, tourist-phobia and overcrowding ([Zemla, 2020](#)). Over-tourism is a crowded tourist population that reduces the quality of life or experience for locals or tourists ([Goodwin, 2017](#)). After over-tourism in destinations, anti-tourism movements are seen ([Karyotakis et al., 2019](#)). Increasing social media shares is one reason for the tourist density in destinations ([Oklevik et al., 2019](#)). Efforts to create budget airlines and cruise ships are among the reasons for over-tourism. Flying to Barcelona for an amount equal to the amount paid for a pizza and a beer in the UK is possible, partly because of incentives ([Francis, 2017](#)). In recent years, changes in consumption-oriented attitudes have made the sharing economy an attractive alternative for consumers ([Hamari et al., 2015](#)). While Barcelona has an estimated 75,000 hotel beds, it is claimed that there are 100,000 rental property beds in total. Half of these rental property beds in Barcelona are rented through legal platforms such as Airbnb, while the other half are rented illegally ([Plush, 2017](#)). More than 2.5 million people stayed at properties booked on Airbnb on the 5th of August 2017. With four million properties in 191 different countries, it has more than the top five hotel chains' rooms ([Cowen, 2017](#)). Accommodation provided by Airbnb causes adverse effects on local people. These negativities drive local people to express their anger with graffiti ([Tulke, 2020](#)).

Many destinations host tourists many times more than their people. For instance, Dubrovnik, with a population of 42,000 in 2017, hosted 1.1 million cruise passengers and 1.2 million international tourists. However, with 4 million overnights, this tourist flow mainly occurs in four months, from June to September (Puljic *et al.*, 2019). Ninety-eight destinations in 63 countries are faced with the problem of over-tourism (Francis, n.d.).

Obese destination is abnormal or excessive tourist accumulation that poses a risk to the destination. Physical, economic, social, environmental and psychological limits above tolerable levels in the destination are symptoms of obese destination. The more this limit is exceeded, the greater the obesity. Therefore, destinations should adopt sustainable tourism policies in order not to be obese. These policies should be like stringent diets when necessary. Table 3 shows some of the destinations showing the symptoms of obesity and the precautions are taken.

Over-tourism, a potential danger to popular destinations globally, may be unrecoverable if the problem is not managed sustainably (Sheivachman, 2016). However, the over-tourism problem can be overcome with technical and political solutions to be developed by addressing the economic relationship between people and destinations and social, cultural and ecological concerns (Milano *et al.*, 2019).

The concept of sustainable tourism is a concept that should be emphasized to eliminate the harmful effects of over-tourism. Sustainable tourism can be defined as using today's tourism resources, while keeping in mind the next generations' needs (World Commission on Environment and Development, 1987). The benefits of tourism development with tourism policies created by considering the balance of protection and use will benefit all society segments. Sustainable development aims to generate economic benefits and provide better living conditions for all society members. Through sustainable development, economic, environmental and social progress can be seen simultaneously (Grundey, 2008). In this way, a more desirable atmosphere is created for locals and tourists in the destination with better living conditions. Eber (1992) listed the issues that need to be addressed under principles for sustainable tourism development in 10 items to discuss sustainable tourism development.

1. Destinations must use resources sustainably. Protecting and sustainable use of natural, social and cultural resources is critical and provide long-term economic contribution.
2. Destinations should reduce excessive consumption and waste. So, the costs caused by environmental damage eliminate and contribute to tourism quality.
3. Preserving diversity. Natural, social and cultural diversity is essential for long-term sustainable tourism and the tourism industry.
4. Environmental impact assessments should be taken regarding tourism planning included in national and local development plans to be considered.
5. Tourism should support and protect local economic activities.
6. To involve local communities in the tourism sector. Thus, it benefits local communities and improves the quality of the tourism experience.
7. Stakeholders and the public should be consulted to avoid potential conflicts of interest.
8. Personnel training should cover the understanding of sustainable tourism. Thus, sustainability can be seen in tourism products.
9. Responsible tourism marketing understanding. Providing complete and responsible information in marketing activities increases respect for the destination's natural, social and cultural structure and customer satisfaction.
10. To do helpful research that will contribute to problems.

Ecolabel is a symbol of environmentalism. Today, 456 ecolabels, covering 25 industries are used in 199 countries ("All ecolabels", 2020). Some of these ecolabels are ecolabels that play a role in

Table 3 Obese destination symptoms and precautions

<i>Destination</i>	<i>Obesity symptoms and precautions</i>
Maya Bay – Thailand	The famous Maya Bay on the island of Ko Phi Phi Leh in Thailand was closed for four months in 2018, then from May 2019 to 2021 due to over-tourism
Bukchon – South Korea	Bukchon is a traditional Korean village in Seoul. More than 300,000 visitors per month caused a protest in 2019
Philippines – Boracay	Boracay island, which hosted more than 2 million tourists in 2017, had 66 tourists for each resident. The island, which was closed to tourism because of over-tourism for rehabilitation in February 2018, was reopened to tourism on October 26, 2018, with certain restrictions
Peru – Machu Picchu	More than 5,000 tourists visit the Machu region of Peru a day. There are many problems in the area due to tourist behavior. Restrictions have been imposed on the region's entrance hours, the types of visits, and the duration of stay
Italy – Venice	While 150,000 people lived in Venice 50 years ago, which was visited by more than 36 million tourists in 2017, this number has decreased to 53,000 with the effect of tourism. Tourism has caused overcrowding, environmental damage, and costly regional problems. Certain sized ships were banned and decided to take the city's entrance fee from daily tourists and install temporary turnstiles on the busiest streets. Locals attacked the turnstiles, carrying banners that the town was sold to tourists
Netherlands – Amsterdam	The local people living in Amsterdam left the area due to the city's noise, the parties made by tourists, and the damage they caused to the environment. The authorities took measures such as removing the "I Amsterdam" sign from the city square outside the city, preparing a guide on what should not be done for tourists who damage tulip gardens, stopping the promotions for the region, and ending the tours to the Red Light region. It banned opening new hotels and gift shops in Amsterdam, and a campaign called "Pleasure and Respect" was launched
Spain – Barcelona	Barcelona has begun to lose its cultural heritage due to over-tourism. Significant problems have arisen for the local people in Barcelona due to the increase in the housing rents due to the over-tourism and the daily shops leaving their places to places unsuitable for the locals. With the new regulation made in Barcelona, opening new hotels in the city center is prohibited. Also, it is on the agenda to stop the permits given to online websites to convert apartments into accommodation. The fact that only 8 million people out of 32 million tourists in the region stay in the hotels is an essential source of the problems. Locals placed posters in the area to react to the tourists in the city, and a group of protesters attacked the tour bus and cut its tires
Iceland	Iceland, which has a population of 350,000 hosted more than 2.2 million visitors in 2017. This situation has led to expensiveness and significant environmental damage to the region. Because of this tourist density, Iceland is the seventh-worst European region in over-tourism
Indonesia – Bali	Bali welcomed 5.7 million international tourists in 2017. Due to tourism, various problems have arisen in waste management, health resources, and ecological terms. As a solution, Bali's government is preparing a \$10 tax bill when tourists leave the area
India – Taj Mahal	The effects of over-tourism are felt at a high level since 35,000–40,000 people come to the Taj Mahal a day and an average of 70,000 people on weekends. The authorities limited the tourists' time in the region and protected the area by placing turnstiles at the entry points
Greece – Santorini	The island of Santorini, 76 km ² in Greece, was significantly affected by over-tourism due to increased water and energy consumption and traffic congestion after 5.5 million overnight accommodations in 2017
Italy – Rome	The new tourism regulations in Rome imposed a ban on eating and drinking at essential points, such as using historical figures and taking pictures with tourists, the prohibition of selling and using alcohol at 2 o'clock, the use of fountains, and the Spanish stairs. A ban has been imposed on tour buses, limiting the right to change and pass the ancient city
Spain – Mallorca	Parma Port, located in Mallorca, is the third most intense city in Europe due to over-tourism and second in pollution. Residents and organizations are about to sign petitions for restrictions on cruise ships and visitors
Croatia – Dubrovnik	The Croatian city of Dubrovnik is experiencing problems due to the popularity of a TV series. It is planned to limit the number of visitors and cruise ships in the region
Portugal – Lisbon	People had to move out of the city due to rising rents in the city. Historical shops and restaurants that do not appeal to tourists were closed. In response to local businesses' closings, Lisbon declared a plan called Lojas Com História, or "Shops with a History," in February 2015. Lisbon city and Airbnb signed an agreement about responsible home sharing and simplifying tourist taxes in 2016
France – Paris	Paris hosted tourists more than ten times its population, around 25 million in 2018. At the end of May, the Louvre Museum, home of Leonardo Da Vinci's Mona Lisa painting, was closed for a day due to complaints due to tourist behavior and overcrowding
Germany – Berlin	Berlin hosted approximately 13 million visitors in 2017. There are occasional conflicts between residents and visitors. The residents of trendy Kreuzberg, Friedrichshain and Neukölln districts complain of noise, waste, and rising rents. The Berlin Senate has targeted increasing tourist numbers in the past, now quality tourists

Source(s): Baker (2018), Flinns (2018), Kirchoff (2018), Stone (2018), Amiel (2019), Deguara (2019), Çolak et al. (2019), Koh and Fakfare (2019) and Varga (n.d.)

protecting tourism resources. With these ecolabels, environmentally conscious tourists can make their purchasing preferences more easily (Font, 2001). Nonocolabel is a label indicating a destination that shows obesity symptoms. Nonocolabel can be used just like ecolabel to protect tourism resources. The nonocolabel can guide responsible tourists on which destinations they should not choose for their trip. Stakeholders who generate revenue from any destination will not want such labeling. This way, nonocolabel can be addressed as a compelling factor for maintaining and regaining destination health that has exceeded its carrying capacity. Urban exploration is also a way to reduce the concentration of the tourist population in a region by spreading it to different areas (Robinson, 2015).

Demarketing, used in the health sector to reduce smoking and inappropriate health consumption, can also be applied in tourism management and planning (Beeton and Benfield, 2002). Demarketing, which Kotler and Levy (1971) added to the literature, can be an essential destination marketing tool to keep the demand at the desired level. Demarketing is an option for destinations if the carrying capacity is exceeded. Appropriate strategies can be determined to manage demand for destinations (Medway et al., 2010).

Obese destination classification

Exceeding the carrying capacity can occur at physical, environmental, economic, psychological or social levels. Each carrying capacity has its specific contents and appears in different ways. Locals' perspective is an excellent tool to measure the carrying capacity. Each part in Doxey's irritation index (1975) can find its counterpart in the obesity classification. Obesity classifications of a destination can be achieved through social carrying capacity, such as in Table 4.

Method

Since the study aims to describe the graffiti showing the obesity symptoms on the web pages, the research method is a content analysis, one of the qualitative research methods. Firstly, the images related to the destinations with over-tourism problems were searched by typing "over-tourism" into the search engines. Afterward, the prominent graffiti in images were searched one by one in search engines. The 50 graffiti obtained were classified according to their frequency and analyzed. The contents and frequencies of the graffiti used are given in Table 5.

Results

Some photos of the 50 graffiti showing obese destination symptoms are shared in Plates 1, 2, 3 and 4.

Table 4 Obese destination classification	
Level of irritation	Obesity level of destination
Euphoria	→ Underweight destination Tourism activities have started in the destination. Tourism is developing, that is, gaining weight. This situation is greeted with enthusiasm
Apathy	→ Normal range destination Commercial relations have developed in the destination, and the blessings of tourism have brought the destination to the desired weight
Annoyance	→ Overweight destination Problems that may appear at the destination are beginning to be uneasy
Antagonism	→ Obese destination Issues at the destination are experienced clearly, and the discomfort shows up

Source(s): Adopted from Doxey's Irritation Index (Doxey, 1975) and WHO classification of obesity (James et al., 2001)

Table 5 Obese destination symptoms graffiti

Graffiti	<i>n</i>
"Tourist go home"	20
"Tourist go home refugees welcome"	12
"Refugees welcome tourist go home"	5
"Tourist you are the terrorist"	5
"Tourist are terrorists"	2
"Tourism kills the city"	2
"Tourist go home you are not welcome"	2
"Tourist go home or die"	1
"Tourist: your luxury trip my daily misery"	1

Plate 1 Tourist are terrorist



Source(s): Wetzels, 2011

Plate 2 Tourist: your luxury trip my daily misery



Source(s): Burgen, 2015

Over-tourism negatively affects the lives of local people. Local people may no longer have the quality of life they used to have in their hometown. Local people may complain about tourists because of their expensive living conditions. The local people's perspective toward the tourists can show how healthy the destination has a social carrying capacity. People can use different methods to express their emotions just as they use words. Graffiti is one of the ways people express their feelings. The abundance of graffiti expressing discontent with tourist destinations clearly says the obesity problem experienced. Dissatisfaction with tourists is seen in the 50 graffiti obtained for the study. Graffiti, which sees tourists as terrorists, asking them to return to their homes and wishing them to die if they do not return, shows that over-tourism is a significant social problem. Therefore,

Plate 3 Tourist go home or die



Source(s): Butcher, 2019

Plate 4 Tourist go home refugees welcome



Source(s): Canelas, 2017

the policies required for obese destinations to attain a healthy weight should be determined and implemented as soon as possible. Sustainability should be the main starting point for these policies to be determined.

Discussion

This study aimed to reveal the problems experienced in destinations due to exceeding the carrying capacity. The study, which sees these problems as worsening the destination's health, suggested that the destinations could be called obese and used the social carrying capacity as an obese destination determination tool. Social carrying capacity is related to other carrying capacities. Therefore, exceeding the social carrying capacity indicates that obesity is at its most intense form. Graffiti expressing the feelings of the local people is used in the study. When fifty graffiti obtained from search engines is examined, it is seen that tourists are not desired by some locals in these obese destinations. The study's limitation is that the study's data were obtained only from graffiti on the Internet. Another limitation is that these data do not give the chance to see whether there are similar graffiti from each destination with obesity problems.

The study suggests that destinations that exceed their social carrying capacity should start obesity treatment. This treatment is possible with sustainable tourism policies. Protection of resources in destination, limiting consumption, preserving diversity, considering environmental issues in planning, protecting and supporting the local economy by tourism, ensuring that local people participate in tourism, avoiding situations that may cause a conflict of interest between stakeholders and local people and taking their opinions, ensuring that employees adopt the

understanding of sustainable tourism, determining a responsible marketing approach, carrying out studies on the problem (Eber, 1992) is among the preventive measures to help obese destinations from getting rid of this problem.

If the obese destination classification is done, destinations that have exceeded their social carrying capacity are 3rd class obese. The graffiti in the study show that exceeding the social carrying capacity can lead to significant social problems. Tourists, seen as people who make their lives worse, are asked to leave the destination or die. No matter how high tourism contributes to the economy, if tourism arouses grudge and hates in society, tourism demand should be decreased. This issue has been swept under the rug due to COVID 19. However, with the removal of travel restrictions after COVID 19, the current problem will continue to grow. Therefore, the study suggests that mentioned sustainable tourism policies, should be implemented as a preventive measure.

Obesity for humans occurs after the human body reaches more weight than it should. Regarding destinations, obesity occurs after destinations have more tourists than they should. In both cases of obesity, problems are seen. Both issues can have a lot in common. For example, while obese individuals feel inadequate and their quality of life decreases, it is observed that locals feel insufficient, and their quality of life declines. In both cases, the discomfort can manifest in different ways. Overeat, which is fun at first, can cause discomfort afterward. In obese destinations, they may be happy with the presence of tourists who come to the destination, but then they may be disturbed by the tourist density. While the excess weight seen in individuals is a clear manifestation of individual obesity, the discomfort in local people that can be seen with graffiti in destinations is a clear manifestation of destination obesity. In this sense, personal obesity and destination obesity are very similar.

Conclusion

Obesity is a health problem after people consume more food than necessary. Obese people have trouble living a healthy life. Sociological, physiological and psychological difficulties experienced by obese individuals reduce their quality of life. However, obesity is a problem that can be solved with right measures taken. At this point, the obese individual must first show the determination to take the necessary steps to become a healthy individual.

Destinations may have specific problems when they host more tourists such as obese individuals with more weight. These problems decrease the satisfaction level of both local people and tourists. These problems can be sociological, physiological and psychological, as in obese individuals. For instance, after over-tourism, environmental damage can be considered a physiological issue. In addition, situations such as anxiety and discomfort seen in locals and tourists can be regarded as psychological and sociological problems. Destinations should continue their lives without becoming obese to avoid these problems.

In addition to the benefits of increasing tourism revenues in a destination, losses are also seen. These damages can be physical, environmental, economic, psychological or social. These problems reduce the destination's quality of life and cause issues between local people and tourists. Locals may lose their tolerance toward tourists due to the difficulties experienced and display a hostile attitude toward tourists. This loss of tolerance can manifest itself in protests and graffiti. The words used in the graffiti reveal how significant the problem is. As one of the research's graffiti shows, tourists are asked to return home or die. The hatred toward tourists that want them to die shows that social carrying capacity has far been exceeded.

Each destination exceeding its carrying capacity suffers from obesity. Destinations that have exceeded all their carrying capacities experience the most severe obesity. The first thing to do with these destinations is to determine and implement policies to prevent these problems' further growth. The destinations' recovery period will begin if these policies are implemented based on sustainable tourism development policies. Regardless, sustainable tourism policies should never

be compromised in destinations that regain their former health. Destinations must balance the use and the protection of the attributes they own. Destinations' characteristics should be available for today's people without harming future generations' right to use them. At this point, obese destinations should start dieting like obese individuals. Sustainable tourism policies will be an effective diet for obese destinations.

Early diagnosis is crucial in the treatment of diseases. Obese destinations should first realize their obesity problem when starting a diet. Tips that destinations will have this problem before becoming obese should be read very well. Thus, problems can be solved without seeing irritating graffiti. Studies to be done for early diagnosis are very important. The research to be done is one of the issues that should be considered in sustainable tourism development. Also, constantly exchanging views with the local people, listening to them and ensuring their participation in tourism can help to prevent the obesity problem. Developing scales to diagnose obese destinations is also crucial in future studies. At this point, applicable scales measuring each carrying capacity should be developed. Raising awareness of unhealthy destinations that exceed their carrying capacity may be more effective with the phrase "obese destination."

Revenues from tourism are significant for each destination. Naturally, destinations want to benefit from these revenues at a maximum level. However, ignoring the problems that may arise at the expense of increasing these revenues may cause destinations to lose more and more health day by day. Obesity mainly results from welfare. The desire to improve the well-being of the destination at all costs may lead to the death of travel desire to destination among tourists. At this point, it is necessary to manage demand. Demarketing can be used as an essential tool in managing demand.

Every destination is the shared value of human beings, and sustainable policies must be adopted to protect destinations' health. If destinations do not adopt sustainable tourism policies, nonecolabels, like ecolabels, can also be used for environmentally conscious tourists. Obese destinations can be labeled as nonecolabel. Tourists considering future generations may not be willing to travel to obese destinations. Thus, the decrease in the demand for the destination may cause a reduction in the revenues of the destinations. Nonecolabel labeling can provide a solid message to destinations that "care about your resources not to lose your welfare." Nonecolabel labeling can be a powerful driver for obese destinations to start a mandatory diet.

This study reveals that the discomfort caused by over-tourism is been declared with graffiti. This study, which aims to understand the feelings of the local people through graffiti after being affected by the negativities of tourism, contributes to understanding the social carrying capacity with this method. The importance of not exceeding each carrying capacity is evident both for locals and tourists.

In this study, only the content of graffiti is examined, and its social carrying capacity is discussed. However, each carrying capacity can be measured in future studies. Moreover, researchers may directly get the opinions of the locals from the destinations with obesity symptoms.

References

- All ecolabels (2020), 10th December available at: <http://www.ecolabelindex.com>
- Amiel, G. (2019), "Mass tourism troubles the residents of Paris, France", available at: <https://www.stuff.co.nz/travel/news/114402962/mass-tourism-troubles-the-residents-of-paris-france>
- Archer, B., Cooper, C. and Ruhanen, L. (2005), "The positive and negative impacts of tourism", in Theobald, W.F. (Ed.), *Global Tourism*, 3rd ed., Elsevier, Burlington, MA, pp. 79-102.
- Baker, V. (2018), "Tourism pressures: five places tackling too many visitors", available at: <https://www.bbc.com/news/world-43700833>
- Beeton, S. and Benfield, R. (2002), "Demand control: the case for demarketing as a visitor and environmental management tool", *Journal of Sustainable Tourism*, Vol. 10 No. 6, pp. 497-513.

- Burgen, S. (2018), "Tourists go home, refugees welcome': why Barcelona chose migrants over visitors", available at: <https://www.theguardian.com/cities/2018/jun/25/tourists-go-home-refugees-welcome-why-barcelona-chose-migrants-over-visitors>
- Butcher, A. (2019), "Taming to tourist", available at: <https://www.tcs.cam.ac.uk/taming-the-tourist/>
- Butler, R.W. (1980), "The concept of a tourist area cycle of evolution: implications for management of resources", *Canadian Geographer*, Vol. 24 No. 1, pp. 5-12.
- Canellas, M.A. (2017), "Tourism minister plays down 'tourismphobia' anxieties", available at: <https://www.majorcadailybulletin.com/news/local/2017/03/09/47196/tourism-minister-plays-down-tourismphobia-anxieties.html>
- Çolak, O., Kiper, O.V. and Batman, O. (2019), "Kent Destinasyonlarında Over Tourism'e (Ölçüsüz Turizm) Dair Kavramsal Bir Yaklaşım [A Conceptual Approach to Over Tourism in Urban Destinations]", *20. Ulusal Turizm Kongresi Bildiriler Kitabı*, Eskişehir, 16-19 Ekim.
- Cole, T.J., Freeman, J.V. and Preece, M.A. (1995), "Body mass index reference curves for the UK, 1990", *Archives of Disease in Childhood*, Vol. 73, pp. 25-29.
- Cowen, M. (2017), "Airbnb and overtourism - let the statistics have their say", available at: <https://www.phocuswire.com/Airbnb-and-overtourism-let-the-statistics-have-their-say>
- Deguara, B. (2019), "Famous Thai beach Maya Bay closed to the public until 2021", available at: <https://www.stuff.co.nz/travel/news/112643386/famous-thai-beach-maya-bay-closed-to-the-public-until-2021>
- Doxey, G.V. (1975), "A causation theory of visitor-resident irritants: methodology and research inference", in *Proceedings of The Sixth Annual Conference of the Travel Research Association*, pp. 195-198, San Diego, California.
- Eber, S. (1992), *Beyond the Green Horizon: A Discussion Paper on Principles for Sustainable Tourism*, WWF and Tourism Concern, London.
- Flinns, J. (2018), "Feature stories, overtourism comes to korea", available at: <http://magazine.seoulselection.com/2018/08/10/overtourism-comes-to-korea/>
- Font, X. (2001), "Regulating the green message: the players in ecolabelling", *Tourism Ecolabelling Certification and Promotion of Sustainable Management*, CABI Publishing, Wallingford, pp. 1-17.
- Francis, J. (2017), "Flights have to get more expensive for the sake of the environment", available at: <https://news.co.uk/inews-lifestyle/travel/problems-overtourism-revealed-85705>
- Francis, J. (n.d), "Overtourism mapped: tourism is headed into a global crisis", Retrieved 11.30.2020 available at: <https://www.responsibletravel.com/copy/overtourism-map>
- Goeldner, C.R. and Ritchie, J.R.B. (2009), *Tourism: Principles, Practice, Philosophies*, John Wiley & Sons, NJ.
- Goodwin, H. (2017), "The challenge of overtourism", Responsible Tourism Partnership Working Paper, available at: <https://haroldgoodwin.info/wp-content/uploads/2020/08/rtpwp4overtourism012017.pdf>
- Grundey, D. (2008), "Managing sustainable tourism in Lithuania: Dream or reality?", *Technological and Economic Development of Economy*, Vol. 14 No. 2, pp. 118-129.
- Hall, C.M. and Page, S. (2006), *The Geography of Tourism and Recreation: Environment, Place and Space*, Psychology Press, Oxford.
- Hamari, J., Sjöklint, M. and Ukkonen, A. (2015), "The sharing economy: why people participate in collaborative consumption?", *Journal of the Association for Information Science and Technology*, Vol. 67 No. 9, pp. 2047-2059.
- Hazell, A. (2020), "BMI formula - how to use the BMI formula", available at: <https://www.thecalculatorsite.com/articles/health/bmi-formula-for-bmi-calculations.php>
- Holden, A. (2008), *Environment and Tourism*, 2nd ed., Routledge, London.
- James, P.T., Leach, R., Kalamara, E. and Shayeghi, M. (2001), "The worldwide obesity epidemic", *Obesity Research*, Vol. 9, pp. 228-233.
- Karyotakis, M.A., Kiourexidou, M. and Antonopoulos, N. (2019), "Media and you tube appeal in social movement mobilization: the case of anti-tourism incident", *Media Watch*, Vol. 10 No. 3, pp. 687-701.

- Kennell, J. (2014), "Carrying capacity, tourism", in Jafari, J. and Xiao, H. (Eds), *Encyclopedia of Tourism*, Springer, Cham.
- Khosla, T. and Lowe, C.R. (1967), "Indices of obesity derived from body weight and height", *Brit.J.prev.soc.Med.*, Vol. 21, pp. 122-128.
- Kirchhoff, A. (2018), "Overtourism: where will it take us?", available at: <https://www.dw.com/en/overtourism-where-will-it-take-us/a-42863355>
- Klein, S., Wadden, T. and Sugerman, H.J. (2002), "AGA technical review on obesity", *Gastroenterology*, Vol. 123, pp. 882-932.
- Koh, E. and Fakfare, P. (2019), "Overcoming 'over-tourism': the closure of maya bay", *International Journal of Tourism Cities*, Vol. 6 No. 2, pp. 279-296.
- Kotler, P. and Levy, S.J. (1971), "Demarketing, yes, demarketing", *Harvard Business Review*, Vol. 49, pp. 74-80.
- Lopez-Bonilla, J.M. and Lopez-Bonilla, L.M. (2008), "Measuring social carrying capacity: an exploratory study", *Tourismos: An International Multidisciplinary Journal of Tourism*, Vol. 3 No. 1, pp. 116-134.
- McCool, S.F. and Lime, D.W. (2001), "Tourism carrying capacity: tempting fantasy or useful reality?", *Journal of Sustainable Tourism*, Vol. 9 No. 5, pp. 372-388.
- Medway, D., Warnaby, G. and Dharni, S. (2010), "Demarketing places: rationales and strategies", *Journal of Marketing Management*, Vol. 27 Nos 1-2, pp. 124-142.
- Milano, C., Novelli, M. and Cheer, J.M. (2019), "Overtourism and tourismphobia: a journey through four decades of tourism development, planning and local concerns", *Tourism Planning and Development*, Vol. 16 No. 4, pp. 353-357.
- Obesity (2020), 06th December available at: www.who.int/health-topics/obesity#tab=tab_1
- Oklevik, O., Gössling, S., Michael, H.C., Jakopsen, J.K.S., Grotte, I.P. and McCabe, S. (2019), "Overtourism, optimisation, and destination performance indicators: a case study of activities in Fjord Norway", *Journal of Sustainable Tourism*. doi: [10.1080/09669582.2018.1533020](https://doi.org/10.1080/09669582.2018.1533020).
- Peter, L. (2017), "'Tourists go home': leftists resist Spain's influx", available at: <https://www.bbc.com/news/world-europe-40826257>
- Plush, H. (2017), "Barcelona unveils new law to keep tourists away", available at: <https://www.telegraph.co.uk/travel/destinations/europe/spain/catalonia/barcelona/articles/barcelona-unveils-new-law-to-keep-tourists-away/>
- Puljic, I., Knezevic, M. and Segota, T. (2019), "Case study 8 Dubrovnik, Croatia", in Carvão, S. and Oliveira, D. (Eds), *'Overtourism'? – Understanding and Managing Urban Tourism Growth beyond Perceptions*, World Tourism Organization, Madrid, Vol. 2, Case Studies, pp. 40-43.
- Robinson, P. (2015), "Conceptualizing urban exploration as beyond tourism and as anti-tourism", *Advances in Hospitality and Tourism Research*, Vol. 3 No. 2, pp. 141-164.
- Saveriades, A. (2000), "Establishing the social tourism carrying capacity for the tourist resorts of the east coast of the republic of Cyprus", *Tourism Management*, Vol. 21 No. 2, April, pp. 147-156.
- Sheivachman, A. (2016), "Iceland and the trials of 21st century tourism", available at: <https://skift.com/iceland-tourism/>
- Sievert, S. (2021), "Over tourism in the cinque terra", available at: <https://storymaps.arcgis.com/stories/b09db4f8801f469fa7edb79e96a5ca33>
- Stone, R. (2018), "Lisbon's overtourism lesson: living like a local is not enough", available at: <https://skift.com/2018/05/31/lisbons-overtourism-lesson-living-like-a-local-is-not-enough/>
- Swarbrooke, J. (1999), *Sustainable Tourism Management*, Cab International, Wallingford.
- Tejada, M., Malvarez, G.C. and Navas, F. (2009), "Indicators for the assessment of physical carrying capacity in coastal tourist destinations", *Journal of Coastal Research Special Issue 56*, pp. 1159-1163.
- Tulke, J. (2020), "'Tourism owns the hood:' the emergence of anti-Airbnb graffiti in Athens", available at: <https://aestheticsofcrisis.org/2020/anti-airbnb-graffiti-in-athens/>
- Varga, P. (n.d), "Overtourism: lessons from boracay island, the Philippines", Retrieved 11.30.2020 available at: <https://hospitalityinsights.ehl.edu/overtourism-boracay-island-philippines>

Wetzel, L. (2011), "Tourist=Terrorist?", available at: <https://lucaswetzel.com/2011/06/04/tourist-terrorist/>

World Commission on Environment and Development (1987), *Our Common Future*, Oxford University Press, Oxford.

Zacarias, D.A., Williams, A.T. and Newton, A. (2011), "Recreation carrying capacity estimations to support beach management at praia de Faro, Portugal", *Applied Geography*, Vol. 31, pp. 1075-1081.

Zemla, M. (2020), "Reasons and consequences of overtourism in contemporary cities—knowledge gaps and future research", *Sustainability*, Vol. 12, p. 1729.

Corresponding author

Fatih Pektaş can be contacted at: fpektas@aksaray.edu.tr

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com