

SUSTAINABILITY IN CULTURAL TOURISM DESTINATIONS  
FROM THE PERSPECTIVE OF TOURISTS



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SUSTAINABILITY IN CULTURAL TOURISM DESTINATIONS  
FROM THE PERSPECTIVE OF TOURISTS

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Sustainability in Cultural Tourism Destinations

From the Perspective of Tourists

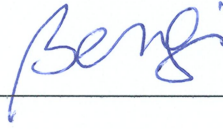
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## ABSTRACT

### Sustainability in Cultural Tourism Destinations

#### From the Perspective of Tourists

Sustainability is turning into a major idea for tourism destinations and the literature has recognized the significance of sustainable development for any tourism destination. Since marketing is an important driver of sustainability practices, it is vital for the destinations that are trying to become more sustainable to be able to market these attributes to their target markets. Although tourists are recognized as an important stakeholder for sustainable tourism, their attitudes toward sustainability in tourism destinations and the importance that they give to certain sustainability attributes as opposed to others are under-researched topics in the literature. Therefore, this study aims to investigate Turkish tourists' perceptions of the importance of sustainability attributes in tourism destinations and to determine the tourists' willingness to pay for these aspects. Socio-cultural, economic and environmental dimensions of sustainability are considered, as the study provides a comprehensive model of sustainability attributes of destinations from the perspective of tourists. The investigation combines qualitative procedures, intended to acquire insights into the topic, and quantitative methodology, aimed at obtaining the views of Turkish cultural tourists. A scale is created to measure the importance given to sustainability attributes. Findings indicate that tourists give most importance to cultural and environmental protection and they are more willing to spend more for the environmental attributes. According to the results obtained, recommendations for the communication of sustainability attributes of tourism destinations are provided.

## ÖZET

### Kültür Turizmi Destinasyonlarındaki Sürdürülebilirliğe Yönelik

### Turistlerin Algısı

Sürdürülebilirlik turizm destinasyonları için önemli bir kavram haline geliyor ve literatür bütün turizm destinasyonları için sürdürülebilir turizm gelişiminin önemini kabul etmiş bulunmaktadır. Pazarlama sürdürülebilirlik için önemli bir sürücü olduğundan, sürdürülebilir olmaya çalışan destinasyonların bu özelliklerini hedef kitleye pazarlayabilmesi de önemlidir. Turistlerin sürdürülebilir turizmin önemli bir paydaşı olduğu kabul edilmesine rağmen, turizm destinasyonlarındaki sürdürülebilirlik ile ilgili tutumları ve bazı sürdürülebilirlik niteliklerine verdikleri önem literatürde az araştırılmış konular arasındadır. Bu nedenle, çalışma Türk turistlerin turizm destinasyonlarının sürdürülebilirlik niteliklerine yönelik tutumlarını ve turistlerin bu nitelikler için ödeme istekliliğini araştırmayı amaçlamaktadır. Çalışma Türk turistlerin bakış açısından destinasyonlardaki sürdürülebilirlik niteliklerine yönelik kapsamlı bir model oluşturduğundan, sürdürülebilirliğin sosyo-kültürel, ekonomik ve çevresel boyutları dikkate alınmaktadır. Araştırma, konu hakkında bir anlayış kazanmak amacıyla kalitatif ve Türk kültür turistlerinin bakış açısını anlamak amacıyla kantitatif araştırma yöntemlerini birleştiriyor. Sürdürülebilirlik niteliklerine verilen önemi ölçmek amacıyla bir ölçek oluşturulmuştur. Sonuçlar, turistlerin en fazla önemi kültürel ve çevresel korumaya verdiğini, çevresel özellikler için harcama konusunda daha istekli olduklarını göstermektedir. Elde edilen sonuçlara göre, turizm destinasyonlarının sürdürülebilirlik niteliklerinin iletişimi ile ilgili tavsiyelerde bulunmaktadır.

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## TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION .....	1
1.1 Research background.....	1
1.2 Aims and objectives .....	2
CHAPTER 2: SUSTAINABLE DEVELOPMENT AND THE CONCEPT OF SUSTAINABLE TOURISM .....	4
2.1 Historical background to sustainable development .....	4
2.2 Sustainability and development in tourism .....	7
2.3 Measuring sustainability.....	17
2.4 Sustainable tourism in cultural and heritage destinations .....	25
2.5 Sustainable tourist attitude and green marketing.....	26
CHAPTER 3: RESEARCH QUESTIONS AND CONCEPTUAL MODEL .....	31
3.1 Research questions .....	31
3.2 Conceptual model.....	31
CHAPTER 4: METHODOLOGY .....	34
4.1 Qualitative study.....	34
4.2 Quantitative study.....	39
CHAPTER 5: FINDINGS AND DISCUSSION.....	42
5.1 Qualitative study findings and discussion .....	42
5.2 Quantitative study findings and discussion .....	50
CHAPTER 6: CONCLUSION .....	69
6.1 Theoretical implications .....	70
6.2 Practical implications .....	76
6.3 Limitations.....	79
6.4 Further research.....	82
REFERENCES .....	83
APPENDIX A: INTERVIEW GUIDELINE.....	94
APPENDIX B: QUESTIONNAIRE IN TURKISH .....	97
APPENDIX C: QUESTIONNAIRE IN ENGLISH .....	101
APPENDIX D: CLUSTER ANALYSIS DENDOGRAM .....	105
APPENDIX E: CLUSTER ANALYSIS AGGLOMERATION SCHEDULE .....	106

## LIST OF TABLES

Table 1. Sustainable Tourism Aims for Policy Makers.....	16
Table 2. The Global Sustainable Tourism Criteria for Destinations.....	22
Table 3. Sustainability Attributes from a Demand-Based Perspective.....	32
Table 4. Methods Used to Answer the Research Questions.....	41
Table 5. Factor Analysis: Importance Given by Tourists to Sustainability Scale....	52
Table 6. Descriptive Statistics of Tourists' Willingness to Pay for Sustainability ....	57
Table 7. Paired Samples T-Test: Difference between the Importance Given by the Tourists to Sustainability and Their Willingness to Pay for It.....	60
Table 8. Top 5 Most Liked Cultural Destinations.....	61
Table 9. Final Cluster Centres.....	64
Table 10. One-Way Analysis of Variance (ANOVA).....	65
Table 11. Independent Sample t-test.....	66
Table 12. Net monthly income * Cluster Number of Case Crosstabulation.....	68

# CHAPTER 1

## INTRODUCTION

### 1.1 Research background

Tourism ranks among the biggest and quickest growing industries in the world. It is a major contributor to the global economy and an important driver of development. While allowing a set of opportunities, tourism can also lead to a series of negative effects if it is badly managed (Mowforth & Munt, 2008). In order to obviate or alleviate the adverse effects of tourism, destinations are under pressure to develop contingency strategies and to diversify their services (Loibl & Waltz, 2010). With this aim, an increasing number of destinations are focusing on implementing more sustainable development practices. Therefore, in the last two decades, sustainable tourism has become a leitmotiv for tourism destinations.

Cultural tourism is a rising segment of the tourism industry and cultural tourism destinations are becoming major tourist attractions. While having positive effects like generating funds and providing needed capital (Salazar & Zhu, 2015), tourism may also cause negative effects like commodification of culture and physical damage (Kaminski, Benson, & Arnold, 2014). Since cultural and heritage assets are generally fragile (Salazar N. B., 2010), sustainability is *sine qua non* for cultural heritage destinations.

Involvement of all stakeholders is vital in sustainable tourism management. Tourists are one of the key stakeholders of sustainable tourism development and, as stated by the World Tourism Organization (2014, p. 11), “sustainable tourism should maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable

tourism practices amongst them”. Tourists’ perceptions are important considerations in tourism development as they influence local economies, societies, cultures and environments, as well as the intention to revisit the destination (Jafari, Smith, & Brent, 2001). However, destinations generally face major challenges in communicating the sustainability of their products to customers because many sustainable product characteristics cannot be experienced directly by tourists (Wehrli, et al., 2013) Although, it is important to know which attributes of sustainability are paid more attention to by the tourists, little research has been done on tourists’ attitudes toward sustainable tourism development. Among the very few studies in the existing literature on visitor behaviour, the analysis of sustainable behaviour emphasizes mainly on one facet of sustainability, namely environmental sustainability. Thus, studies that investigate the attitude towards sustainability of visitors or their behaviour concerning sustainability practices are missing in the literature. Thus, the current study aims to address this shortcoming, focusing on the views of Turkish cultural tourists concerning the importance of sustainability in tourism destinations.

## 1.2 Aims and objectives

The purpose of this study is to analyse sustainability from the point of view of the tourists by determining the importance given by Turkish tourists’ to the sustainability of tourism destinations and their willingness to pay for these attributes, considering all three facets of sustainability, socio-cultural, economic and environmental. Tourist attitudes toward sustainable tourism services have received scant consideration as most scientific studies on sustainable tourism are conducted from the viewpoint of supply. Also, the possibility of distinguishing tourists according to their willingness

to pay for sustainability will be examined. According to the results of this research, recommendations will be done on how sustainable destinations should communicate their sustainability practices to potential Turkish visitors.

In line with the aim of the study, the following research questions have been formulated:

- Which attributes of sustainability are most frequently mentioned by tourists in their reviews of a tourism destination?
- Which attributes of sustainable destinations are most important according to Turkish tourists?
- Are the Turkish tourists willing to pay extra money for sustainable destinations? If yes, for which attributes?
- Is it possible to distinguish between tourists in terms of their willingness to pay for sustainability?

CHAPTER 2  
SUSTAINABLE DEVELOPMENT  
AND THE CONCEPT OF SUSTAINABLE TOURISM

2.1 Historical background to sustainable development

The growing concern worldwide for overcoming poverty, protecting natural resources and achieving social justice and cultural diversity has resulted in the appearance of sustainable development (Yoon & Lee, 2003). This concept is not new, and has been discussed in the literature for many years. Although sustainability was not precisely defined until more recent years, interest regarding the impact of humans on the environment go back a long way to the time of ancient civilizations (Hardy, Beeton, & Pearson, 2001). However, a greater focus on sustainability dates back to the post World War II period. Due to the rapid acceleration of the economy after the war, it became clear that economic development was damaging the environment (Miller & Twining-Ward, 2006). According to Munier (2005), economic forces have fostered a civilization motivated by mass utilization of non-renewable resources which have to be protected in order to sustain the economy. “It is often argued that 20% of the world's population consumes 80% of the resources.” (United Nations Development Programme [UNDP], 1999, p. 2). Therefore, emphasis was put on the association between economic development and environmental friendliness, starting from the mid-1960s (Hardy, Beeton, & Pearson, 2002).

Sustainable development movement is considered to have been born during the United Nations Conference on the Human Environment held in Stockholm in 1972. This event was the first major United Nations conference that worried about

environmental issues on a worldwide level, and it gave way to the opinion that development is compatible with the protection of the environment (Page & Connell, 2006). With the publication of the World Conservation Strategy in March 1980, sustainability became an internationally significant discussion matter, in parallel to the notion of combining conservation with development (Bramwell & Lane, 1993). However, the most widely employed definition of sustainable development was devised in the Brundtland Report, which was published in 1987. Sustainable development was defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development [WCED], 1987, p. 43). According to this definition, sustainable development basically involves two crucial concepts. The first one includes paying attention to the needs of the people, especially those of the poor in the world. The second one concerns establishing limits in the consumption of reserves or the environment, since overuse of these resources can impact on the life of people in the present and in the future, resulting in potential social troubles .

In the Brundtland Report, which is also known as “Our Common Future”, the idea of sustainable development was introduced viewing the two contradictory concepts of economic progress and protection of the environment as interdependent (Hardy & Beeton, 2001). Sustainable development was considered further at the United Nations Conference on Environment and Development, which is also identified as the Earth or Rio Summit, held in Rio de Janeiro in 1992. Five major documents came out from this meeting, not the least being Agenda 21, which is considered as the “bible of sustainable development” since it gives various recommendations for the implementation of this concept (Rist, 1997, p. 190). In 1993, the Commission on Sustainable Development (CSD) was founded in order to

guarantee the effective follow-up on the implementation of Agenda 21. The World Summit on Sustainable Development (WSSD) came together in 2002 in Johannesburg at “Earth Summit 2002”, which is also known as Rio+10, to evaluate the progress made on the implementation of the global commitments made in Agenda 21. In 2012, the third international conference on sustainable development, “Earth Summit 2012”, which is also known as Rio+20, was organized to secure renewed political commitment to sustainable development and set the global environmental agenda for the next 20 years (Haines, Alleyne, Kickbusch, & Dora, 2012).

Sustainability is gaining more importance in recent years and there has been a rise in the attention to it among governments, businesses, non-profit organizations and academic institutions. The number of books, articles and conferences on this topic has increased dramatically. Also, the quantity of entries on Internet on sustainable development increased eight times between 2003 and 2006, reaching the 60 million mark in 2006 (Blackburn, 2007). On the other hand, the goals and expectations of “Earth Summit” have not been met in the years following the meeting (Munier, 2005). According to the results of the United Nations Environment Report, only a few of organizations are actually endeavouring to achieve sustainability goals, and there is an increasing gap between the worsening state of the planet and the efforts carried out (United Nations Environmental Programme [UNEP], 2005). As stated by a more recent global survey of McKinsey Company (2010), although more than 50% of executives consider sustainability as an important concept, only around 30% of them indicate that their companies embed it in their business practices. This shows that firms are not taking a proactive stance to achieving sustainability. Another conclusion of the survey is that companies are more likely to pursue sustainability if it aligns with their business goals rather than

for building a reputation. However, it is important that organizations that are embracing sustainability receive an advantage or are able to communicate this to their consumers. Therefore, there needs to be an active approach taken in communicating sustainability initiatives externally to gain recognition and increase their impacts.

## 2.2 Sustainability and development in tourism

Advances in transportation and communication along with globalization in the 20th century have enabled tourism to develop into one of the world's largest industries (Choi & Sirakaya, 2006). Today, tourism is one of the most significant and expanding sectors of the world economy generating 9% of the world's GDP (UNWTO, 2014). It represents a share of 29% of the exports of commercial services worldwide and employs over 200 million people internationally, equalling and even surpassing the business volume of oil exports, food products or automobiles (UNWTO, 2014). The tourism industry creates many economic benefits including employment, government earnings, contribution to foreign exchange revenues and regional development. The advantages of tourism are also expected to have a multiplier effect and a trickle down influence to the general economy with the reflection of increased purchasing power of tourism wage earners (Alvarez, 2014). Therefore, tourism is often presented as an engine for economic growth and development (APEC, 2012).

On the other hand, tourism may have negative environmental and socio-economic impacts like any other economic activity (Choi & Sirakaya, 2006) and may become a double edged sword if it is not properly managed. For example, in the cases of increased dependence on imported goods and high levels of foreign

investments, economic leakage may arise (Choi & Sirakaya, 2005). According to Choi & Sirakaya (2005, p. 383), “no more than 20% (less than 10% in some regions) of tourist dollars circulate within community destinations”. There is a faster growth of tourist movement towards developing and least developed countries than those directed to the developed ones, which currently accounts now for approximately 50% of total international tourist arrivals (UNWTO, 2013). Destinations in emerging economies are expected to surpass those in more developed countries in the next 5 years (UNWTO, 2011). Despite the fact that tourism is perceived as a panacea for economic development of less developed countries, it has failed to meet the expected commitment to destination’s growth and development (Alvarez, 2014). Besides causing economic leakages, tourism can also disturb the natural balance, as well as the cultural and social activities at the destination, especially if it develops rapidly. As the tourism industry requires a lot of resources and produces waste and GHG gasses, it is a major contributor to climate change. Tourism currently accounts for around 5% of global CO<sub>2</sub> emissions, and this figure is anticipated to increase by 152% by 2035 (Scott, et al., 2008). Other than natural resources, cultural and social aspects of the place may also be irreversibly damaged due to tourism. Cultural resources could become commodified, losing their significance for the community members. Losing such cultural elements not only affects the residents; it also reduces the attractiveness of the destination for tourists (King & Stewart, 1996).

The tourism industry has been accused of focusing on maximizing short-term profits instead of long-term sustainability (Swarbrooke, 1999). “Not surprisingly, many destinations have been caught off-guard in dealing with the adverse impacts of tourism on natural, social, and cultural resources” (Sirakaya, Jamal, & Choi, 2001, p. 411). The industry needs to recognize and reduce the harmful effects on destinations.

Therefore, it is important for tourism to base its activities on a sustainability perspective considering conservation of the resources and improvement of the quality of life of the residents (Ozdemir, Yilmaz, Yalçin, & Alvarez, 2014). As a result of expanded information and concern about the negative impacts of tourism, the need for sustainability practices in the tourism industry is increasing (Holden A. , 2003).

Sustainable tourism concept is obtained from the broader one of sustainable development (Garrod & Fyall, 1998). Applied to the tourism industry, the focal point is on reducing the negative effects of tourism, while expanding the benefits to the entire community (Alvarez, 2014). Through Agenda 21 and the principles put forward by the Brundtland Commission, tourism started to be seen as an industry that can help to create a healthy planet with economic resources' redistribution, advances in the socio-economic situation and mitigation of climate change (Gössling, 1999). In the late 1980s and early 1990s, the implications of sustainable development for tourism started to be contemplated by both academicians and practitioners (Berno & Bricker, 2001). After the United Nations "Earth Summit" in 1992, recommendations to adopt the Agenda 21 principles highlighted the potential of tourism for advancing the goals of sustainable development (Saarinen, 2006). "The sustainable tourism plan of action" and "Charter for sustainable tourism" documents emerged from Lanzarote Conference in 1995.

Clarke (1997) suggested a framework of methods for the development of sustainable tourism and its interpretation (Swarbrooke, 1999). He identified four stages based on different approaches: polar opposites, a continuum, movement and convergence. According to the first stage, polar opposite approach, mass tourism and sustainable tourism were perceived as polar opposites and stereotyped as being

“good” and or “bad”. Small scale tourism was viewed as good and synonymous with sustainable tourism. However, In the 1990s the second stage, a continuum, presented a flexible adaptation of the earlier ideas. It was acknowledged that sustainable tourism and mass tourism could merge at some point. Later, the third stage movement appeared with the realization that inappropriately managed small-scale tourism could grow into mass tourism. This approach suggested that positive action could make mass tourism more sustainable. Mass tourism started to be seen as a form of improvement rather than a bad thing and the operationalization of sustainable tourism received a practical focus, leaving behind the debates on the definition of sustainable tourism (Hardy et. al., 2002). The fourth stage, convergence, represents the current understanding of sustainable tourism, which defines it as “a goal that all tourism, regardless of scale, must strive to achieve” (Clarke J. , 1997, p. 229). Therefore, all types of tourism can attempt to be sustainable.

Sustainable tourism and sustainable development are extensively investigated and referenced concepts. There are different approaches in defining sustainable development in tourism. The tourism centric approach views sustainable tourism separate from sustainable development, focusing on tourism having a long term business viability (Miller & Twining-Ward, 2006). According to Place (1995) sustainable development is an oxymoron and this school of thought sees sustainability as a barrier to development because development can only be achieved through the use of existing resources which are often diminished because of tourism. This view points out that tourism can only achieve short-term economic gains while endangering the resources. Therefore, tourism can never be conceived as being sustainable (Sharpley, 2000) and the sustainability paradigm may be seen as a barrier to development (Alvarez, 2014).

On the other hand, Hunter (1997) argued that the range and scale of resources used in tourism are restricted by this perspective. Also, Lane (1994) supported that development needs to be considered from a broader viewpoint. Opposite to the tourism centric approach, sustainability should be seen as a vehicle that encourages the utilization of tourism for development (Alvarez, 2014). According to Lozano, Blancas, Gonzalez & Caballero (2012, p. 659) sustainable tourism is “not a specific form of tourism but more an approach that can be used to make all types of tourism more environmentally, socially and economically beneficial”. This approach defines sustainable tourism in terms of a wider, multi-sectorial context and recognizes the impacts of tourism as part of accomplishing the greater objective of sustainable development (Hunter, 1997). In the same vein, the United Nations World Tourism Organization (UNWTO) defined sustainable tourism as “development that meets the needs of the present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems” (Inskip, 1998, p. 21).

As tourism is an economic activity, it needs to be economically feasible. Economic sustainability alludes to generating prosperity regardless of the levels of society and optimizing the development growth rate at a manageable level by taking the limits of the destination’s environment into account (Choi & Sirakaya, 2005). For example, land speculation can be a result of certain forms of tourism development which creates an increase in rents and property taxes. Also, competition for resources may increase prices (Ritchie & Crouch, 2003). Therefore, not only a small part of the shareholders should benefit from this activity. Tourism can create direct, indirect and

induced employment to sustain the destination while ensuring that resources are managed in a smarter way that future generations can be supported (Alvarez, 2014). Local labour needs to be utilized so that residents support tourism development more strongly. Also, as tourism demand can be seasonal, job security of the employees should be maintained (Ritchie & Crouch, 2003). As a result of economic sustainability, the attractiveness of destinations for tourists and residents may increase with the development of infrastructure (Ozdemir, Yilmaz, Yalçin, & Alvarez, 2014). Nevertheless, economic viability of the destinations can be maintained if the tourism development plans are compatible with the market needs while they also protect human and environmental integrity (Hassan, 2000).

“Tourism depends ultimately upon the environment.” (Mason, 2010, p. 56).

Either the environment is the context in which tourism activities take place or a major attraction for many destinations (Holden A. , 2000). Tourism and environment are mutually dependent upon each other; however, the unbalanced relationship between them is accepted after the Second World War, with the recognized beginning of mass tourism (Mason, 2010). While tourism has the potential to contribute to environmental protection by increasing public awareness because of its ability to attract tourists, it also tends to over-consume resources (McKercher, 2003) and can have significant negative impacts on the environment, such as pollution, traffic congestion and overcrowding. Environmental sustainability is concerned with protecting and managing renewable and non-renewable resources both for present and future generations. It points out to the importance of local rights to the destination’s assets and to the use of these resources to support the well-being of the residents while reducing consumption of non-renewable resources (Ozdemir, Yilmaz, Yalçin, & Alvarez, 2014). Without the protection of natural, cultural and

historical environment, sustainability and long term success cannot be achieved in destinations (Gezici, 2006).

With the rapid expansion of tourism, changes and developments in the structure of society started to occur. As tourists' travel, they seek for an experience of the destinations' socio-cultural fabric (Ritchie & Crouch, 2003). Tourism may support the social development with the improvements in income, education, healthcare and employment opportunities. Tourism has also the potential to conserve cultural assets. On the other hand, traditional social values may be challenged and the cultural values may be commoditized. Demonstration effect, "the host population's emulation of the behaviour and especially the consumption practices of the tourists who visit them" (Moore, 1995, p. 302), may occur and the local communities may change their own values and modes of behaviour (Teo, 1994). The socio-cultural impacts of tourism are felt more strongly in the destinations where local communities are entirely dependent on tourism. According to Farsani, Coelho and Costa (2012, p. 30), "Cultural sustainability is the concept for the recovery and protection of cultural identities". McKercher (2003) indicated that cultural sustainability increases individual's control over their lives and makes the community's identity stronger; it is also compatible with the locals' culture and values (Farsani, 2012). Social sustainability in tourism destinations is defined as giving local people more power by allowing them to control their lives, and to make decisions concerning tourism. It also extends to giving support to individuals and creating education possibilities (Ozdemir, Yilmaz, Yalçin, & Alvarez, 2014).

In order to permit the long-term endurance of tourism, a suitable balance must be provided between economic, environmental and sociocultural dimensions (Lansing & De Vries, 2007). This idea is closely linked to the Triple bottom line

(TBL) approach, introduced by sustainability expert Briton John Elkington in 1997. This viewpoint considers People, Planet, and Profit (PPP) and refers to increasing profits, improving the planet and bettering the lives of people. In order for sustainable development to succeed, there must be a win-win-win situation between PPP (People, Planet, and Profit) as a result of the activities performed under a cause-no-harm initiative (Blackburn, 2007). Recently, climate change has been added as the fourth element and the triple bottom line started to be referred as the quadruple bottom line by UNWTO (Law, DeLacy, & McGrath, 2011). As a result of the fragmented nature of tourism and the conflicting interests of various stakeholders, achieving the right balance between the economic, environmental- and socio-cultural resources of a destination is fraught with difficulties (Alvarez, 2014).

Tourism destinations involve a wide range of stakeholders (Swarbrooke, 1999) of whom it is the main issue (Carter, 2005). They are also the areas where the impacts of the tourism industry are felt more strongly (Wall & Mathieson, 2006). Because of the current and future negative impacts of the tourism industry, it is more important than ever that destinations be managed in a thoughtful way while also considering their key success indicators (Fuchs & Weiermair, 2004). Competitiveness of a destination mostly relies on how well the destination attains superiority through its central attributes. Sustainability is considered as an important driver of competitiveness (Mathew, 2009). According to Clarke (2002), sustainability becomes a synonym for long-term competitiveness.

Since sustainability is a complex multidimensional concept that may change according to various situations, (Mathew, 2009), it is both subjective and complex to develop a sustainable tourism destination (Chan, 2010). In order to achieve sustainable tourism development, the evaluation of the place's competitive elements

is essential. Furthermore, it is important to determine the desired level of sustainability, together with the most important influencing attributes. As sustainable tourism development has many different and sensitive aspects, there are conceptual flaws within the frameworks done, which have not been proven to be a sufficient guide of sustainable development (Tao & Wall, 2009). The adoption of the sustainable tourism development concept needs to be done from a broader perspective including economic, environmental and cultural context that it takes place.

After the publication of the Brundtland Report in 1987, the concept of “sustainable tourism” started to become a part of the tourism development plans and a considerable amount of sustainable tourism development plans emerged. Researchers and practitioners have created a variety of guidelines and principles for sustainable tourism development. UNEP (2005) published the book “Guide for Policy Makers” which states that there is an agenda framed around twelve aims in relation with the three pillars of sustainability for effective approaches to achieve a more sustainable tourism globally. Table 1 below provides a detailed description of it. There is a strong correlation between the aims; for example, satisfaction of visitor is about providing security, while achieving to give them a fulfilling experience, which is related to both social and economic pillars of sustainability.

Table 1. Sustainable Tourism Aims for Policy Makers

<b>Twelve Aims</b>	<b>Descriptions and Explanations</b>
<b>Economic Viability</b>	To ensure the viability and competitiveness of tourism destinations and enterprises, so that they are able to continue to prosper and deliver benefits in the long term.
<b>Local Prosperity</b>	To maximize the contribution of tourism to the economic prosperity of the host destination, including the proportion of visitor spending that is retained locally.
<b>Employment Quality</b>	To strengthen the number and quality of local jobs created and supported by tourism, including the level of pay, conditions of service and availability to all without discrimination by gender, race, disability or in other ways.
<b>Social Equity</b>	To seek a widespread and fair distribution of economic and social benefits from tourism throughout the recipient community, including improving opportunities, income and services available to the poor.
<b>Visitor Fulfilment</b>	To provide a safe, satisfying and fulfilling experience for visitors, available to all without discrimination by gender, race, and disability or in other ways.
<b>Local Control</b>	To engage and empower local communities in planning and decision making about the management and future development of tourism in their area, in consultation with other stakeholders.
<b>Community Wellbeing</b>	To maintain and strengthen the quality of life in local communities, including social structures and access to resources, amenities and life support systems, avoiding any form of social degradation or exploitation.
<b>Cultural Richness</b>	To respect and enhance the historic heritage, authentic culture, traditions and distinctiveness of host communities.
<b>Physical Integrity</b>	To maintain and enhance the quality of landscapes, both urban and rural, and avoid the physical and visual degradation of the environment.
<b>Biological Diversity</b>	To support the conservation of natural areas, habitats and wildlife, and minimize damage to them.
<b>Resource Efficiency</b>	To minimize the use of scarce and non-renewable resources in the development and operation of tourism facilities and services.
<b>Environmental Purity</b>	To minimize the pollution of air, water and land and the generation of waste by tourism enterprises and visitors.

Source: Excerpted from UNEP and UNWTO, 2005.

Although enormous efforts have been made while trying to implement sustainable development values to tourism, the majority of the work on sustainable tourism have concentrated on developing theories and formulating policies. However, there is a challenge in finding practical tools in turning academic knowledge into practice and to operationalize the concept (Butler, 1999). Ruhanen (2008) undertook an investigation to examine the transfer of theory into action for the public sector in Queensland, Australia. According to the results of this research, although there is vast amount of knowledge on sustainable tourism, this knowledge is not spread out to the people in need of using it for planning and managing. Also, Teo (2002) argued that the requirements to achieve this balance have never been investigated in the tourism literature. This author also contends that tourism development is usually in an imbalanced state that needs to be resolved (Teo, 2002).

### 2.3 Measuring sustainability

According to Butler (1999, p. 16) “the use of the term ‘sustainable’ is meaningless and becomes hyperbole and advertising jargon” without indicators or measures for tourism development. Hart (2010, p. 1) defines indicators as “something that helps you understand where you are, which way you are going and how far you are from where you want to be”. While reducing a large amount of information to its simplest form and providing meaning to the data that reaches beyond the attributes generally related to it, sustainability indicators can also enhance the general comprehension of problems, encourage community capacity building and assist determining sustainable development goals and appropriate management strategies (Miller & Twining-Ward, 2006). As Hunter (1997) notes, sustainable tourism is a meaningless concept without indicators because they have a great importance in informing us about the negative

effects of tourism (Torres-Delgado & Saarinen, 2014). Therefore, indicators development is essential for both the researchers and practitioners of sustainable tourism development.

Gross Domestic Product and Gross National Product are the traditional development indicators that have been found to be inadequate measures and have been criticized since the 1970s (Rebollo & Baidal, 2004). Likewise, standard tourism indicators, like number of arrivals and tourist spending, have been used in the tourism industry to monitor the destination's performance for many years; however, they are found to be unsatisfactory assessments of tourism's real performance (Miller & Twining-Ward, 2006). Because of the limitations of traditional development measures, Agenda 21 strongly emphasized the necessity for an international set of indicators to evaluate the evolution of sustainability. The Earth Summit +5 reaffirmed that indicators are essential instruments to reduce the large amount of information into meaningful criteria for sustainable development which support national decision making (Mearns, 2012). Many national, international and non-governmental organizations are engaged in sustainability initiatives, such as the United Nations Organisation (Environment and Development Programmes and the Commission for Sustainable Development), the European Union's General Directorate XI, the World Bank, the Organisation for Economic Cooperation and Development (OECD), the World Tourism Organization, the European Environmental Agency, the International Council for Local Environmental Initiatives, the World Watch Institute, the International Institute of Sustainable Development, the World Wide Fund, etc. (Rebollo & Baidal, 2003). This has brought about the improvement of various concepts and tools for the evaluation and implementation of sustainable tourism (Schianetz, Kavanagh, & Lockington, 2007).

In 1993, the World Tourism Organization (UNWTO) accredited a team of experts to develop indicators for the identification of emerging problems as an early warning system in the tourism industry. However, the team confronted conflicting views on what is a suitable set of indicators. While scientists wanted a deeper measurement with hundreds of indicators, potential users suggested a simpler set of indicators (Manning, 1999). Criteria for a “good” set of indicators have been listed by various researchers such as, sensitivity, accessibility of information, consistency, cost-effectiveness, clearness and comparability (Schianetz & Kavanagh, 2008). The team realized that there is no “perfect” set of indicators as each user can have a different set of ideal ones depending on the specific case (Manning, 1999). In 1995, the World Tourism Organization published the guide “What Tourism Managers Need to Know: A Practical Guide to the Development and Use of Indicators of Sustainable Tourism” (Manning, 1996), which was updated and became the “Guidebook on Indicators of Sustainable Development for Tourism Destinations” in 2004. It remains one of the most comprehensive resources on this topic (Schianetz & Kavanagh, 2008).

In addition, the Tourism Sustainability Group (TSG) was created by the European Commission at the end of 2004 to contribute efforts to the sustainability of European tourism. It was composed of a variety of participants such as regional and local authorities, professional bodies, non-governmental organizations, international bodies, trade unions with expertise and experience in sustainable tourism. In 2007, TSG established a report with recommendations in order to encourage action to make European tourism more sustainable. Within the same year, the European Commission endorsed a medium-long term agenda on the basis of the TSG-Report (TSG, 2007). Also, European Tourism Indicators System (ETIS) for Sustainable

Management at Destination Level is developed by the European Commission for tourism destinations to assist them in supervising, managing, measuring and enhancing their sustainability performances. It is a new indicator system based on European Destinations of Excellence (EDEN), an initiative launched for the promotion of sustainable tourism development models across the European Union. Every year since 2006, a national competition is taking place for “destination of excellence” based on the commitment to sustainability (EDEN, 2016).

Another initiative addressed to the sustainable practices promotion of in the tourism industry worldwide is that of the Global Sustainable Tourism Council (GSTC). The GSTC is an independent international body, generally a volunteer organization, comprising of e sustainable tourism experts and supported by both organizations like UNWTO and individuals. While adopting a diverse global sustainable tourism principles, it compiles and creates global instruments and training to apply sustainability practices in many tourism destinations. The necessity for the Global Sustainable Tourism Criteria for Destinations (GSTC-D) was established and the GSTC Destination Working Group (the “Destinations WG”) was instituted in 2010. After working on various drafts, the Global Sustainable Tourism Criteria for Destinations (GSTC-D) were accepted by the GSTC Board in 2013 to create a common understanding of sustainable destinations. GSTC Criteria for Destinations include the guiding principles to protect and preserve the diverse and limited resources based on sustainability standards recommended by the UNWTO and other leading environmental groups (GSTC, 2015).

The Global Sustainable Tourism Criteria for Destinations is composed of four main themes: “1) demonstrate sustainable destination management; 2) maximize economic benefits to the host community and minimize negative impacts; 3)

maximize benefits to communities, visitors, and culture; 4) minimize negative impacts and maximize benefits to the environment” (GSTC, 2014). There are sub-criteria (Table 2) for each theme indicating what should be done. As these criteria provide information to the media leading them to identify destinations applying sustainability principals and inform the public regarding their sustainability, these GSTC standards also provide marketing visibility for the destinations that apply them. The criteria periodically undergo public scrutiny through open public forums and feedback, in order to improve the current criteria (GSTC, 2016). Table 2 below provides details on these criteria.



Table 2. The Global Sustainable Tourism Criteria for Destinations

<b>Global Sustainable Tourism Criteria for Destinations</b>
<b><i>SECTION A: Demonstrate sustainable destination management</i></b>
A1 Sustainable destination strategy
A2 Destination management organization
A3 Monitoring
A4 Tourism seasonality management
A5 Climate change adaptation
A6 Inventory of tourism assets and attractions
A7 Planning Regulations
A8 Access for all
A9 Property acquisitions
A10 Visitor satisfaction
A11 Sustainability standards
A12 Safety and security
A13 Crisis and emergency management
A14 Promotion
<b><i>SECTION B: Maximize economic benefits to the host community and minimize</i></b>
B1 Economic monitoring
B2 Local career opportunities
B3 Public participation
B4 Local community opinion
B5 Local access
B6 Tourism awareness and education
B7 Preventing exploitation
B8 Support for community
B9 Supporting local entrepreneurs and fair trade
<b><i>SECTION C: Maximize benefits to communities, visitors, and culture; minimize</i></b>
C1 Attraction protection
C2 Visitor management
C3 Visitor behaviour
C4 Cultural heritage protection
C5 Site interpretation
C6 Intellectual property
<b><i>SECTION D: Maximize benefits to the environment and minimize negative</i></b>
D1 Environmental risks
D2 Protection of sensitive environments
D3 Wildlife protection
D4 Greenhouse gas emissions
D5 Energy conservation
D6 Water Management
D7 Water security
D8 Water quality
D9 Wastewater
D10 Solid waste reduction
D11 Light and noise pollution
D12 Low-impact transportation

Source: Adapted from GSTC, 2011.

14 destinations are the early adopters of these criteria: Cusco Region of Peru; Botswana's Okavango Delta Ramsar Site; Fjord region, Norway; Huangshan, China; Jackson Hole, Grand Teton & Yellowstone in the USA; Lake Llanquihue in Chile; Lanzarote, Canary Islands in Spain; Mara Naboisho Conservancy, Kenya; Samoa; Sierra Gorda; South Sardinia, Italy; Sierra Gorda, Mexico; St. Kitts and Nevis; Riviera Maya, Mexico; St. Croix, Virgin Islands. These are shown in Figure 1.

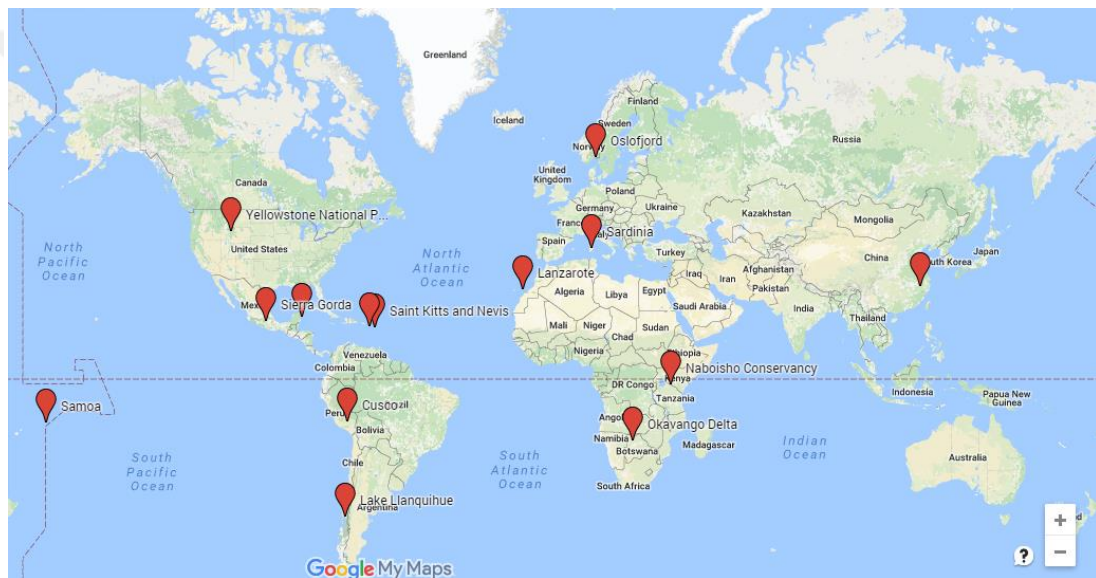


Figure 1 Map showing the early adopters of the GSTC criteria. Map prepared by the author using Google Maps.

In parallel to the work carried out by these organizations, some countries have developed frameworks, like Korea, which created a system for managing a national park in a sustainable way (Brebbia, 2013). However, they are criticized by researchers for being restricted to specific cases. The practitioner measures with the policy-maker approach have the potential to create bias in the process of development of the indicators, as well as a greater deal of subjectivity, both of which are denounced by academicians (Tanguay, Rajaonson, & Therrien, 2013).

Also, many indicators for the sustainable tourism and destinations have been developed in the literature. McElroy (1998) proposed one of the first sustainable tourism indexes, which was grounded on only three indicators: per capita expenditures of visitors, daily number of visitors per 1000 population and the density of hotel rooms per square kilometre. In time, the number of indicators expanded. For example, an index composed of 20 indicators concerned with the economic, social and environmental impacts of tourism was produced by Castellani and Sala (2010) to evaluate the application of the European Charter for Sustainable Tourism to the mountain community of Alpi in Italy. Miller (2001) conducted a Delphi survey with professionals to develop a set of indicators of sustainable tourism to be used either at an organization or resort level, with the notion of finding the best way to encourage tourists to select sustainable tourism destinations. Choi and Sirakaya (2006) also used Delphi technique and arrived at a set of 125 indicators under six dimensions: political, social, ecological, economic, technological and cultural. Although it is one of the most comprehensive studies on sustainable tourism indicators, it is criticized for being solely based on expert opinion. Bossel (1999) notes that people's views from different social and academic backgrounds need to be included. A bottom-up approach matches the wider recognition of the need for community participation; however, it may not necessarily cover all critical aspects of sustainability (Schianetz & Kavanagh, 2008).

According to Tanguay, Rajaonson, & Therrien (2013), 768 indicators of sustainable tourism can be found. While the scientific approach seeks to obtain a large amount of information, its application is being restricted to specific cases, neglecting generalization (Fernandez & Rivero, 2009), and found to be too complex to be adopted by policy makers (Tanguay, Rajaonson, & Therrien, 2013). The

practitioner measures simplify the information for public understanding and ease of application (Tanguay, Rajaonson, & Therrien, 2013); however, they are at the risk of being exploited for branding purposes (Manning, 1999). Therefore, both approaches have pros and cons and there is not a globally and unanimously acknowledged list of indicators. Choosing the right set of indicators is very significant for sustainable tourism management. Otherwise, the indicators will show an unaccurate state or provide unreliable data (Durovic & Lovrentjev, 2014).

#### 2.4 Sustainable tourism in cultural and heritage destinations

Cultural tourism is becoming a more essential segment of the tourism industry; however, there is no one-agreed upon definition (UNWTO, 1993). According to Hall and Zeppel (1990, p. 54), “cultural tourism is an experiential tourism type, based on being involved in and stimulated by the performing arts, visual arts, and festivals”. Another related term, heritage tourism is defined as “a broad field of specialty travel, based on nostalgia for the past and the desire to experience diverse cultural landscapes and historic sites, buildings or monuments” (Hall & Zeppel, 1990, p. 47).

Cultural tourism and heritage tourism generally have different academic definitions with varied focuses. On the other hand, they have also some overlapped contents. McKercher and Cros (2002) explained cultural tourism encompassing the use of cultural heritage assets. Likewise, Zeppel, Hall & Weiler (1992) identified cultural heritage as one of the elements in explaining cultural tourism. In this way, cultural tourism and heritage tourism cannot be differentiated from each other; therefore, cultural tourism, heritage tourism, and cultural heritage tourism are often used interchangeably.

Cultural heritage is generally a fragile and irreplaceable resource appealing to a wide variety of users (Salazar N. B., 2010). Different stakeholders may value cultural heritage assets for different reasons pursuing varied goals (McKercher & Cros, 2002). Therefore, considering diverse stakeholders is a significant part of sustainable cultural heritage management. Tourists, as one of the stakeholders, may provide new sources of income (Russo & van der Borg, 2002), acting as a force to not only preserve the sites, but also to keep the communities and their culture alive (Fladmark, 1994 ). On the other hand, many cultural heritage resources are being transformed into tourism products (Li, 2003) and this may cause valuable resources to be damaged (McKercher & Cros, 2002) Also, tourism can cause other negative effects like commodification and increased standardization of the culture. (Kaminski, Benson, & Arnold, 2014). Improved cooperation and partnerships between cultural heritage management and tourism are key to increasing the benefits while minimizing the adverse effects.

## 2.5 Sustainable tourist attitude and green marketing

With growing pressures on the world's limited resources, there has been a growing trend towards sustainable products, and an increased public awareness of the importance of sustainability (Cherian & Jacob, 2012). This trend includes buying local and organic food, hybrid cars and other sustainable products. Because of the increasing interest in sustainable development, many businesses today go "green" and sustainability is included as part of their corporate strategy. Therefore, sustainability has become a requirement to achieve competitive advantage rather than an option (Kumar, Rahman, Kazmi, & Goyal, 2012). The marketing arena has transitioned over time and is expanding to include issues such as the need to take into

account the requirements of future generations while taking into consideration profitability, public interests and ecology (Vagasi, 2004). This balance can only be achieved by creating, communicating and delivering sustainability based value to customers (Dam & Apeldoorn, 1996)

There is an increase in the number of researches done on sustainable consumption; however, the majority of them are concerned with only environmental issues ignoring other dimensions of sustainability (Raderbauer, 2011). As sustainability is a complex concept, it is difficult to describe sustainable consumer behaviour (Polonsky & Rosenberger, 2001). However, a more thorough comprehension of businesses understanding can be achieved by considering all dimensions of sustainability (Raderbauer, 2011). Peattie (2001) also states that the focus should shift away from the consumer towards the purchase itself, thereby understanding consumption as a complete process.

Moreover, there is a gap between the attitude and actual behaviour of consumers. For example, despite the fact that 30% of UK consumers claim to be worried about environmental issues, this concern is not echoed in green purchases (Young, Hwang, McDonald, & Oates, 2010). According to a study of Barr, Shaw, Coles, and Prillwitz (2010), individuals who are committed to green behaviour in their daily lives at home, found it hard to apply this behaviour to different contexts like tourism. Although these individuals knew the negative effects of flying and were willing to pay more money to counteract the negative impact, they did not want to change their overall flying habits.

In the tourism industry, tourists are the consumers and it is difficult to describe sustainable tourist behaviour like in other industries. However, recent studies are showing that tourists are becoming more involved in sustainable kinds of

tourism (Weaver & Lawton, 2004). Compared to the large number of studies on host resident attitudes, little research has been done on tourists' attitudes toward sustainable tourism development. Sustainable tourism requires a high tourist satisfaction; however, as tourists have different needs and seek varied experiences, keeping them satisfied is challenging. Although tourists perceive the positive and the negative social, cultural, and environmental impacts of their behaviour, the percentage of those who would partake in sustainable tourism practices is considerably lower (Daud & Rahman, 2011). Previous studies have shown that tourists are not very interested in environmental concerns and eco-labels (Raderbauer, 2011). According to Fairweather et al. (2005) reasons for the lack of response to eco-labels and sustainable tourism might be the number of eco-labels on the international market which lead to confusion or lack of knowledge among tourists. Therefore, marketers have the challenging job of increasing the knowledge and trust in sustainable tourism.

Sustainability is also becoming a significant concept for tourism destinations (Mathew, 2009) and destination marketing is one of the key success drivers for sustainability (Buhalis, 2000). Although traditionally the focus point of destination marketing used to be winning a larger market share by using marketing communications like advertising or sales promotions to create a favourable image, recent studies encourage its integration with sustainable destination management (Cox & Wray, 2011). Marketing can act as a tool enabling destinations to support sustainable tourism and undertake a dual responsibility of providing a high quality visitor experience while conserving the resources of the place (March, 2004).

Destinations generally face major challenges in communicating the sustainability of their products to consumers because many sustainable product

characteristics cannot be experienced directly by tourists (Wehrli, et al., 2013) .

Since sustainable tourism products are different from standard alternatives, they need to be marketed differently to the common 4-P producer oriented model (Jamrozy, 2007). Although communication of sustainability attributes to tourists is important, there is little literature related to tourists' attitudes towards sustainability attributes in tourism destinations.

While sustainability research in the sparse literature on visitors is restricted to tourist choices and levels of satisfaction, which are considered to be essential to improve profitability of tourism businesses, research on residents is usually broader, focused on the sociocultural, economic and environmental impacts of tourism (Joseph, Lena, Anderson, & Tommy, 2012). However, there is a need for integrating tourist attitudes into management systems that make decisions for sustainable tourism (Weaver & Lawton, 2004). Weaver and Lawton (2004), and Raymond and Brown (2007) have examined both resident and tourist attitudes toward tourism growth and recognized that tourists have positive attitude towards tourism development, but prefer slow growth based on sustainability attributes. Another study by Poudel, Nyaupane & Budruk (2014) examining the perspectives of both residents and tourists recognized that the perception of the tourists on the positive and negative impacts of tourism across the protected areas is different from that of the residents.

Nicholas and Tapa (2010) analysed environmental, economic, and social attitudes of the tourists based on a sustainable tourism development framework. The results of the study indicated that there is a positive correlation between the attitudes and the level of support for sustainable development. On the other hand, results of the research conducted by Cottrell, Van der Duim, Ankersmid and Kelder (2004)

show us that although sustainability is an important issue for tourists, they are not always knowledgeable about the concept, a fact which inhibits them from evaluating sustainability attributes properly. Ngamsomsuke, Hwang, and Huang (2011) examined tourist perceptions of sustainability on three historic sites of Thailand and revealed the most important attributes for the tourists are the architectural character and the urban design. Despite the fact that there are some researches done on tourist perceptions of sustainability, as mentioned above, the question of the extent to which tourists consider the sustainability attributes of a destination when making visitation choices is still largely unanswered and requires further research. In this regard, this study attempts to determine the importance given to sustainability by the tourists and their willingness to pay for sustainability attributes of a cultural tourism destination.

## CHAPTER 3

### RESEARCH QUESTIONS AND CONCEPTUAL MODEL

#### 3.1 Research questions

- Which attributes of sustainability are most frequently mentioned by tourists in their reviews of a tourism destination?
- Which attributes of sustainable destinations are most important according to Turkish tourists?
- Are the Turkish tourists willing to pay extra money for sustainable destinations? If yes, for which attributes?
- Is it possible to distinguish between tourists in terms of their willingness to pay for sustainability?

#### 3.2 Conceptual model

Based on the literature (Choi & Sirakaya, 2006; Cottrell, Van der Duim, Ankersmid, Kelder, & L., 2004; Ngamsomsuke, Hwang, & Huang, 2011; Nicholas & Thapa, 2010), an initial list of sustainability attributes for a cultural tourism destination is created. Since the current study attempts to theorize which aspects of the sustainability of tourism destinations may be considered by tourists, more understanding is required concerning the research area. Therefore, interviews are conducted with three cultural tourism travel experts chosen through judgmental sampling due to their extensive knowledge on cultural tourism, sustainability and tourist attitudes. Semi-structured, face-to-face interviews lasting about 30-45 minutes are undertaken by using the guidelines in Appendix A. By taking their advice and

evaluations into consideration, the initial list of sustainability attributes for cultural tourism destination derived from the literature is refined with the resulting attributes of sustainability shown in Table 3 below.

Table 3. Sustainability Attributes from a Demand-Based Perspective

<b>Economic Attributes</b>	
Capital leakage and linkage	<ul style="list-style-type: none"> <li>• Availability of local products for purchase by tourists for the benefit of the local people</li> </ul>
	<ul style="list-style-type: none"> <li>• Services at the destination are provided by the local people as opposed to international chain/non-local providers</li> </ul>
Capital formation in the community/investment	<ul style="list-style-type: none"> <li>• The destination charges adequate pricing that allows it to sustain itself in the future</li> </ul>
	<ul style="list-style-type: none"> <li>• Money paid by the tourists to experience/view/interact with cultural attractions is used for the conservation of the destination</li> </ul>
Local career opportunities	<ul style="list-style-type: none"> <li>• Local employment/Local people employed not only in lower-paid jobs, but also in higher-paid jobs in the tourist labour market</li> </ul>
	<ul style="list-style-type: none"> <li>• Women and minorities getting equal opportunities</li> </ul>
Ease of access to cultural destinations	<ul style="list-style-type: none"> <li>• Convenient access to cultural destinations</li> </ul>
Nature of demand	<ul style="list-style-type: none"> <li>• Seasonality of cultural tourism</li> </ul>
Infrastructure/superstructure	<ul style="list-style-type: none"> <li>• Availability and quality of facilities and services at cultural destinations</li> </ul>
<b>Socio-cultural Attributes</b>	
Respect for culture and local values	<ul style="list-style-type: none"> <li>• Destination is developed with respect to the local community's culture and values</li> </ul>
	<ul style="list-style-type: none"> <li>• Local authorities act with respect for the local community's culture and values</li> </ul>
Criminality and other negative behaviours at cultural destinations	<ul style="list-style-type: none"> <li>• Crime, vandalism, drug usage, alcoholism rates are not increased due to tourism</li> </ul>
Access of local community to tourism resources at the destination	<ul style="list-style-type: none"> <li>• Local people are able to benefit from facilities which tourists come to enjoy</li> </ul>
	<ul style="list-style-type: none"> <li>• Local people are able to visit the attractions at the destination together with the tourists</li> </ul>

Cultural exchange	<ul style="list-style-type: none"> <li>• The destination offers cultural exchange between tourists and hosts</li> </ul>
Quality of life	<ul style="list-style-type: none"> <li>• The local community's quality of life at the destination is increased because of tourism</li> </ul>
Knowledge	<ul style="list-style-type: none"> <li>• Interpretation/Knowledge about the history and culture of the destination received through the visit</li> </ul>
<b>Environmental Attributes</b>	
Preservation of natural resources	<ul style="list-style-type: none"> <li>• Protection of green areas, fauna and flora</li> </ul>
	<ul style="list-style-type: none"> <li>• Urbanization and level of building at the cost of green areas is controlled for</li> </ul>
Preservation of historical and cultural resources	<ul style="list-style-type: none"> <li>• Protection of historical/cultural resources</li> </ul>
	<ul style="list-style-type: none"> <li>• Cultural/historical site preservation conditions</li> </ul>
	<ul style="list-style-type: none"> <li>• Overall architectural character of the location surrounding the cultural destination is protected</li> </ul>
Pollution of the environment	<ul style="list-style-type: none"> <li>• Level of pollution of the environment, water and air in cultural tourism destinations</li> </ul>
Reuse/recycling	<ul style="list-style-type: none"> <li>• Renewable resources being used and recycling being applied</li> </ul>
Capacity/limit to tourism growth	<ul style="list-style-type: none"> <li>• Tourist overcrowding and congestion at cultural destinations is addressed</li> </ul>
	<ul style="list-style-type: none"> <li>• The site puts emphasis on limiting the growth of tourism</li> </ul>

## CHAPTER 4

### METHODOLOGY

The study aims to investigate the importance given by Turkish tourists' to sustainability attributes in cultural tourism destinations and to determine the tourists' willingness to pay for these attributes. There is a lot of literature on sustainable tourism from a supply side perspective but the demand viewpoint is lacking. Therefore, this study aims to obtain knowledge on tourists' perceptions on the topic.

The study is accomplished in two parts. First, a qualitative study using netnography is conducted to understand which sustainability attributes in tourism destinations are more frequently mentioned by visitors to a specific cultural destination, namely Cusco, Peru. This qualitative study allows for the creation of the questionnaire used in the quantitative study, which investigates the importance given by Turkish tourists to sustainability attributes in a cultural tourism destination. Thus, the study took on both quantitative and qualitative methods which complemented each other (Bryman, 2004). The literature supports the use of a mixed method approach allowing for triangulation of the data and a deeper understanding of the research topic (Bryman & Bell, Business research strategy, 2007).

#### 4.1 Qualitative study

As more understanding is needed because of limited number of researches done previously in this area, a qualitative research method is chosen to be used in the first part of the research. The qualitative study aimed at providing an additional perspective on the importance given to sustainability by tourists. This exploratory

part of the study examined the extent to which sustainability attributes of destinations are mentioned in the online reviews that individuals make concerning a specific destination. This approach addresses the issue of social desirability and considers only those attributes of a sustainable destination that are spontaneously mentioned by online reviewers, without being prompted by the researcher. However, this method also has the limitation that some of the attributes considered important by the tourists may not be mentioned in the reviews because they are not considered relevant to the attractiveness of the destination or of interest to other individuals.

Internet usage is increasingly embedded in the daily lives of people and this medium is an important information source for tourists. Travellers are using the internet by getting involved in chat rooms, blogs and forums to share considerable quantities of information, exchange ideas, search for assistance and reach different tourists who have already experienced a particular destination. Therefore, World Wide Web is thought to be an appropriate medium to initially explore the topic.

Netnography is a popular online marketing research technique which started being used in tourism research recently (Wu & Pearce, 2014). It is a new and different adaptation of traditional ethnography with the Internet as a virtual investigation site. This study follows Kozinets' (2002) guidelines including five steps proposed by him: *entrée*, data collection, data analysis, data interpretation, and member checks. The first stage, *entrée*, involves identifying the most relevant online communities and gathering information regarding the identified groups. As such, travellers' comments from Tripadvisor on Cusco (Peru) as a specific destination are accessed. The Tripadvisor website is chosen following the key criteria suggested by Kozinets to select the site which consists of: (1) a more targeted segment, more relevant to the research question; (2) higher number of posts; (3) more

comprehensive or data; and (4) more member to member interactions needed to answer the research question.

Cusco is a key tourism destination in Peru where unplanned growth of tourism caused many detrimental effects. Therefore, in order to alleviate the negative effects, this destination has adopted the Global Sustainable Tourism Council's criteria for sustainable tourism destinations. Cusco is chosen as a case study to ensure that the travellers' perspective on a destination that has been labelled as an adopter of sustainability criteria, and which is trying to market itself as sustainable, is assessed.

Peru is an attractive destination for tourists with abundant natural resources, historical sites and ethnic communities. Peruvian tourism has undergone an increased growth since 1991 with the privatization of hotel chains and the national airline as a part of the transition from state-led organizational methods to market-based economic policies (Desforges, 2000). The accelerated growth in tourism continued in the 2000's and this industry became the fastest-growing industry in the Peruvian economy (Mitchell & Eagles, 2001). On the other hand, 80% of tourists visit Cusco; therefore, there is not an even distribution of tourism in the country.. Cusco region of Peru, is widely considered as a key tourism destination and as the archaeological capital of the Americas, offering a range of archaeological monuments (GSTC, 2014). The city of Cusco is on the United Nations Educational, Scientific & Cultural Organization (UNESCO) World Heritage List (UNESCO, 2016) and one of the main attraction points. It sits 3,399 meters above sea level and is located in the heart of the Andes. The city was the capital of the Inca Empire and the most important place of pilgrimage in South America in modern times. However, with a constant increase in

visitors, archaeological remains are destructed and the aesthetic enjoyment of many tourists is thus affected (Ladkin & Martinez Bertramini, 2002).

Sustainable tourism resource management became a must for the region (Larson & Poudyal, 2012). Therefore, in order to mollify some of the challenges mentioned above, Cusco completed the GSTC Early Adopters program.

Accordingly, an assessment of the region was conducted. Meetings with key stakeholders who participate in tourism planning, protection of the environment, conservation of the heritage resources or in the supplying of utilities were organized. A small working group was created consisting of the Ministry of Foreign Commerce and Tourism of Peru, Swisscontact Peru, which is a business oriented independent foundation for international development corporation, and the Destination Management Organization Cusco. Further, various focus group meetings were held with different tourism stakeholders. As a result, a comprehensive report was provided, which included the sustainability areas that the destination could improve upon. Stakeholders in the destination participated in different stages of the process by providing their feedback, like the validation of the report and the improvement of the GSTC Criteria for Destinations. Additionally, attempts to use the marketing benefits of GSTC accreditation, such as media pieces distributed through the GSTC network, can be observed for this destination.

Among the destinations that are among the early adopters of the GSTC criteria (Cusco Region of Peru; Botswana's Okavango Delta Ramsar Site; Fjord region, Norway; Huangshan, China; Jackson Hole, Grand Teton & Yellowstone in the USA; Lake Llanquihue in Chile; Lanzarote, Canary Islands in Spain; Mara Naboisho Conservancy, Kenya; Samoa; Sierra Gorda; South Sardinia, Italy; Sierra Gorda, Mexico; St. Kitts and Nevis; Riviera Maya, Mexico; St. Croix, Virgin

Islands), Cusco Region of Peru is chosen as a suitable case; a place which is focused on tourism based on its cultural and historical resources and is trying to promote itself as a sustainable tourism destination. The other GTSC adopters are mostly natural destinations, except for the Botswana's Okavango Delta Ramsar Site. As there is no destination that can be defined as a sustainable destination, and not enough traveller reviews are available for Botswana's Okavango Delta Ramsar Site, Cusco is used as a case study for determining the sustainability attributes in a cultural tourism destinations that tourists pay most attention to.

The second phase of Kozinets' method includes data collection. In netnography this step is about observing the selected site pages closely and downloading data that includes conversations or pictures. Accordingly, it is possible to understand how people interact and relate with each other and what type of information is posted. In this research, TripAdvisor's posts on the "Centro Histórico de Cusco" of the past year concerning Cusco as a tourism destination are downloaded. In order to avoid seasonality bias and to keep the number of reviews at a manageable level, comments made in July 2014, October 2014, January 2015 and April 2015 are taken into account. Only those comments made in English are used, to avoid the need for translation. On the other hand, this limits the findings of the research to English-speaking tourist.

Finally, member checks are criticized by some researchers such as Langer and Beckman (2005). TripAdvisor website excludes even the contact information of some of the reviewers and allows only a limited interaction with them is possible. Therefore this step is thought to be difficult for this particular research and eliminated.

Content analysis is done to analyse the collected data, through the QSR International's Nvivo 10 software program. Data is coded into discrete parts. Similarities and differences are examined and the codes are categorized. "Content analysis is the process of identifying, coding, and categorizing the primary patterns in the data" (Patton, 1990, p. 381). The conceptual model on the sustainability attributes for a cultural tourism destination discussed above in section 3.2 guided the coding and identification of categories. The reviews are classified under three main categories: economic, socio-cultural and environmental sustainability. Direct quotes from the comments are also used in order to support some of the findings.

#### 4.2 Quantitative study

The second step aims to find which sustainability attributes in tourism destinations are found to be more important by tourists. Another objective is to investigate if Turkish tourists' are willing to pay extra money for these sustainability attributes. The qualitative study provided information concerning those aspects of sustainability that are mentioned by tourists in their reviews of Cusco, and therefore may be considered most significant to them when evaluating a destination. Thus this exploratory study, together with the initial conceptual model discussed in Chapter 3, helped shape the questionnaire devised to find out the importance given by Turkish tourists to sustainability attributes in a cultural tourism destination.

The questionnaire was inserted in professional on-line research software, SurveyMonkey, for the ease of distribution and further analysis. Using this software, an Internet link leading to the questionnaire was created and then sent to the target sample together with a brief explanation. The data collection lasted six weeks from 30th of November 2015 until 11th of January 2016.

The target sample included Turkish tourists that generally travel to cultural tourism destinations in Turkey or abroad. A combination of snowball and judgmental sampling was used to access respondents that fit this characteristic. Thus, the links and information about the survey were distributed via social media platforms, Facebook.com tourism groups and other closed travel groups like Varuna Gezgin, Gezipin, Gezimanya, Gezi Bloglari, etc . Additionally, virtual friends were encouraged to fill in the questionnaire themselves and then to forward the link and information to their friends, who travel to cultural tourism destinations. As a result, the size of the sample is 353 respondents.

Overall, the questionnaire included 44 itemized-rating and Likert type scale questions, one open-ended question and several demographic questions. The survey was in Turkish as Turkish tourists were targeted. Most of the questions in the questionnaire were mandatory to prevent missing data. The questionnaire was analysed using SPSS.

The first part of the questionnaire included questions to measure the importance given by the respondents to the various sustainability attributes when visiting a cultural destination, measured on a 5-point scale: 9 items to assess economic sustainability attributes, 8 items to investigate socio-cultural attributes and 9 items to measure environmental attributes. The second section of the questionnaire included 18 Likert-scale questions to examine the tourists' willingness to pay more money for various sustainability attributes. In the third part, respondents were asked to name a cultural tourism destination they have visited in the last 2 years, and which they thought should be considered as an example of best practice. Lastly, demographic questions were asked to obtain the profile of the sample. A copy of the questionnaire used in its original Turkish and in its English translation can be seen in

Appendices B and C. Table 4 summarizes the methods used in order to answer each of the research questions.

Table 4. Methods Used to Answer the Research Questions

Research Questions	Study / Data Analysis Methods
1) Which attributes of sustainability are most frequently mentioned by tourists in their reviews of a tourism destination?	Qualitative study / Content analysis
2) Which attributes of sustainable destinations are most important according to Turkish tourists?	Quantitative study / Factor analysis using the principal component method; Descriptive statistics based on mean analyses
3) Are the Turkish tourists willing to pay extra money for sustainable destinations? If yes, for which attributes?	Quantitative study / Descriptive statistics based on mean analyses; Paired samples t-test (comparison between importance given to sustainability and their willingness to pay)
4) Is it possible to distinguish between tourists in terms of their willingness to pay for sustainability?	Quantitative study: Cluster analysis combining hierarchical and non-hierarchical procedure

## CHAPTER 5

### FINDINGS AND DISCUSSION

#### 5.1 Qualitative study findings and discussion

TripAdvisor's posts on the Historical Centre of Cusco, a total of 127 user generated reviews in English, were analysed. Only 110 of them included any reference to sustainability attributes that may be related in some way to the sustainability attributes included in our conceptual model. It should be noted that these are not evenly distributed among the different dimensions. While there is an equal amount of references (n=41) concerning economic and socio-cultural attributes, the environmental dimension is only discussed in 28 comments.

The results of the analysis in the distribution of sustainability dimensions differ from those existing in the literature. Environmental sustainability is the main topic addressed in the literature (Jim, 2000) (Shaalán, 2005) (Rivera, 2002), whereas it is the least addressed dimension in this research. However, it should be noted that the current study takes a broader range of sustainability attributes into account as a part of the overall perception of the destination that are not traditionally related to sustainability. Also, environmental issues are considered more prominently in nature-based destinations. However, a cultural heritage destination is analysed in this study.

The demographic characteristics of the reviewers are not shown in the TripAdvisor web site for all subjects. Among the ones that reveal this demographic information, 51% are male. In terms of country of origin, the largest group of

reviewers comes from North America, including 44% from the US and 9% from Canada.

### 5.1.1 Economic attributes

In analysing economic attributes, 12 references to capital leakage and linkage, 10 to infrastructure/superstructure, 8 to ease of access to the destination, 7 to the nature of demand, and 4 to capital information in the community are found. On the other hand, local career opportunities did not take place in any of the reviews which is in line with the view of the interviewees. Travel experts interviewed during the preliminary data gathering phase indicated that although tourists would be happy to see local employment, they would not check whether it is there or not. Similarly, none of the comments included women and minorities receiving equal employment opportunities. Figure 2 below provides information on the reference percentages of economic attributes.

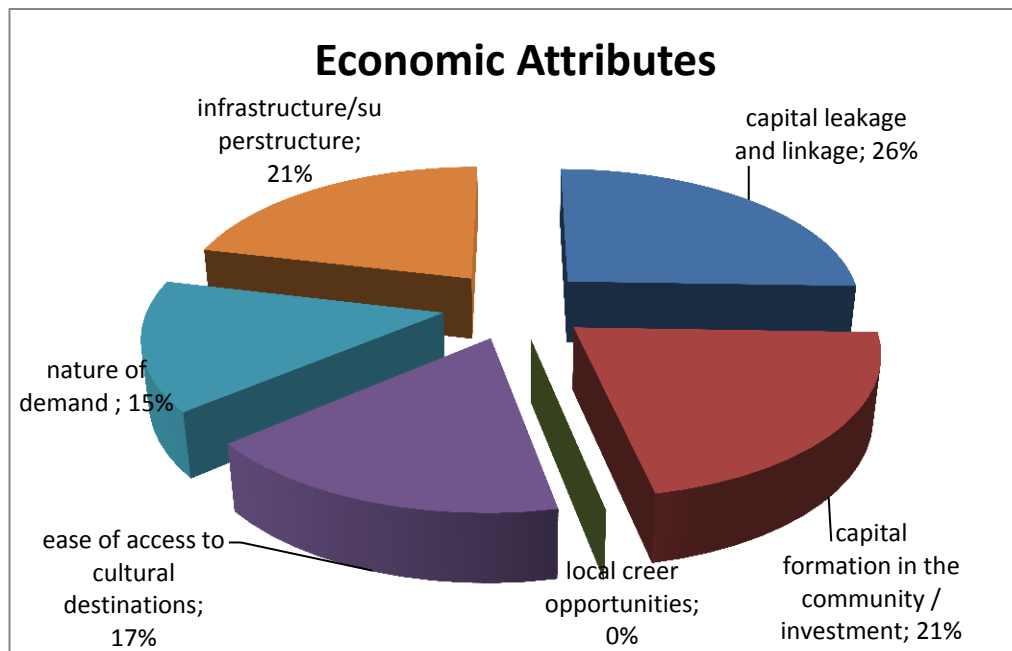


Figure 2 Economic attributes' reference percentages

Regarding capital leakage and linkage, tourists are interested in buying local products. They prefer purchasing *well-crafted souvenirs of local artisans* like “not a spoon or a shot glass with Cusco stamped on it” as one of the reviewers from the USA mentioned. Fakery and deception surrounding the indigenous culture makes the tourists feel disheartened. For example, one of the reviewers living in Mexico remarked that there is “a theatrical attempt to make you think that you are buying from an artisan, when you’re not” in the artisan market. The majority of the ‘handmade’ items for sale are actually machine woven (or knitted). The uniqueness of souvenirs are also questioned in some of the reviews like “Are we selling India cheap?” Although tourists are interested in buying local products, they do not questioned if those products are for the benefit of the local people.

In terms of facilities and services, tourists generally prefer local, small eateries instead of non-local fast-food restaurants like KFC and Starbucks which is termed as a “shame” in one of the comments. There was only one remark about *taking a drink in odd Irish and English pubs*. Therefore, local products and services can be used as an attraction point for tourists as they seem to be a matter of concern in accord with the sustainability perspective.

Regarding capital formation in the community / investment, pricing is mentioned in the comments but tourists are only concerned about whether the price is expensive or not. For example, in some of the reviews it is mentioned that visiting some of the churches is too expensive. In the other comments, the money paid by tourists to experience, view and interact with the cultural attractions was mentioned. They are in line with what one of the travel experts stated in the interviews to

experts: tourists want to get the best service at the lowest price without thinking about the sustainability of the destination. However, tourists are not concerned about whether the destination charges adequate pricing that allows it to sustain itself in the future or whether the money paid by them to experience/view/interact with cultural attractions is used for the conservation of the destination.

Ease of access is another attribute that is important for the tourists. The Cusco Historic Centre is close to other destinations like Machu Picchu and described as “small” and “convenient to walk around”. While the destination having convenient access to nearby places seems to be important for the tourists, it may increase the number of tourists and lead to overcrowding, thus endangering sustainability (Gezici, 2006). In the preliminary interviews, one of the travel experts noted that if a destination is not easily accessible, it will attract fewer tourists. However, drifter and explorer type of tourists are more satisfied with less accessible destinations (Cohen, 1984).

The nature of demand is mentioned in the comments regarding the best time to travel to the destination which is June due to the festivals. “Rain season” and “crowding” are taken into consideration regarding seasonality, which affects the tourist’s comfort during the trip. One of the reviewers mentioned that everything was closed for an election. Therefore, seasonal factors affecting the visitors’ satisfaction are considered.

### 5.1.2 Socio-cultural attributes

Experience of socio-cultural attributes of destinations is sought by the tourists (Ritchie & Crouch, 2003). Out of a total of 127 reviews examined in this study,

comments referring to socio-cultural attributes include 15 references regarding respect to the culture and local values, followed by 13 comments on criminality and other negative behaviours at cultural destinations, 8 mentions concerning knowledge and 5 allusions to cultural exchange. However, there were no comments regarding the access of local community to tourism resources at the destination and the local community's quality of life. Figure 3 below provides information on the reference percentages of socio-cultural attributes.

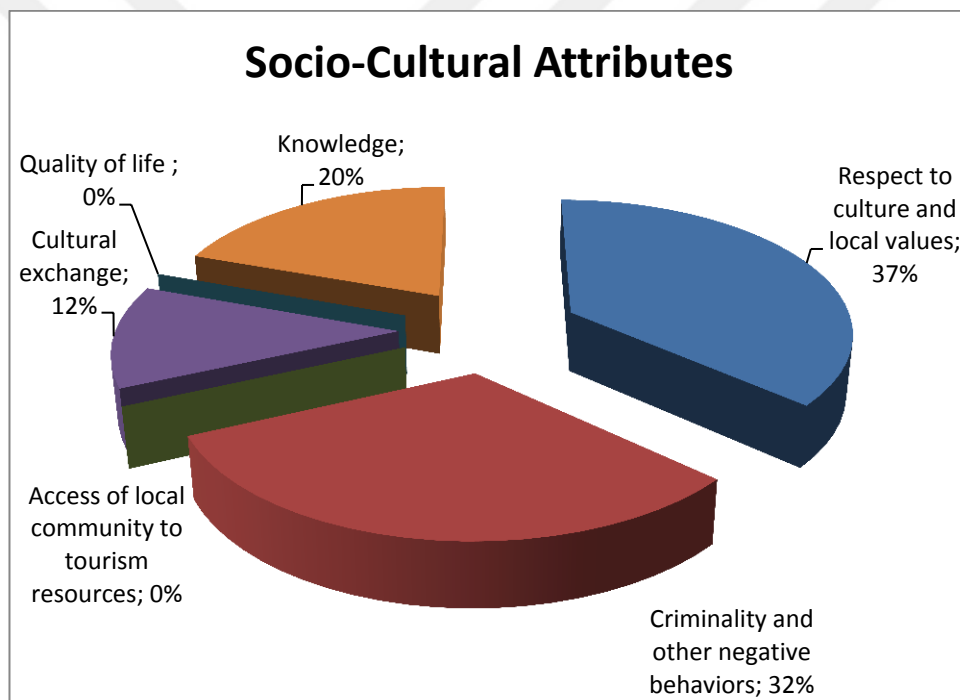


Figure 3 Socio-cultural attributes' reference percentages

Local community's culture is described as "marvellous" and an "amazing experience to see the way the locals live". Authentic experiences like folk dancing are described as "picturesque and engaging perspective of the marvellous culture". While tourists are interested in the cultural attractions, some aspects of the cultural experience like the "onslaught of street hawkers" bothers them.

Regarding the cultural exchange between tourists and hosts, reviewers state that it is an “amazing experience to see the way the locals live” and “it was amazing to see all their traditions and people dancing on the streets with colourful clothes”. The residents are described as “friendly”; however, the local community’s access to tourism resources, their quality of life at the destination, and the question of whether they are affected by tourism are not mentioned in any of comments.

Criminality is one of the most mentioned socio-cultural attributes in the reviews. This result is in line with the literature that states that tourists are more sensitive to the direct impacts of the environmental attributes like human waste and vandalism (Gezici, 2006). The destination is described as “a secure city to walk around”, “well policed” and “very safe for solo women travellers”. While being concerned about their personal safety and pick-pocketing problems, tourists did not comment on anything concerning tourism’s effect on the community in terms of criminality and other negative behaviours.

The destination’s interpretative information and the knowledge gained by the tourists’ visit regarding the history and culture is another of the most mentioned socio-cultural attributes. The interpretive information available to tourists at cultural sites is considered part of their cultural education and all of the eight references regarding knowledge concern the importance of tour guides. For example, “the guide helped us understand the history”, “impressed by the wealth of knowledge displayed by our guide” and “guides were superb in narrating these tours” are some of the comments made about the tour guides. Tourists are more concerned about those aspects that affect their experience instead of whether the interpretive information is culturally appropriate or not.

### 5.1.3 Environmental attributes

Tourism relies heavily on the environment; however, environmental attributes is the least mentioned of the 3 main dimensions of sustainability in the reviews. As Cusco is a cultural tourism destination, comments are made on the preservation of historical and cultural resources rather than natural resources. While 19 comments relate to the preservation of historical and cultural resources, there are only 5 references on the pollution of the environment, 2 on the preservation of natural resources and 2 on the capacity/limit to tourism growth. No comments are made on reuse and recycling.

Figure 4 below provides information on the reference percentages of environmental attributes.

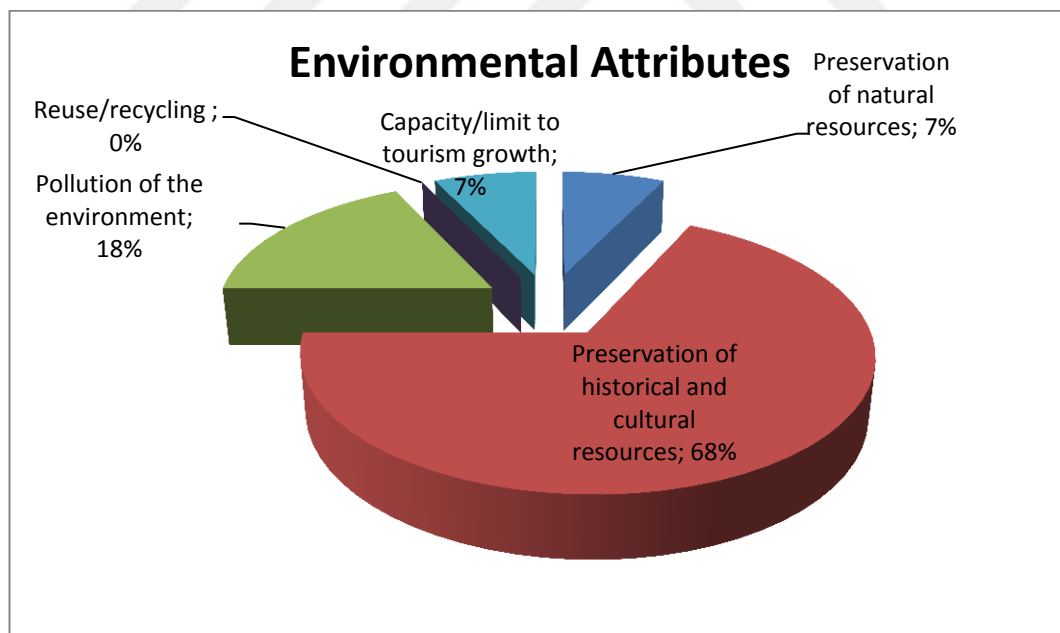


Figure 4 Environmental attributes' reference percentages

There is an equal distribution between protection of historical/cultural resources, cultural/historical site preservation condition and protection of the overall architectural character of the cultural destination's surroundings among the comments made on the preservation of historical and cultural resources. In one of reviews, it is mentioned that the destination is "relatively unchanged for 35,000 years", in another comment it is pointed out that there are "no neon signs, billboards". The explanation of the fact is made in another comment: "an accident of natural barriers and malaria that have kept this continent pristine". "Incredible buildings perfectly maintained" and the presence of "ingenuity and innovative ideas of the Incas" in the destination are attracting the tourists' attention.

Although the preservation of historical and cultural resources is found to be important for the tourists, there are only two comments on the preservation of natural resources. The reason might be due to the fact that the destination is mainly a cultural destination and not a natural one.

Regarding pollution, one of the tourists mentioned that "the constant never ended car horns" annoyed him. In another review, Cusco is described as "very noisy with a lot of traffic". As pollution, overcrowd and congestion can affect the experience of tourists, they are mentioned as negative features of the destination. On the other hand, no information exists on whether the site puts limit to the growth of tourism or not. Also, renewable resources being used and recycling being applied are not among the issues that concern the tourists. One of the travel experts in the preliminary interviews mentioned that tourists are only interested in those issues that might lessen their quality of experience.

## 5.2 Quantitative study findings and discussion

In line with the purpose of the study, a scale to measure the importance given to the various attributes of sustainability of a cultural destination by the tourists was created and administered to a sample of 355 Turkish cultural tourists. The respondents were asked about the importance that they give to each of these attributes, and subsequently about their willingness to pay more for them in a cultural tourism destination.

### 5.2.1 Importance given by tourists to the sustainability of a destination scale

A factor analysis using the principal component method was utilized to describe and better understand the dimensions of the scale to measure the importance given to sustainability by the tourists, and to see if there is an overlap between the dimensions mentioned in the literature and those that appear in the empirical analysis. In addition, data reduction was also another objective of the analysis, since the reduction of the scale to a lower number of factors would make subsequent analyses easier. According to Hair, Black, Babin, Anderson, & Tatham (2006), principal component factor analysis is most appropriate when variable reduction is the essential goal. Likewise, Pallant (2005) takes note of that factor extraction distinguishes the number of underlying factors from a large variables set.

In order to determine the adequate sample size to be factor analysed, Tabachnick and Fidell (1996) suggest having at least 300 cases for factor analysis. More specifically, Hair et al. (2006) recommend at least 10 observations per variable. The data was screened for outliers, with none being identified. Therefore, the minimum amount of data for factor analysis was satisfied with a sample size of 355, exceeding the 10:1 ratio for 26 variables.

The suitability of 26 variables and the strength of the inter-correlations among them were checked for factor analysis based on several well-recognized statistic indicators. The results of Barlett's Test of Sphericity show us that the analysis is highly significant ( $p < 0.001$ ). The Kaiser-Meyer-Olkin measure of sampling adequacy is 0.920, which exceeds the recommended value of 0.5. However, when the communalities analysis was checked, it was found that two variables - "Tourism and tourists not causing negative behaviours at the destination" and "Money spent at the destination to be used for the conservation of cultural attractions" had values below 0.5. As those items were also questioned by experts during the preliminary interviews leading to the qualitative analysis, they were excluded.

In this study, factors with eigenvalues greater than 1.0 to meet 60% or higher of the total variance was used as a criteria for extracting the initial number of factors. Six factors were initially extracted with an eigenvalue greater than 1.0, resulting in 70.1% of the total variance explained. A Varimax rotation method was used to produce a simpler factor structure and meaningful interpretation by maximizing the variances of loadings for the six factors. According to the results, "Pricing being at an adequate level for the destination that allows to sustain itself in the future" cross loaded on two factors (.492 and .461 respectively). Hair et al. (2006) suggest that if variables cross-load on more than one factor, they are usually deleted unless theoretically justified. These authors also suggest that Varimax rotation should be applied again with the reduced set of variables. Since this variable also had a communality value only slightly above .5 (.519), it was also excluded.

Table 5. Factor Analysis: Importance Given by Tourists to Sustainability Scale

Items	Factor Loading	Mean <sup>b</sup>	Eigen-value	Total Rotated SS <sup>c</sup>	Variance Explained (%)	Cronbach's alpha
<b>Factor 1: Cultural and environmental protection</b>		4.728	9.448	4.678	41.078	.919
Preservation of historical and cultural resources	.856	4.82				
Protection of green areas, fauna and flora	.800	4.77				
Protection of overall architectural character of the location surrounding cultural destination	.786	4.75				
Urbanization and level of building at the cost of green areas	.767	4.74				
Level of pollution of the environment, water and air in cultural tourism destinations	.670	4.64				
Interpretation / Knowledge about the history and culture of the destination received through the visit	.650	4.64				
<b>Factor 2: Local community related issues</b>		4.217	2.033	3.981	8.841	.889
Local people are able to visit the attractions at the destination together with the tourists	.833	4.08				
Local people are able to benefit from facilities which tourists come to enjoy	.826	4.1				
The local community's quality of life at the destination is increased because of tourism	.646	4.2				
Local authorities act with respect to the local community's culture and values	.622	4.5				
The destination offers cultural exchange between tourists and hosts	.612	4.16				
Local people employed not only in lower-paid jobs, but also in higher-paid jobs in the tourist labour market	.583	3.89				
Destination is developed with respect to the local community's culture and values	.524	4.59				
<b>Factor 3: Services &amp; facilities</b>		3.991	1.626	2.68	7.068	.796
Availability of facilities at cultural destinations	.847	4.11				
Quality of services at cultural destinations	.814	4.27				
Convenient access to cultural destinations	.726	4.08				
Destination being a place visited not in certain periods but continuously	.657	3.51				
<b>Factor 4: Reuse/recycling</b>		4.271	1.208	1.877	5.251	.859
Renewable resources being	.783	4.3				
Recycling being applied	.762	4.24				
<b>Factor 5: Local products &amp; providers</b>		4.006	1.064	1.655	4.625	.647
Availability of local and traditional products for purchase by tourists	.833	3.96				
Services at the destination are provided by the local people as opposed to international chain/non local providers	.789	4.05				
<b>Factor 6: Limits to tourism growth</b>		3.894	1.028	1.536	4.468	.673
The destination not being overcrowded by the tourists	.887	3.57				
The site puts emphasis on limiting the growth of tourism	.710	4.22				
Overall scale					71.331	0.929

<sup>a</sup>Varimax rotation was used; Kaiser-Meyer-Olkin = 0.912; Barlett's Test of Sphericity— Significance = 0.000. Factor loadings smaller than 0.5 are not included.

<sup>b</sup>Items measured on a 5-point scale (1-lowest importance level; 5-highest importance level)

<sup>c</sup>Sum of squares

The final analysis carried out to explore the dimensionality of the scale through exploratory factor analysis includes 23 variables. The results shown in Table 5 fit well to the literature, identifying 6 factors: Cultural and environmental protection; Local community related issues; Services & facilities; Reuse/recycling; Local products & providers; and Limits to tourism growth. However, further studies can be done as only limited testing of this factor structure has been conducted.

Factor 1 “Cultural and environmental protection” contributes 41.08% of the variance, and includes factor loadings greater than .650 on six variables:

“Preservation of historical and cultural resources” (.856); “Protection of green areas, fauna and flora” (.800); “Protection of overall architectural character of the location surrounding the cultural destination” (.786); “High, reinforced concrete buildings not being built with unplanned urbanization at the cost of green areas” (.767); “Level of pollution of the environment, water and air” (.670); “The information received through the visit about the destination’s history and culture being properly transferred” (.650). The internal consistency between these variables was checked using Cronbach’s alpha and the .919 result, indicates satisfaction with the minimum criterion (above .600) recommended by Robinson, Shaver, & Wrightsman (1991).

Factor 2 “Local community related issues” encompasses significant factor loadings greater than .524 including “Local people being able to visit the attractions at the destination together with the tourists” (.833); “Local people being able to benefit from facilities which tourists come to enjoy” (.826); “The local community’s quality of life at the destination being increased because of tourism” (.646); “Local authorities acting with respect for culture and values of the local community” (.622); “The destination offering cultural exchange between tourists and hosts” (.612); “Local people being employed not only in lower-paid jobs, but also in higher-paid

jobs in the tourist labour market” (.583); and “Tourism development at the destination being done with respect for the culture and values of the local community” (.524). This factor explains 8.84% of the variance with a reliability (Cronbach’s alpha) value of .889.

Factor 3 “Services & facilities” explains 7.07% of variance with significant factor loadings greater than .657. Four variables were loaded to this factor including “Availability of tourism facilities at the destination” (.847); “Quality of services at the destination” (.814); “Convenient access to the destination” (.726); and the “The destination being a place visited not in certain periods but continuously” (.657). The reliability (Cronbach’s alpha) for the factor is .796.

Factor 4, 5 and 6 include two variables each. Factor 4, “Reuse/recycling”, accounts for 5.25% of the variance and has factor loadings greater than .762, including “Renewable resources being used” (.783), and “Recycling being done” (.762). The reliability (Cronbach’s alpha) for the factor is .796. Factor 5 “Local products & providers” includes variables “Availability of local and traditional products for purchase” (.833), and “Services being provided by the local people as opposed to international chains and non-local providers” (.789). This factor explains 4.62% of the variance and shows a reliability of .647 (Cronbach’s alpha). Factor 6 “Limits to tourism growth” explains 4.47% of the variance and has a reliability of .673. “Tourist overcrowding and congestion at the destination” (.887), and “The site putting emphasis on limiting the growth of tourism” (.710) are grouped under this factor with factor loadings greater than .710.

Descriptive statistics based on mean analyses were conducted to determine which sustainability attributes are considered most important when visiting a cultural

tourism destination. This information is also included in Table 5 above for simplification purposes.

Among the six factors listed in Table 5, factor 1: cultural and environmental protection is found to be the most important by the tourists (mean=4.728), followed by factor 4: reuse/recycling (4.271) and factor 2: local community related issues (4.217); whereas factor 6: limits to tourism growth is the least important factor (3.894).

When the items are compared, preservation of historical and cultural resources has the highest mean (4.82) for the importance given by the tourists to sustainability. In fact, all items under factor 1: cultural and environmental protection have means higher than all other items in the scale. However, tourists do not pay attention to the destination being a place visited not in certain periods but continuously (3.51), the destination not being overcrowded by the tourists (3.57), and the local people being employed not only in lower-paid jobs, but also in higher-paid jobs in the tourist labour market (3.89).

The quantitative study brought further insights into the results of the qualitative part of the study. For example, although “*Rain season*” and “*crowding*” are taken into consideration in the TripAdvisor comments, seasonality is one of the attributes with the lowest mean (mean=3.51) for the importance given by the tourists to sustainability. Likewise, the local community’s access to tourism resources, their quality of life at the destination, and the question of whether they are affected by tourism are not mentioned in any of comments. On the other hand, when tourists are asked in the questionnaire about these issues, the results show us that they do give importance to those attributes, all of which include means above 4. The TripAdvisor

reviewers are found to be sensitive to the safety of the destination; however, they are less sensitive to the issue of whether tourism and tourists cause negative behaviours at the destination or not, which is an attribute that seems to be important to Turkish tourists as seen in the quantitative study (mean=4.29). Tourists do not comment in TripAdvisor on reuse and recycling, which also seems to be an important attribute to Turkish tourists that responded to our questionnaire (means of 4.30 and 4.24 respectively).

### 5.2.2 Tourists' willingness to pay for sustainability

Descriptive statistics based on mean analyses were conducted to determine for which sustainability attributes tourists are willing to pay more when visiting a cultural tourism destination. The results can be seen in Table 6.

Table 6. Descriptive Statistics of Tourists' Willingness to Pay for Sustainability

Attributes	Mean <sup>a</sup> Importance	SD <sup>b</sup> Importance
<b>Economic Attributes</b>	3.45	1.13
Willingness to pay more for a destination where local products are sold rather than mass produced ones	3.55	1.18
Willingness to pay more for a destination where services are being provided by the local people as opposed to international chains and non-local providers	3.52	1.08
Willingness to pay more for a destination where local people are being employed in higher-paid jobs	3.11	1.10
Willingness to pay more for a destination which is more convenient to access	3.38	1.17
Willingness to pay more for a destination offering higher quality of services	3.71	1.14
<b>Socio-Cultural Attributes</b>	3.57	1.08
Willingness to pay more for a destination developed with respect for the culture and values of the local community	3.57	1.06
Willingness to pay more for a destination where tourism does not cause negative behaviours	3.67	1.10
Willingness to pay more for a destination in which local people are able to benefit from facilities which tourists come to enjoy	3.31	1.06
Willingness to pay more for a destination offering cultural exchange between tourists and hosts	3.52	1.14
Willingness to pay more for a destination in which tourism increases the local community's quality of life	3.41	1.07
Willingness to pay more for a destination where cultural attractions are preserved and sustainability is ensured	3.78	1.07
Willingness to pay more for a destination in which the information received through the visit about the destination's history and culture is properly transferred	3.70	1.09
<b>Environmental Attributes</b>	3.69	1.09
Willingness to pay more for a destination where green areas, fauna and flora are protected	3.70	1.06
Willingness to pay more for a destination where its historical and cultural resources are preserved	3.79	1.07
Willingness to pay more for a destination where the overall architectural character of the location is protected	3.90	1.06
Willingness to pay more for a destination with a lower level of pollution of the environment, water and air	3.84	1.08
Willingness to pay more for a destination where renewable resources are being used and recycling is being carried out	3.46	1.11
Willingness to pay more for a destination which is not overcrowded	3.42	1.15

<sup>a</sup> Willingness to pay mean ranges from 1 (lowest willingness to pay) to 5 (highest willingness to pay)

<sup>b</sup> Standard deviation

Environmental attributes of sustainability has the highest mean for the willingness to

pay more (3.69) when compared with economic (3.51) and socio-cultural attributes (3.53). Among the environmental attributes, willingness to pay more for a destination “where the overall architectural character of the location is protected” (3.90) has the highest mean, followed by a destination with “a lower level of pollution of the environment, water and air” (3.84) and a destination where “its historical and cultural resources are preserved” (3.79). Environmental attribute with the lowest mean of willingness to pay more was for a destination “which is not overcrowded” (3.42).

When the willingness to pay more is asked for the economic attributes of sustainability, the highest mean belongs to a destination “where cultural attractions are preserved and sustainability is ensured” (3.78), followed by a destination “offering higher quality of services” (3.71), a destination “where local products are sold rather than mass produced ones” (3.55). Economic attribute with the lowest mean of willingness to pay more was for a destination “where local people are being employed in higher-paid jobs” (3.11).

Among the socio-cultural attributes, willingness to pay more for a destination “in which the information received through the visit about the destination's history and culture is properly transferred” (3.70) has the highest mean, followed by a destination where “tourism does not cause negative behaviours” (3.67), a destination “developed with respect for the culture and values of the local community” (3.57). Socio-cultural attribute with the lowest mean of willingness to pay more is for a destination “in which local people are able to benefit from facilities which tourists come to enjoy” (3.31).

### 5.2.3 Comparison between importance given by the tourists to sustainability and their willingness to pay for it

Paired sample t-test is applied to check if there is a significant difference between the importance that the tourists give to sustainability attributes of a cultural tourism destination and their willingness to pay for those attributes. Since in order to reduce the length of the questionnaire to a manageable size the willingness to pay for sustainability scale had a lower number of items than that measuring the importance given to sustainability, not all items had a corresponding item in both scales.

Therefore, only the items with a corresponding match are listed in Table 7, which highlights the means of both the importance given to sustainability and the willingness to pay for it and their difference scores.

The results indicate that there are no attributes in which the willingness to pay scores outweigh the importance scores. Therefore, tourists claim to be less willing to pay for sustainability attributes even though they give a higher importance to them. There is only one attribute, “tourist overcrowding and congestion at the destination”, with a non-significant difference between the two means ( $t=1.972$ ,  $p \geq .05$ ). There is a significant difference for the rest of the attributes listed in Table 7, with the highest mean difference (1.07) for the protection of green areas, fauna and flora.

Table 7. Paired Samples T-Test: Difference between the Importance Given by the Tourists to Sustainability and Their Willingness to Pay for It

Attributes	Mean <sup>a</sup> of Importance Given to Sustainability	Mean <sup>b</sup> of Willingness to Pay for Sustainability	Mean Difference	t-value	Sig.
<b>Economic Attributes</b>					
Availability of local and traditional products for purchase	3.96	3.55	0.42	6.31	0.00
Services being provided by the local people as opposed to international chains and non-local providers	4.05	3.52	0.53	8.66	0.00
Local people being employed not only in lower-paid jobs, but also in higher-paid jobs in the tourist labour market	3.89	3.11	0.78	12.74	0.00
Convenient access to the destination	4.08	3.38	0.7	10.63	0.00
Quality of services at the destination	4.27	3.71	0.56	8.61	0.00
<b>Socio-Cultural Attributes</b>					
Tourism development at the destination being done with respect for the culture and values of the local community	4.59	3.57	1.02	16.39	0.00
The destination offering cultural exchange between tourists and hosts	4.16	3.52	0.64	10.16	0.00
The local community's quality of life at the destination being increased because of tourism	4.2	3.41	0.79	13.36	0.00
The information received through the visit about the destination's history and culture being properly transferred	4.64	3.7	0.94	15.46	0.00
<b>Environmental Attributes</b>					
Protection of green areas, fauna and flora	4.77	3.7	1.07	18.8	0.00
Preservation of historical and cultural resources	4.82	3.79	1.03	17.17	0.00
Protection of overall architectural character of the location surrounding the cultural destination	4.75	3.9	0.85	14.17	0.00
Level of pollution of the environment, water and air	4.65	3.84	0.82	14.11	0.00
Tourist overcrowding and congestion at the destination	3.57	3.42	0.14	1.97	0.05

<sup>a</sup> Importance means range from 1 (very unimportant) to 5 (very important).

<sup>b</sup> Willingness to pay means range from 1 (lowest willingness to pay) to 5 (highest willingness to pay)

#### 5.2.4 Most liked cultural tourism destination

An open ended question was included asking the respondents about the cultural tourism destination they liked the most among the destinations they visited in the last 2 years. There was no limit to the number of destinations the respondents could write. Out of 413 identified destinations, 73% of them were from Turkey and 27% from abroad. Aegean was the region with the highest number of mentions (25%) among all of the regions in Turkey, followed by Central Anatolia (21%), Black Sea (16%), Marmara (13%), Southeast Anatolia (11%), Mediterranean (10%), and Eastern Anatolia (4%). As shown in Table 8 below, Cappadocia is the most mentioned cultural destination in Turkey. Italy is the most mentioned foreign country (n=23) followed by France (n=7) and Germany (n=6). Nevertheless, destinations from other parts of the world like Rwanda, Valparaiso, and Victoria Falls in Zimbabwe were also mentioned.

Table 8. Top 5 Most Liked Cultural Destinations

Destination	Number of Responses
Cappadocia	42
Mardin	18
Ephesus	15
Safranbolu	13
Şirince	11

#### 5.2.5 Clustering of tourists according to their willingness to pay for sustainability

A cluster analysis was performed to identify different types of tourists according to their willingness to pay more money for the sustainability attributes while visiting a

cultural tourism destination. The objective is to understand whether different groups of tourists can be determined according to how willing or unwilling they are to pay for the sustainability attributes, since this has practical implications for destination managers. According to the results, targeted marketing strategies based on the cluster groups can be developed.

There are 18 variables measuring the willingness to pay for various sustainability attributes of tourism destinations and 355 respondents. Although there is no rule-of-thumb about the sample size necessary for cluster analysis, Hair et al. (2006) recommend that samples fewer than 300 cases are decently acceptable for hierarchical cluster analysis; however, sample sizes need to be larger for non-hierarchical analysis. Also, the minimal sample size to include is suggested not to be less than  $2k$  cases ( $k = \text{number of variables}$ ), preferably  $5*2k$  (Dolnicar S. , 2002). In this analysis, the minimum sample size is calculated as 180 ( $5*2(18) = 180$ ); therefore, it can be concluded that the sample size is adequate for this analysis.

Two partitioning procedures have been generally used for cluster analysis: hierarchical and non-hierarchical. Hierarchical clustering solutions generate initial seed points for the non-hierarchical analysis, whereas non-hierarchical clustering methods are more often used to determine the final cluster. In this respect, Hair et al. (2006) suggested that a mixed approach using both procedures is more useful in clustering cases.

Hierarchical clustering using “Ward’s Method” and “Squared Euclidean Distance Interval” are used in determining the number of clusters. Hair et al. (2006) suggests that approximately equal numbers of observations can be produced in clusters when Ward’s method is used in combination with squared Euclidean distance. The agglomeration schedule and dendrogram were analysed to identify a

set of preliminary cluster solutions. As seen in the dendogram and the agglomerations schedule in Appendices D and E, 2 groups are identified. Therefore, a two cluster solution is chosen in this study.

After determining the number of clusters, a 2 cluster K-means non-hierarchical analysis was used to assign respondents to one of the two clusters. According to this analysis, 114 respondents (32%) fall into the first cluster and 239 respondents (68%) fall into the second cluster. Respondents from cluster 1 are less willing to pay for sustainability, whereas respondents in cluster 2 are more willing to pay for sustainability of the destination they visit. The final cluster centres that include the means for each of the variables for each cluster are presented in Table 9.

Table 9. Final Cluster Centres

	Cluster	
	1	2
Willingness to pay more for a destination where green areas, fauna and flora are protected	2.70	4.17
Willingness to pay more for a destination where its historical and cultural resources are preserved	2.77	4.27
Willingness to pay more for a destination with a lower level of pollution of the environment, water and air	2.79	4.33
Willingness to pay more for a destination where renewable resources are being used and recycling is being carried out	2.46	3.94
Willingness to pay more for a destination which is not overcrowded	2.58	3.83
Willingness to pay more for a destination where local products are sold rather than mass produced ones	2.58	4.01
Willingness to pay more for a destination where services are being provided by the local people as opposed to international chains and non-local providers	2.54	3.98
Willingness to pay more for a destination in which tourism increases the local community's quality of life	2.50	3.84
Willingness to pay more for a destination where local people are being employed in higher-paid jobs	2.23	3.53
Willingness to pay more for a destination developed with respect for the culture and values of the local community	2.53	4.07
Willingness to pay more for a destination in which local people are able to benefit from facilities which tourists come to enjoy	2.49	3.70
Willingness to pay more for a destination offering cultural exchange between tourists and hosts	2.46	4.02
Willingness to pay more for a destination in which the information received through the visit about the destination's history and culture is properly transferred	2.71	4.17
Willingness to pay more for a destination where the overall architectural character of location is protected	2.82	4.42
Willingness to pay more for a destination which is more convenient to access	2.68	3.71
Willingness to pay more for a destination offering higher quality of services	2.94	4.08
Willingness to pay more for a destination where tourism does not cause negative behaviours	2.67	4.15
Willingness to pay more for a destination where cultural attractions are preserved and sustainability is ensured	2.68	4.31

5 = Highest willingness to pay; 1 = Lowest willingness to pay

One-way analysis of variance (ANOVA) determined that all variables can significantly discriminate between the two clusters (see table 10).

Table 10. One-Way Analysis of Variance (ANOVA)

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Willingness to pay more for a destination where green areas, fauna and flora are protected	166.740	1	.643	351	259.163	.000
Willingness to pay more for a destination where its historical and cultural resources are preserved	173.673	1	.648	351	268.079	.000
Willingness to pay more for a destination with a lower level of pollution of the environment, water and air	184.301	1	.650	351	283.516	.000
Willingness to pay more for a destination where renewable resources are being used and recycling is being carried out	169.315	1	.753	351	224.823	.000
Willingness to pay more for a destination which is not overcrowded	120.505	1	.979	351	123.044	.000
Willingness to pay more for a destination where local products are sold rather than mass produced ones	157.706	1	.803	351	196.452	.000
Willingness to pay more for a destination where services are being provided by the local people as opposed to international chains and non-local providers	161.872	1	.702	351	230.689	.000
Willingness to pay more for a destination in which tourism increases local community's quality of life	137.935	1	.750	351	183.993	.000
Willingness to pay more for a destination where local people are being employed in higher-paid jobs	131.106	1	.836	351	156.746	.000
Willingness to pay more for a destination developed with respect for the culture and values of the local community	184.196	1	.610	351	301.817	.000
Willingness to pay more for a destination in which local people are able to benefit from facilities which tourists come to enjoy	113.323	1	.799	351	141.856	.000
Willingness to pay more for a destination offering cultural exchange between tourists and hosts	185.872	1	.764	351	243.171	.000
Willingness to pay more for a destination in which the information received through the visit about the destination's history and culture is properly transferred	163.814	1	.714	351	229.304	.000
Willingness to pay more for a destination where the overall architectural character of the location is protected	198.239	1	.568	351	349.148	.000
Willingness to pay more for a destination which is more convenient to access	80.760	1	1.140	351	70.844	.000
Willingness to pay more for a destination offering higher quality of services	101.205	1	1.011	351	100.094	.000
Willingness to pay more for a destination where tourism does not cause negative behaviours	169.013	1	.733	351	230.645	.000
Willingness to pay more for a destination where cultural attractions are preserved and sustainability is ensured	203.918	1	.575	351	354.825	.000

### 5.2.5.1 Profiling of Clusters

Based on the t-test given in the table below, statistically significant differences between cluster 1 (less willing to pay) and cluster 2 (more willing to pay) in the importance given to sustainability are seen on thirteen of the attributes. These are highlighted in Table 11 below:

Table 11. Independent Sample t-test

Variable	Cluster	Mean	t	p
<b>Factor 1: Cultural and environmental protection</b>				
Importance given to preservation of historical and cultural resources	Less Willing to Pay	4.719	-1.81	0.0723
	More Willing to Pay	4.862		
Importance given to protection of green areas, fauna and flora	Less Willing to Pay	4.649	-2.1531	0.0328
	More Willing to Pay	4.824		
Importance given to protection of overall architectural character of location surrounding the cultural destination	Less Willing to Pay	4.658	-1.6425	0.1024
	More Willing to Pay	4.795		
Importance given to high, reinforced concrete buildings not being built with unplanned urbanization at the cost of green areas	Less Willing to Pay	4.640	-1.7294	0.0856
	More Willing to Pay	4.787		
Importance given to level of pollution of the environment, water and air	Less Willing to Pay	4.465	-3.1202	0.0022
	More Willing to Pay	4.745		
Importance given to the information received through the visit about the destination's history and culture being properly transferred	Less Willing to Pay	4.518	-2.1572	0.0323
	More Willing to Pay	4.694		
<b>Factor 2: Local community related issues</b>				
Importance given to local people being able to visit the attractions at the destination along with the tourists	Less Willing to Pay	4.000	-1.0835	0.2793
	More Willing to Pay	4.117		
Importance given to local people being able to benefit from facilities which tourists come to enjoy	Less Willing to Pay	4.009	-1.2436	0.2145
	More Willing to Pay	4.142		
Importance given to the local community's quality of life at the destination being increased because of tourism	Less Willing to Pay	4.079	-1.8074	0.0716
	More Willing to Pay	4.255		
Importance given to local authorities acting with respect to the local community's culture and values	Less Willing to Pay	4.263	-3.2803	0.0013
	More Willing to Pay	4.611		

Importance given to the destination offering cultural exchange between tourists and hosts	Less Willing to Pay	3.912		
	More Willing to Pay	4.272	-3.1769	0.0018
Importance given to local people being employed not only in lower-paid jobs, but also in higher-paid jobs in the tourist labour market	Less Willing to Pay	3.728	-2.1616	0.0313
	More Willing to Pay	3.971		
Importance given to the destination being developed with respect for culture and values of the local community	Less Willing to Pay	4.421		
	More Willing to Pay	4.673	-2.5575	0.0115
<b>Factor 3: Services &amp; facilities</b>				
Importance given to the availability of tourism facilities at the destination	Less Willing to Pay	4.140	0.4018	0.688
	More Willing to Pay	4.096		
Importance given to the quality of services the destination	Less Willing to Pay	4.228	-0.6223	0.5341
	More Willing to Pay	4.289		
Importance given to convenient access to the destination	Less Willing to Pay	4.061	-0.1845	0.8537
	More Willing to Pay	4.084		
Importance given to the destination being a place visited not in certain periods but continuously	Less Willing to Pay	3.570	0.7063	0.4805
	More Willing to Pay	3.477		
<b>Factor 4: Reuse/recycling</b>				
Importance given to renewable resources being used	Less Willing to Pay	4.105	-2.8644	0.0044
	More Willing to Pay	4.397		
Importance given to recycling being done	Less Willing to Pay	4.088	-2.0411	0.042
	More Willing to Pay	4.310		
<b>Factor 5: Local products &amp; providers</b>				
Importance given to the availability of local and traditional products for purchase	Less Willing to Pay	3.781	-2.5239	0.012
	More Willing to Pay	4.050		
Importance given to the services being provided by the local people as opposed to international chains and non-local providers	Less Willing to Pay	3.912	-1.9774	0.0488
	More Willing to Pay	4.113		
<b>Factor 6: Limits to tourism growth</b>				
Importance given to tourist overcrowding and congestion at the destination	Less Willing to Pay	3.325	-3.047	0.0025
	More Willing to Pay	3.682		
Importance given to the site putting emphasis on limiting the growth of tourism	Less Willing to Pay	3.939	-4.1219	0.00004
	More Willing to Pay	4.356		

Note: Items shown in grey are those that show a significant difference ( $p < 0.05$ ) between the two clusters

Additionally, a chi-square tests were conducted to compare the socio-demographic profile of the clusters including age group, gender, marital status, education level,

occupation, and net monthly income level. According to the results shown in Table 12, the two clusters could only be differentiated in relation to their income (Cramer's  $V = 0.182$ ; significance = 0.011). As the net monthly income increases, the percentage of respondents in Cluster 2 (those more willing to pay for sustainability) increases. Therefore, it can be concluded that respondents with higher income are more willing to pay for the sustainability attributes.

Table 12. Net monthly income \* Cluster Number of Case Crosstabulation

		Cluster 1	Cluster 2	Total
	% within Net monthly income	47.8%	52.2%	
Income between 2,000-5,000 TL	Count	52	89	141
	% within Net monthly income	36.9%	63.1%	
Income between 5,001-10,000 TL	Count	32	89	121
	% within Net monthly income	26.4%	73.6%	
Income more than 10,000 TL	Count	5	24	29
	% within Net monthly income	17.2%	82.8%	
	Count	111	226	337
	% within Net monthly income	32.9%	67.1%	

Chi-square Cramer's  $V = .182$  with a significance level of .011

## CHAPTER 6

### CONCLUSION

Tourism is very important for global sustainable development creating many job opportunities and providing income especially for the developing countries. On the other hand, sustainable tourism is an on-going process that needs constant academic investigation to identify issues and gaps in existing practices, as well as fitting solutions. Although there are several guidelines for sustainable tourism available to destinations which have been elaborated by international organizations, such as the UNWTO or the European Union, as well as some academic research that discusses sustainability indicators, all of these studies focus on the supply side, neglecting the point of view of the visitors. Since obtaining the support of the tourists is essential for the success of sustainability initiatives in destinations, there is a need to understand how these individuals view sustainability and its attributes. Given the lack of both theoretical and practical studies on the topic, the current study is designed to address this gap.

The aim of the project was to investigate the importance given by the Turkish tourists to sustainability attributes in cultural tourism destinations and to determine their willingness to pay for these attributes, considering socio-cultural, economic and environmental dimensions of sustainability. The research also attempted to create a model of sustainability in cultural tourism destinations viewed from the perspective of the tourists and to propose a new scale to measure the concept. In this section, the

contribution of the research both to the literature and practical studies, as well as recommendations and limitations of the study are outlined.

## 6.1 Theoretical implications

### 6.1.1 Conceptual model of sustainability of cultural destinations from the tourists' perspective

This study contributes to the theory by creating a conceptual model of sustainability of a particular cultural destination from a demand-based perspective derived from the literature and refined through qualitative research. There have been few published studies considering the tourists perspective and investigating the visitors' perceptions concerning the sustainability of the destination. Despite the fact that the initial conceptual model created in this study was based on the literature, this research provides a different perspective and is unlike the few other prior studies that also consider tourists' perceptions of sustainability in destinations.

As discussed before, Cottrell et al. (2004) analyse tourists' perceptions of sustainability in two distinctive areas. In their study, the authors examine the individuals' views based on site-specific sustainability aspects. As the 15 facets of sustainability used in the study were particular to Costa Rica and Texel, they are not appropriate to be used in other destinations. Nicholas and Thapa (2010) also employed a scale to measure visitor attitudes toward sustainable tourism in Zambia. Although it gave a general view on what can be included in a demand-based destination sustainability scale, the number of attributes used in the research was very limited and specific to sustainable tourism in protected areas. In another study, Ngamsomsuke, Hwang, and Huang (2011) developed 20 sustainable cultural heritage

tourism indicators specific to World Heritage Sites in Thailand with limited applicability to other destinations.

When the literature on the sustainable development of tourism is examined in terms of culture and heritage tourism, only three articles are found among 132 journal articles from the 47 sustainability and tourism journals, published between 1993 and 2013 (Zolfani, Sedaghat, Maknoon, & Zavadskas, 2015). However, these studies did not measure sustainability. In the literature, there are several articles measuring the sustainability of cultural and heritage tourism destinations (Lozano et al., 2012; Durovic, 2014). Although the indicators used in these researches are comprehensive, not only measuring sustainability of cultural tourism destinations, but also providing a tool to be used for benchmarking and planning purposes, they do not consider the topic from a demand-side perspective. Therefore, the current study addresses a void in the literature by creating a conceptual model of sustainability of a cultural destination from a demand-based perspective.

In this study, a conceptual model conceived from a demand-based perspective is created by examining tourists' comments in TripAdvisor on Cusco as a heritage tourism destination and by interviewing three travel experts. The model is particularly designed for cultural tourism destinations and is based on all three dimensions of sustainability: economic, socio-cultural, and environmental. According to the results of the TripAdvisor comments, in line with the travel expert interviews, tourist reviews focus on the aspects of sustainability that influence the experience like the availability of local products, the respect shown to the culture and values of the local community, the quality of the environment, and the preservation of historical and cultural resources. Therefore, the model is created based on the visibility of the sustainability attributes and the importance given by the tourists,

developing a base to describe the various facets of sustainability and converging the various components of the literature into a distinct model.

Although using a conceptual model can cause the researcher to look particularly for aspects that fit rather than contest, the model (Smyth, 2004), it can also make other investigators place their own researches within its relevant context. Therefore, the model proposed may guide future studies with a focus on measuring how tourists view the sustainability of a specific cultural destination.

When developing this conceptual model, the current research also has the merit of using both qualitative and quantitative methods that complement and support each other. In particular, the initial exploratory research focused on identifying aspects of sustainability spontaneously mentioned by tourists in their reviews of a particular destination. While previous research on tourists' perceptions of the sustainability of destinations (Cottrell, Van der Duim, Ankersmid, Kelder, & L., 2004; Ngamsomsuke, Hwang, & Huang, Sustainable cultural heritage tourism indicators, 2011) used interviews or questionnaires that prompt tourists to consider sustainability aspects of the place, this study used netnography, an original variation of conventional ethnography with the internet as the virtual field in which the research is carried out (Wu & Pearce, 2014), in order to determine the extent to which tourists include sustainability-related issues in their online reviews of a particular cultural tourism destination. If only interviews or questionnaires are used, the individuals may provide more politically correct answers for those issues that may not have been considered before being asked, which allows a potential for bias. However, comments in TripAdvisor on Cusco as a heritage tourism destination are examined and they are complemented with interviews with travel experts in order to create the conceptual model that identifies those issues that come up naturally,

without being prompted by the researcher. Therefore, a more unobtrusive investigation is made.

#### 6.1.2 Importance given by tourists to sustainability of cultural tourism destinations

Based on the conceptual model, a scale is created to measure the importance given by Turkish tourists to sustainability attributes in a cultural tourism destination.

According to the results of the exploratory factor analysis done in order to better understand the dimensionality of this construct, the importance given to sustainability of a destination from a tourist perspective yields six dimensions of the concept: cultural and environmental protection, local community related issues, services & facilities, reuse/recycling, local products & providers, and limits to tourism growth. This categorization of the various issues concerning the sustainability of the destination from the point of view of the tourists goes beyond the classical grouping of sustainability in economic, socio-cultural and environmental dimensions and may be used in future studies since it provides further insights into the topic.

The results of the descriptive statistics of this scale based on mean analyses show us that cultural and environmental protection is considered most critical, since it is the dimension with the highest mean. Among all of the items, “preservation of historical and cultural resources” is what the tourists give greatest importance to, followed by “protection of green areas, fauna and flora” and “protection of overall architectural character of the location surrounding the cultural destination”.

Likewise, in the study of Ngamsomsuke, Hwang, and Huang (2011) the most important attributes for the tourists are the architectural character and the urban design. This scale may guide future studies in measuring the importance given to the

sustainability attributes in cultural destinations by other segments of tourists for other specific cultural tourism destinations.

### 6.1.3 Tourists' willingness to pay for sustainability

The research also investigates another important topic, namely the extent to which tourists are ready to pay higher prices for a more sustainable destination, which makes it a study distinct from those available in the literature. The tourism industry is being pressured to become more responsible; however, it still remains unclear if customers are willing to pay extra charges for more sustainable destinations or not. Previous researches carried out on this topic within the context of the tourism industry mainly concern hotels and generally consider only environmental aspects of sustainability (Bohdanowicz, 2006; Deng, Ryan, & Moutinho, 1992; Manaktola & Jauhari, 2007). According to the results of a study conducted by Lonely Planet in 2007, sustainable travel is considered as important by 88% of tourists (Kang, Stein, Heo, & Lee, 2012). However, while some tourists are willing to pay additional charges to support sustainability (Masau & Prideaux, 2003), others see sustainability practices as an obligation and think that the costs incurred should not be added to the prices (Gustin & Weaver, 1996). Consumers are looking for both green and low-priced products, but they do not respond favourably to low prices when the sustainability performance of the products is minimal (Kang, Stein, Heo, & Lee, 2012). According to the theory of planned behaviour, there are several factors in the customer's actual purchasing decision of sustainable products including knowledge, ability and opportunity to engage in sustainability practices (Manaktola & Jauhari, 2007). Therefore, the positive perceptions and attitudes towards environmental issues

that customers might have do not inevitably mean that they would be willing to pay extra for these sustainability attributes.

This study differentiates itself from the other previously listed studies by investigating the extent to which tourists may be ready to pay more for destinations that are more sustainable. According to the results of this research, tourists claim to be less willing to pay for sustainability attributes even though they give a high importance to them. The features that they are most willing to pay for include the protection of the overall architectural character of the location, followed by a lower level of pollution of the environment, water and air. Thus, when considering the three pillars of sustainability, tourists are found to be more willing to pay for the environmental attributes as opposed to economic and socio-cultural aspects.

In addition, the present study contributes to the identification of a new method of segmentation of the tourists based on their willingness to pay for sustainability attributes in cultural destinations. Two types of tourists are revealed: those less willing to pay for sustainability and those more willing to pay for it. There are statistically significant differences on the importance given to sustainability by the two clusters for sixteen attributes, thus signifying that in general, sustainability-conscious consumers are more likely to pay higher prices for a more sustainable destination. Also, the results of this research show that respondents with higher income are more willing to pay for the sustainability attributes, although there are prior researches that found a negative relationship between the income level of the respondents and their willingness to pay extra for sustainability initiatives (Kang, Stein, Heo, & Lee, 2012). The difference in the findings may be due to the fact that Kang et al.'s study focuses on hotels, while the current investigation relates to tourism destinations. Also, even though a significant difference concerning the level

of education was not found between the two clusters in the present research, there may be other variables that differentiate between those that are willing to pay more for sustainability and those that are less eager to do so. Additionally, this study targeted Turkish tourists, whereas different cultural contexts may yield diverse results. Further investigations are required in order to obtain more conclusive results.

## 6.2 Practical implications

The current research is also of use to practitioners and provides practical insights concerning several issues. First of all, the findings are able to guide the inclusion of sustainability aspects in online tourist-generated destination evaluation systems. Since individuals are becoming more conscious about responsible tourism options, user-generated review websites are starting to create projects like TripAdvisor's GreenLeaders programme that foresee including sustainability as an aspect to be rated by the tourists. The results of the qualitative part of the study shows us that reviewers mostly consider those aspects of sustainability that influence the experience of the tourists, such as the convenient access to the destination, the crime rates, the interpretation concerning the history and culture, and the quality of the environment. Therefore, the creation of an experience-based sustainability model can be of practical use in designing these evaluation systems.

In addition, the research provides insights for destination managers concerning those aspects of sustainability that are most important to tourists. The factor analysis revealed that cultural and environmental protection is the factor with the highest importance given by tourists. Among all of the sustainability attributes, tourists care most about the preservation of historical and cultural resources,

protection of green areas, fauna and flora, and protection of overall architectural character of the location surrounding the cultural destination. However, they do not care much about the seasonality of the destination, tourist overcrowd and congestion, and local people being employed in higher-paid jobs. Since destination managers have a limited budget, these findings may provide guidance for managers of destinations in communicating their sustainability practices to tourists focusing on the items that tourists give more importance to like the cultural and environmental protection.

Furthermore, destination managers may also benefit from a greater knowledge concerning which aspects of sustainability are individuals more likely to pay a higher price for. Tourists are more willing to spend more for the environmental attributes as opposed to the economic and socio-cultural ones. Among the sustainability attributes considered in this research, the respondents mentioned that they would give a higher price for the protection of the overall architectural character of the location, followed by a lower level of pollution of the environment, water and air, and the preservation of historical and cultural resources. As may be expected, the items that the tourists give most importance to are also those that they are more willing to pay extra for. In light of these results, sustainability initiatives that are marketed to tourists need to be tied to environmental attributes mostly focusing on the benefits that the tourists may obtain from these sustainability practices in terms of a more attractive, culturally unique and less polluted environment. Therefore, these results can provide guidance to Turkish cultural destinations.

Even though the study is focused on cultural destinations, many of the attributes included in the model are also applicable to other types of destinations, which make the results obtained useful to other destinations as well. Therefore, the

implications may provide insights to destination managers for different types of destinations, and provide clues about how tourists evaluate economic, socio-cultural, and environmental attributes of destinations. These findings can thus be useful in order to develop future policies for destinations.

Tourists could also be educated on the items that do not seem so visible or important to them, like seasonality, tourist overcrowding and congestion at the destination. “Limits to tourism growth factor” has the lowest mean among the 5 other factors in terms of the importance given by the tourists to sustainability scale. Since raising awareness on sustainability can assist the progress of tourists’ sustainable attitudes and practices (Mazilu, 2012), it may also be eventually beneficial for the destination. As seen in this research, those individuals that are more concerned about sustainability are also more willing to pay for it. Therefore education of the tourists to increase their sensitivity and concern for sustainability of the destination may pay off in the long-run, increasing the possibility for the destination of charging more for sustainability practices. The research determines that economic aspects are found to be the least important among the three pillars of sustainability for a cultural destination. Education on these aspects given for example by travel agencies that focus on cultural tourism may increase the level of tourists’ awareness of sustainability and their likelihood of paying for it.

The cluster analysis revealed two clusters of tourists with distinct views toward willingness to pay for sustainability attributes while visiting a cultural tourism destination: less willing to pay, and more willing to pay. There are statistically significant differences between the clusters on the importance given by tourist to sustainability on all factors except one; services and facilities. Also, according to the results of the analysis, respondents with higher income are more

willing to pay for the sustainability attributes. This assessment may allow destinations to segment tourists and target their communications concerning sustainability initiatives to more wealthy individuals that are more likely to care for this issue.

### 6.3 Limitations

As with any research, this study also has some shortcomings that pertain to both the qualitative and the quantitative study. Starting with the qualitative part of the investigation which provided an understanding of the attributes of sustainability that are mentioned in tourists' online reviews, and which guided the development of the questionnaire for the second part of the research, several limitations may be mentioned.

Despite the advantage obtained by the use of netnography, which allowed unobtrusive observation of the respondents' reactions to the destination, this method also may have underestimated the importance that the tourists give to certain sustainability aspects. Thus, those attributes not found in the TripAdvisor comments should not necessarily be labelled as insignificant to tourists since certain facets considered important may not be shared with others or commented on. In the TripAdvisor comments, there were no remarks on local career opportunities, local community's quality of life, access of local community to tourism resources at the destination, and reuse/recycling. On the other hand, local people being employed not only in lower-paid jobs, but also in higher-paid ones in the tourist labour market is an item with a mean of 3.89 for the importance given by the tourists. The local community's quality of life at the destination being increased because of tourism has

a mean of 4.20, local people being able to benefit from facilities which tourists come to enjoy has a mean of 4.10, and local people being able to visit the attractions at the destination together with the tourists has a mean of 4.08. These results show us that not having any comments in TripAdvisor does not necessarily mean that the tourists are not giving importance to these issues. Thus, unobtrusive evaluation of tourists' comments should be complemented with interviews in order to get more conclusive answers.

Additionally, interviews were carried out with only three leading experts from the travel sector who are chosen through judgmental sampling because they work in the area of cultural and heritage tourism and are in contact with cultural tourists while they experience the destinations. Despite the fact that travel experts have a lot of knowledge on the topic of cultural tourism, the results derived from these interviews only represent the opinions of the experts concerning what they think that tourists care for in a cultural tourism destination. However, it is a good starting point that provided further insights into the topic. Nevertheless, further research should consider carrying out interviews with tourists themselves.

In the TripAdvisor reviews, only comments made in English are analysed, and more than half the sample originates from North America. While it limits the findings' generalizability to other populations, English is the language that most of the comments are made in. Still, other more extensive studies may be carried out in the future, taking other languages into consideration.

In the quantitative part of the study, a sample that includes Turkish travellers to Cusco was not reached and therefore the research is carried out on a sample accessed using a combination of convenience and snowball sampling, and which

includes Turkish cultural tourists that have visited at least a cultural destination (not necessarily Cusco) within the last year. The information about the survey and its links were distributed via social media platforms like Facebook.com tourism groups and other closed travel groups. Also, virtual friends were encouraged to forward the link and information to those friends who travel to cultural tourism destinations. The data collection lasted six weeks from 30th of November 2015 until 11th of January 2016. Although these sampling methods used may limit the individuals reached, the demographic profile of the respondents was in line with the target sample, and is thought to be representative of cultural tourist in Turkey. Like with previous research, there is a possibility that the respondents did not answer what they really thought, but that they gave the opinions that they thought would be more politically correct instead (Tourangeau & Rasinski, 1998). Even if the consumers have positive perceptions and attitudes towards environmentally-friendly products, they may not be willing to pay extra for green initiatives (Kang, Stein, Heo, & Lee, 2012). In another study made for the hospitality sector in India, similar results are obtained since the consumers surveyed seem to have a concern for green practices, although they do not demonstrate these preferences in the buying process (Manaktola & Jauhari, 2007).

A factor analysis was applied for the importance given to sustainability by the tourists. Six factors were initially extracted with an eigenvalue greater than 1.0, resulting in 70.1% of the total variance explained. Therefore, the remaining 29.9% is not explained, which means that there may be other dimensions unaccounted for in the research. Also, the fact that most of the variance (41.08%) is explained by Factor 1 “Cultural and environmental protection”, is another limitation that needs to be taken into consideration when interpreting the results.

#### 6.4 Further research

There are many potential follow-ups to this study. The results obtained in our research are particular to cultural tourism destinations; however, investigations in different types of destinations are recommended. Sustainability attributes that are found important and are among those that tourists are willing to pay for may be totally different in other types of destinations. Comparisons can be done both within the same type of destinations and among different kinds.

Further, additional research could examine other variables influencing tourists' attitudes to sustainability, such as tourist types, which are not considered in the current study. Different kinds of tourist may have diverse attitudes towards sustainability. Also, various nationalities can be compared to see whether there is a difference in the perceptions and willingness to pay for sustainability of the nationals of diverse countries.

Finally, the issue of how to market the sustainability attributes of a destination most effectively is a fruitful area for future research. Almost everything sold around us seems to be "sustainably sourced" or "environmentally friendly" (Pearce, 2008, p. 2). This matter is referred to as Green Wash in the literature, so that the question of how to convey and present sustainability practices to consumers becomes crucial. Therefore, future research may consider the most effective tools to market the sustainability of tourism destinations.

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APPENDIX A  
INTERVIEW GUIDELINE

Economic Attributes:

1. Do cultural tourists find it important to purchase local products from which not only tourists, but also local people benefit?
2. Do cultural tourists prefer to use local service at the destination?
3. Do the cultural tourists pay attention if the destination does or does not include large scale development projects?
4. Is it important for the cultural tourists if the destination charges adequate pricing that allows it to sustain itself in the future?
5. Do the cultural tourists pay attention if the local people at higher-paid jobs in the tourist labour market?
6. Is it important for the cultural tourists to have a convenient accessing to the destination?
7. Do they pay attention if money paid by them to experience/view/interact with cultural attractions are used for the conservation of the destination or not?
8. Are the cultural tourists more willing to spend more money at World Heritage Sites than other attractions?
9. Is seasonality important for the cultural tourists?
10. Do the cultural tourists pay attention if women and minorities are getting equal chance opportunities or not?
11. Is it important for the tourists if the prices in the destination are in a way that the locals can also benefit from the same services?
12. Do the cultural tourists pay attention if the facilities and services provided at the destinations are high or not?

Socio-cultural Attributes:

13. Based on your observations, do you think that cultural tourists treat fairly and equally to local community?
14. Do the tourists respect the values and culture of local residents?
15. Do crime, vandalism, drug usage, alcoholism rates at cultural destinations affect the tourists?
16. Do the cultural tourists care if local people are able to benefit from facilities which they come to enjoy?
17. Is there a cultural exchange between the tourists and hosts? How do the tourists find it?
18. Do the cultural tourists prefer more buildings at the cost of the green area?
19. Do the tourists pay attention if the cultural tourism destination has a higher quality of life standard?
20. Is the cultural heritage site preservation condition important for the tourists?
21. Is the knowledge and beliefs received from cultural destinations important for the tourists?

Environmental:

22. Is it important for the tourist if there is a loss of green areas, fauna and flora at the destination?
23. Do the tourists pay attention if there is a pollution of environment, water and air at the destination?
24. Do the tourists prefer renewable resources and recycling being done?

25. Is it important for the tourists if the overall architectural character of location surrounding cultural destination is protected or not?
26. Do the cultural tourists prefer visiting places with less tourist crowd at the cultural destination?
27. Is it important for the tourists if the site puts emphasis on limiting the growth of tourism?



## APPENDIX B

### QUESTIONNAIRE IN TURKISH

Bu anket, Boğaziçi Üniversitesi'nde yapılan akademik bir çalışma kapsamında gerçekleştirilmektedir. Araştırma aynı zamanda Boğaziçi Üniversitesi Bilimsel Araştırma Projeleri tarafından da desteklenmektedir. Aşağıdaki anket ifadelerini dikkatlice okumanızı ve seçeneklerden size uygun olan birini (x) şeklinde işaretleyerek belirtmenizi rica ederiz. Katkılarınız için teşekkür ederiz.

Aşağıdakilerden hangileri, kültür turizmi yapılan bir bölgeye gittiğinizde sizin için YÜKSEK ÖNEME SAHİP'tir?

1 Son Derece Önemsiz	2 Önemsiz	3 Kısmen Önemli	4 Önemli	5 Son Derece Önemli
1. Yerel halkın yaptığı yöresel ve geleneksel ürünlerin satılması			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
2. Verilen hizmetlerin uluslararası zincirler yerine yerel halk tarafından sunulması			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
3. Fiyatların turistik bölgenin varlığını gelecekte sürdürebilmesi için yeterli düzeyde olması			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
4. Bölgede harcadığınız paranın kültürel çekim noktalarının korunması için kullanılması			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
5. Yerel halkın turizm kuruluşlarında sadece düşük ücretli işlerde değil, aynı zamanda yüksek ücretli işlerde istihdamının sağlanması			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
6. Turistik bölgeye ulaşımın kolay olması			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
7. Bölgenin turizm amacıyla sadece belirli dönemlerde değil, sürekli gidilen bir yer			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
8. Bölgedeki turizm tesislerinin durumu			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
9. Bölgedeki hizmet kalitesi seviyesi			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
10. Bölgedeki turizm gelişiminin yerel halkın kültür ve değerleri korunarak yapılması			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
11. Yerel yönetimlerin yerel halkın kültür ve değerlerine saygı göstermesi			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
12. Turizmin ve turistlerin bölgede olumsuz davranışlara neden olmaması			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
13. Yerel halkın da turistlerin faydalandığı olanaklardan yararlanabilmesi			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
14. Yerel halkın turistlerle birlikte turistik bölgedeki kültürel çekim noktalarının ziyaret edebilmesi			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	

15. Yerel halk ile turistler arasında kültür alışverişinin gerçekleşmesi	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
16. Turizmle birlikte yerel halkın hayat kalitesinin artması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
17. Ziyaret sırasında alınan bilgilerde bölgenin tarihinin ve kültürünün doğru şekilde aktarılması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
18. Yeşil alanlar, fauna ve floranın korunuyor olması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
19. Çarpık kentleşme ile birlikte yeşil alanların yerine yüksek betonarme binaların yapılmaması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
20. Tarihi ve kültürel kaynakların korunması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
21. Turistik bölgenin çevresindeki yöresel mimari dokunun korunması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
22. Çevre, hava ve su kirliliğinin düzeyi	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
23. Yenilenebilir kaynakların kullanılması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
24. Geri dönüşümün uygulanması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
25. Turistik bölgenin turist sayısı açısından kalabalık olmaması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
26. Bölgenin kontrolsüz turizm gelişimini sınırlandırması	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Aşağıdaki ifadelere ne derecede katılıyorsunuz?

1	2	3	4	5
Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum

27. Yeşil alanlar, fauna ve floranın korunduğu bir yere gitmek için daha fazla para ödemeye hazırım	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
28. Tarihi ve kültürel kaynakların korunduğu bir yere gitmek için daha fazla para ödemeye hazırım	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
29. Çevre, hava ve su kirliliğinin daha az olduğu bir yere gitmek için daha fazla para ödemeye hazırım	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
30. Yenilenebilir kaynakların kullanıldığı ve geri dönüşümün uygulandığı bir yere gitmek için daha fazla para ödemeye hazırım	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
31. Daha az kalabalık bir yere gitmek için daha fazla para ödemeye hazırım	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

32. Ucuz, seri olarak üretilen ürünler yerine yerel ürünlerin satıldığı bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

33. Uluslararası zincirler yerine yerel hizmet sağlayıcılarının hizmet verdiği bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

34. Turizmin yerel halkın hayat standartlarını arttırdığı bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

35. Yerel halkın yüksek ücretli işlerde çalıştığı bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

36. Yerel halkın kültürel değerlerinin devamlılığının sağlandığı bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

37. Yerel halkın turistlerle aynı olanaklardan faydalandığı ve kültürel çekim noktalarını ziyaret ettiği bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

38. Yerel halk ile kültür alışverişinin olduğu bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

39. Bölge hakkındaki tarihi ve kültürel bilgilerin doğru aktarıldığı bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

40. Bölgedeki yöresel mimari dokunun korunduğu bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

41. Ulaşımın daha kolay olduğu bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

42. Daha yüksek hizmet kalitesinin sunulduğu bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

43. Turizmin bölgeye olumsuz davranışlar getirmediği bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

44. Bölgedeki kültürel çekim noktalarının korunduğu ve sürdürülebilirliğinin sağlandığı bir yere gitmek için daha fazla para ödemeye hazırım 1  2  3  4  5

45. Son 2 sene içerisinde ziyaret ettiğiniz ve en çok beğendiğiniz kültür turizmi bölgesi neresidir?.....

46. Doğum yılınız .....

47. Cinsiyetiniz Kadın  Erkek

48. Medeni durumunuz: Evli  Bekâr /Dul

49. Eğitim seviyeniz: İlköğretim  Lise  Ön Lisans  Lisans

Yüksek Lisans/Doktora

50. Meşguliyet durumunuz : Öğrenci  Ev hanımı  Emekli   
Serbest meslek/İş yeri sahibi  Beyaz yakalı/Memur  Mavi yakalı/İşçi   
İşsiz  Diğer  .....

51. Aylık net geliriniz: 2.000 TL'den az  2.000-5.000 TL  5.001-10.000 TL   
10.000 TL'den fazla



## APPENDIX C

### QUESTIONNAIRE IN ENGLISH

This survey is conducted under an academic study at Boğazici University. The research is supported also by the Boğaziçi University Scientific Research Project. Please read the following statements carefully and indicate the option that suits you by checking the form(x). Thank you for your contribution.

When you go to a cultural tourism destination, which of the following is of HIGH IMPORTANCE to you?

	1	2	3	4	5
	Very Unimportant	Unimportant	Neither Important Nor Unimportant	Important	Very Important
1. Availability of local and traditional products for purchase	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
2. Services being provided by the local people as opposed to international chains and non-local providers	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
3. Prices to be at an adequate level that allows the destination to sustain itself in the future	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
4. Money that you spent to be used for conservation of the destination	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
5. Local people being employed not only in lower-paid jobs, but also in higher-paid jobs in the tourist labour market	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
6. Convenient access to the destination	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
7. The destination being a place visited not in certain periods but continuously	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
8. Availability of tourism facilities at the destination	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
9. Quality of services at the destination	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
10. The destination being developed with respect for culture and values of the local community	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
11. Local authorities acting with respect to the local community's culture and values	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
12. Tourism and tourists not causing tourism does not cause negative behaviours at the destination	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

13. Local people being able to benefit from facilities which tourists come to enjoy	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
14. local people being able to visit the attractions at the destination along with the tourists	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
15. The destination offering cultural exchange between tourists and hosts	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
16. Local community's quality of life at the destination being increased because of tourism	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
17. The information received through the visit about the destination's history and culture being properly transferred	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
18. Protection of green areas, fauna and flora	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
19. High, reinforced concrete buildings not being built with unplanned urbanization at the cost of green areas	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
20. Preservation of cultural and historical resources	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
21. Protection of overall architectural character of location surrounding the cultural destination	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
22. Level of pollution of the environment, water and air	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
23. Renewable resources are being used	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
24. Recycling being carried out	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
25. The destination not being overcrowded	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
26. Uncontrolled tourism development at the destination to be limited	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

To what extent do you agree with the following statements?

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree

27. I am willing to pay more for a destination where green areas, fauna and flora are protected	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
28. I am willing to pay more for a destination where its historical and cultural resources are preserved	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

29. I am willing to pay more for a destination with a lower level of pollution of the environment, water and air	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
30. I am willing to pay more for a destination where renewable resources are being used and recycling is being carried out	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
31. I am willing to pay more for a destination which is not overcrowded	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
32. I am willing to pay more for a destination where local products are sold rather than mass produced ones	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
33. I am willing to pay more for a destination where services are being provided by the local people as opposed to international chains and non-local providers	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
34. I am willing to pay more for a destination in which tourism increases the local community's quality of life	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
35. I am willing to pay more to pay more for a destination where local people are being employed in higher-paid jobs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
36. I am willing to pay more for a destination developed with respect for the culture and values of the local community	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
37. I am willing to pay more for a destination in which local people are able to benefit from facilities which tourists come to enjoy	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
38. I am willing to pay more for a destination offering cultural exchange between tourists and hosts	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
39. I am willing to pay more for a destination in which the information received through the visit about the destination's history and culture is properly transferred	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
40. I am willing to pay more for a destination where the overall architectural character of the location is protected	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
41. I am willing to pay more for a destination which is more convenient to access	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
42. I am willing to pay more for a destination offering higher quality of services	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
43. I am willing to pay more for a destination where tourism does not cause negative behaviours	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
44. I am willing to pay more for a destination where cultural attractions are preserved and sustainability is ensured	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

45. The cultural tourism destination you liked the most among the destinations that you have visited in the last 2 years?.....

46. Year of birth .....

47. Gender Female  Male

48. Marital Status: Married  Single/Widower/Divorced

49. Education level : Primary/Secondary School  High School

Two-year Degree  Undergraduate Degree  Postgraduate Degree

50. Occupation : Student  Housewife  Retired

Self-employed/Business owner  White collar/Officer  Clerical/Blue collar

Unemployed  Other  .....

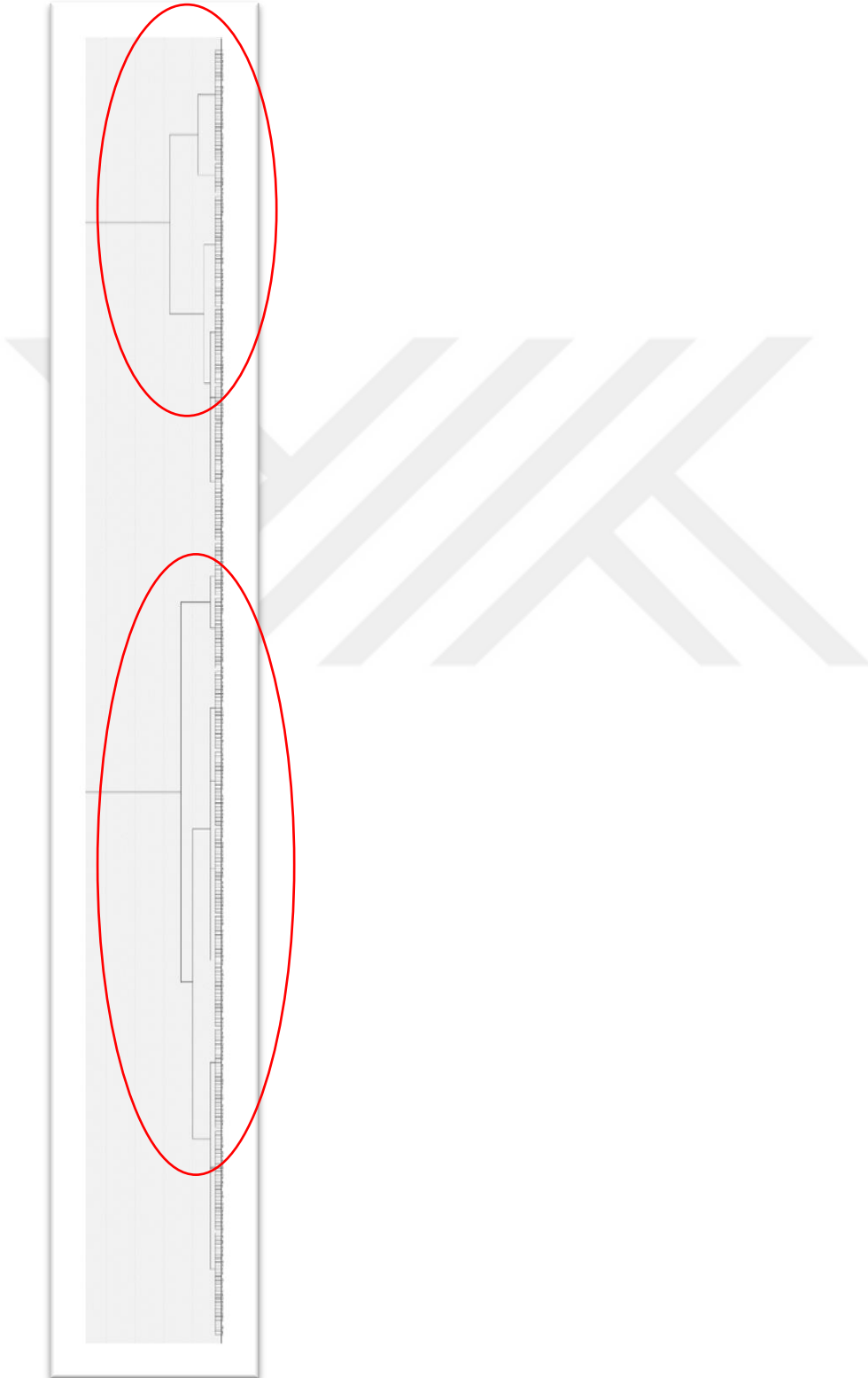
51. Monthly net income: Less than 2000 TL  2.000-5.000 TL

5.001-10.000 TL  More than 10000 TL



APPENDIX D

CLUSTER ANALYSIS DENDOGRAM



APPENDIX E

CLUSTER ANALYSIS AGGLOMERATION SCHEDULE

**Agglomeration Schedule**

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
	1	297		340	.000	
2	303	337	.000	0	0	7
3	324	333	.000	0	0	4
4	14	324	.000	0	3	24
5	314	321	.000	0	0	6
6	80	314	.000	0	5	11
7	48	303	.000	0	2	16
8	104	300	.000	0	0	24
9	283	297	.000	0	1	45
10	250	259	.000	0	0	11
11	80	250	.000	6	10	20
12	153	246	.000	0	0	20
13	194	227	.000	0	0	16
14	195	196	.000	0	0	15
15	18	195	.000	0	14	18
16	48	194	.000	7	13	21
17	182	185	.000	0	0	18
18	18	182	.000	15	17	25
19	139	172	.000	0	0	196
20	80	153	.000	11	12	23
21	48	151	.000	16	0	46
22	100	124	.000	0	0	25
23	80	120	.000	20	0	97
24	14	104	.000	4	8	28
25	18	100	.000	18	22	27
26	91	99	.000	0	0	27
27	18	91	.000	25	26	29
28	14	78	.000	24	0	248
29	18	28	.000	27	0	251
30	326	353	.500	0	0	179
31	89	325	1.000	0	0	37
32	256	292	1.500	0	0	122
33	262	282	2.000	0	0	76

34	121	171	2.500	0	0	59
35	11	38	3.000	0	0	60
36	1	5	3.500	0	0	142
37	89	117	4.138	31	0	177
38	233	350	4.845	0	0	102
39	24	319	5.552	0	0	77
40	76	318	6.259	0	0	45
41	149	316	6.966	0	0	43
42	82	226	7.674	0	0	145
43	149	212	8.381	41	0	97
44	53	57	9.088	0	0	61
45	76	283	9.864	40	9	74
46	48	68	10.721	21	0	142
47	141	335	11.587	0	0	121
48	74	320	12.453	0	0	63
49	274	317	13.319	0	0	60
50	97	315	14.185	0	0	95
51	71	310	15.051	0	0	99
52	47	307	15.917	0	0	193
53	263	286	16.783	0	0	62
54	192	261	17.649	0	0	121
55	137	229	18.515	0	0	169
56	64	193	19.381	0	0	94
57	27	191	20.247	0	0	96
58	103	105	21.113	0	0	93
59	121	351	21.995	34	0	101
60	11	274	22.885	35	49	75
61	53	106	23.804	44	0	99
62	87	263	24.760	0	53	169
63	74	109	25.715	48	0	64
64	74	98	26.693	63	0	294
65	190	331	27.693	0	0	146
66	34	302	28.693	0	0	153
67	206	293	29.693	0	0	193
68	20	291	30.693	0	0	147
69	160	225	31.693	0	0	125
70	159	203	32.693	0	0	98
71	25	167	33.693	0	0	209
72	65	129	34.693	0	0	178
73	111	125	35.693	0	0	231
74	76	343	36.730	45	0	123
75	11	285	37.771	60	0	251
76	262	336	38.849	33	0	159

77	24	144	39.936	39	0	177
78	101	346	41.054	0	0	157
79	308	327	42.172	0	0	156
80	174	323	43.290	0	0	100
81	289	322	44.408	0	0	168
82	264	313	45.526	0	0	181
83	158	311	46.644	0	0	126
84	253	296	47.762	0	0	155
85	271	275	48.880	0	0	154
86	134	260	49.998	0	0	139
87	51	222	51.116	0	0	227
88	155	216	52.234	0	0	127
89	21	215	53.352	0	0	179
90	39	186	54.470	0	0	208
91	130	183	55.588	0	0	206
92	10	22	56.706	0	0	170
93	103	187	57.830	58	0	190
94	64	181	58.953	56	0	124
95	97	176	60.076	50	0	143
96	27	175	61.200	57	0	158
97	80	149	62.353	23	43	330
98	16	159	63.510	0	70	208
99	53	71	64.680	61	51	175
100	32	174	65.870	0	80	285
101	121	173	67.069	59	0	210
102	233	242	68.293	38	0	243
103	234	349	69.518	0	0	249
104	133	347	70.742	0	0	107
105	60	345	71.967	0	0	204
106	46	299	73.192	0	0	218
107	133	288	74.417	104	0	128
108	199	281	75.641	0	0	205
109	239	278	76.866	0	0	210
110	184	255	78.091	0	0	204
111	37	245	79.316	0	0	140
112	102	235	80.540	0	0	209
113	9	219	81.765	0	0	172
114	4	200	82.990	0	0	195
115	92	178	84.215	0	0	219
116	8	168	85.439	0	0	269
117	146	164	86.664	0	0	225
118	148	156	87.889	0	0	175
119	70	119	89.114	0	0	223

120	3	7	90.338	0	0	176
121	141	192	91.577	47	54	167
122	136	256	92.822	0	32	159
123	52	76	94.095	0	74	289
124	64	268	95.382	94	0	276
125	160	301	96.681	69	0	203
126	158	265	97.997	83	0	192
127	45	155	99.312	0	88	141
128	133	228	100.632	107	0	171
129	56	328	101.955	0	0	230
130	128	309	103.278	0	0	144
131	237	287	104.600	0	0	165
132	254	273	105.923	0	0	190
133	165	257	107.246	0	0	237
134	63	243	108.569	0	0	226
135	17	220	109.892	0	0	166
136	108	202	111.215	0	0	213
137	143	163	112.538	0	0	160
138	36	59	113.861	0	0	253
139	88	134	115.186	0	86	242
140	37	218	116.537	111	0	227
141	45	169	117.910	127	0	178
142	1	48	119.290	36	46	348
143	97	258	120.671	95	0	255
144	128	295	122.055	130	0	285
145	82	208	123.452	42	0	202
146	190	280	124.864	65	0	180
147	20	166	126.276	68	0	191
148	131	344	127.690	0	0	232
149	138	298	129.104	0	0	236
150	107	244	130.518	0	0	256
151	135	214	131.933	0	0	267
152	31	112	133.347	0	0	192
153	34	329	134.773	66	0	194
154	13	271	136.217	0	85	207
155	113	253	137.661	0	84	273
156	213	308	139.113	0	79	176
157	101	140	140.565	78	0	181
158	27	177	142.041	96	0	266
159	136	262	143.517	122	76	248
160	143	154	145.012	137	0	268
161	116	312	146.512	0	0	218
162	95	290	148.012	0	0	235

163	26	201	149.512	0	0	229
164	77	84	151.012	0	0	217
165	43	237	152.513	0	131	286
166	17	126	154.015	135	0	195
167	141	189	155.524	121	0	196
168	81	289	157.073	0	81	259
169	87	137	158.629	62	55	271
170	10	29	160.199	92	0	252
171	133	162	161.774	128	0	238
172	9	204	163.354	113	0	242
173	221	332	164.935	0	0	256
174	33	69	166.516	0	0	219
175	53	148	168.101	99	118	263
176	3	213	169.710	120	156	237
177	24	89	171.325	77	37	221
178	45	65	172.961	141	72	294
179	21	326	174.597	89	30	273
180	190	269	176.242	146	0	292
181	101	264	177.899	157	82	215
182	86	338	179.557	0	0	220
183	205	305	181.215	0	0	255
184	270	284	182.874	0	0	254
185	236	249	184.532	0	0	224
186	54	247	186.190	0	0	239
187	50	197	187.849	0	0	222
188	83	127	189.507	0	0	236
189	41	110	191.165	0	0	264
190	103	254	192.835	93	132	240
191	20	279	194.536	147	0	260
192	31	158	196.238	152	126	221
193	47	206	197.942	52	67	216
194	34	251	199.648	153	0	243
195	4	17	201.374	114	166	272
196	139	141	203.103	19	167	259
197	12	348	204.835	0	0	278
198	188	272	206.567	0	0	261
199	252	266	208.299	0	0	214
200	61	145	210.031	0	0	277
201	73	96	211.763	0	0	250
202	19	82	213.506	0	145	233
203	44	160	215.251	0	125	226
204	60	184	217.001	105	110	252
205	198	199	218.782	0	108	271

206	130	209	220.564	91	0	230
207	13	304	222.362	154	0	260
208	16	39	224.160	98	90	263
209	25	102	225.959	71	112	274
210	121	239	227.759	101	109	272
211	115	267	229.562	0	0	324
212	157	248	231.364	0	0	282
213	108	330	233.184	136	0	291
214	252	339	235.010	199	0	254
215	58	101	236.847	0	181	293
216	47	232	238.685	193	0	277
217	72	77	240.542	0	164	298
218	46	116	242.412	106	161	253
219	33	92	244.297	174	115	316
220	86	306	246.183	182	0	280
221	24	31	248.074	177	192	323
222	50	132	249.966	187	0	266
223	70	161	251.860	119	0	327
224	224	236	253.756	0	185	249
225	146	152	255.655	117	0	267
226	44	63	257.571	203	134	268
227	37	51	259.488	140	87	290
228	123	179	261.425	0	0	301
229	26	294	263.374	163	0	297
230	56	130	265.333	129	206	241
231	111	142	267.309	73	0	282
232	55	131	269.290	0	148	275
233	19	150	271.280	202	0	269
234	42	341	273.280	0	0	281
235	95	114	275.299	162	0	265
236	83	138	277.325	188	149	279
237	3	165	279.354	176	133	319
238	49	133	281.413	0	171	274
239	54	62	283.476	186	0	281
240	103	276	285.541	190	0	296
241	56	79	287.611	230	0	305
242	9	88	289.697	172	139	288
243	34	233	291.799	194	102	293
244	211	277	293.921	0	0	297
245	217	241	296.042	0	0	309
246	122	210	298.163	0	0	295
247	147	180	300.285	0	0	287
248	14	136	302.418	28	159	310

249	224	234	304.567	224	103	302
250	73	207	306.728	201	0	322
251	11	18	308.903	75	29	341
252	10	60	311.105	170	204	307
253	36	46	313.334	138	218	307
254	252	270	315.567	214	184	289
255	97	205	317.832	143	183	308
256	107	221	320.120	150	173	290
257	23	231	322.411	0	0	318
258	35	230	324.702	0	0	303
259	81	139	327.009	168	196	337
260	13	20	329.324	207	191	295
261	188	223	331.652	198	0	316
262	2	342	333.997	0	0	287
263	16	53	336.362	208	175	310
264	15	41	338.751	0	189	288
265	85	95	341.141	0	235	312
266	27	50	343.535	158	222	312
267	135	146	345.958	151	225	284
268	44	143	348.389	226	160	305
269	8	19	350.826	116	233	301
270	118	334	353.275	0	0	283
271	87	198	355.727	169	205	286
272	4	121	358.179	195	210	296
273	21	113	360.680	179	155	306
274	25	49	363.222	209	238	317
275	55	75	365.802	232	0	292
276	40	64	368.390	0	124	302
277	47	61	371.007	216	200	304
278	12	238	373.624	197	0	325
279	67	83	376.244	0	236	304
280	86	352	378.871	220	0	291
281	42	54	381.503	234	239	326
282	111	157	384.235	231	212	298
283	6	118	387.006	0	270	299
284	93	135	389.818	0	267	328
285	32	128	392.630	100	144	306
286	43	87	395.450	165	271	315
287	2	147	398.343	262	247	318
288	9	15	401.254	242	264	324
289	52	252	404.222	123	254	332
290	37	107	407.214	227	256	314
291	86	108	410.212	280	213	325

292	55	190	413.212	275	180	309
293	34	58	416.224	243	215	321
294	45	74	419.237	178	64	337
295	13	122	422.297	260	246	333
296	4	103	425.365	272	240	315
297	26	211	428.460	229	244	308
298	72	111	431.599	217	282	311
299	6	170	434.752	283	0	313
300	30	66	437.992	0	0	311
301	8	123	441.241	269	228	327
302	40	224	444.507	276	249	317
303	35	94	447.869	258	0	320
304	47	67	451.239	277	279	314
305	44	56	454.620	268	241	329
306	21	32	458.057	273	285	320
307	10	36	461.560	252	253	322
308	26	97	465.069	297	255	319
309	55	217	468.663	292	245	335
310	14	16	472.274	248	263	342
311	30	72	475.951	300	298	338
312	27	85	479.672	266	265	323
313	6	90	483.534	299	0	331
314	37	47	487.443	290	304	336
315	4	43	491.384	296	286	343
316	33	188	495.359	219	261	328
317	25	40	499.425	274	302	330
318	2	23	503.535	287	257	334
319	3	26	507.667	237	308	335
320	21	35	511.944	306	303	329
321	34	240	516.308	293	0	326
322	10	73	520.719	307	250	331
323	24	27	525.182	221	312	339
324	9	115	529.743	288	211	333
325	12	86	534.493	278	291	340
326	34	42	539.271	321	281	332
327	8	70	544.196	301	223	336
328	33	93	549.323	316	284	334
329	21	44	554.548	320	305	342
330	25	80	559.781	317	97	347
331	6	10	565.199	313	322	344
332	34	52	570.844	326	289	348
333	9	13	577.030	324	295	339
334	2	33	583.300	318	328	338

335	3	55	589.713	319	309	346
336	8	37	596.170	327	314	340
337	45	81	602.705	294	259	341
338	2	30	610.159	334	311	343
339	9	24	618.142	333	323	345
340	8	12	626.144	336	325	344
341	11	45	634.406	251	337	350
342	14	21	643.154	310	329	345
343	2	4	652.391	338	315	346
344	6	8	663.401	331	340	347
345	9	14	675.279	339	342	349
346	2	3	689.289	343	335	349
347	6	25	705.839	344	330	351
348	1	34	729.640	142	332	351
349	2	9	760.589	346	345	350
350	2	11	812.225	349	341	352
351	1	6	876.869	348	347	352
352	1	2	1070.125	351	350	0