HERITAGE TOURISM PLANNING AND MANAGEMENT

by

NATHANIEL DAVID OLIVE

(Under the Direction of Michael A. Tarrant and Cecil A. Jennings)

ABSTRACT

The heritage area is a relatively young natural and cultural resource conservation strategy that engages both host communities and visitors in the telling of the story of place through tourism. To be designated, National Heritage Areas (NHAs) are required to demonstrate that heritage tourism is consistent with an area's economic activity. Yet, despite the vital role that heritage tourism plays in sustainable economic development, few studies have analyzed heritage tourists as a distinct market niche, and none have provided methods for assessing market feasibility or management priorities. As a result, heritage tourism planning and management has thus far operated without specific guidance from the tourism literature and market assessment requirements have been ignored in NHA feasibility studies. The purpose of this study is to provide a methodological framework that compliments community-based planning procedures to do the following: 1) determine the feasibility of NHA tourism development from a market assessment approach, and 2) identify results-oriented heritage tourism performance measures for evaluating the efficacy of NHA tourism management. Using a comparative market research approach, this study contrasts heritage tourism with mass and eco-tourism based on a random sample of visitors to the United States Virgin Islands. Visitor

satisfaction was analyzed through the lens of disconfirmation theory in an innovative importance-performance disconfirmation assessment. Results of this study establish heritage tourism as a niche market with unique sensitivities and management requirements. Heritage tourists are the most loyal, pull-motivated, female, and likely to spend money according to their attitudes about heritage destination attributes. Additionally, their destination loyalty is less affected by trip satisfaction than other segments. Heritage tourism management requires more attentive management on service quality, access to internet, and authentic delivery of heritage tourism experiences. Finally, the study concludes with a proposed Heritage Tourism Planning Framework that integrates this work into the larger existing NHA planning guidelines. This research provides new understandings of the heritage tourism market and market research methodologies that can be used to better inform heritage planning and management in NHAs and other heritage areas around the world.

INDEX WORDS: Heritage tourism planning, tourist motivations, tourist loyalty, national heritage area, disconfirmation theory, heritage area planning framework

HERITAGE TOURISM PLANNING AND MANAGMENT

by

NATHANIEL DAVID OLIVE

BA, University of Georgia, 2000

MA, University of Georgia, 2004

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2016

HERITAGE TOURISM PLANNING AND MANAGMENT

by

NATHANIEL DAVID OLIVE

Major Professor:	Michael A. Tarrant
	Cecil A. Jennings
Committee:	Jeff Hepinstall-Cymerman
	Kris Irwin

Electronic Version Approved:

Suzanne Barbour
Dean of the Graduate School
The University of Georgia
May 2016

DEDICATION

This work is dedicated to three great mentors who touched my life and greatly influenced my study interests before they passed on: Veronica Gordon, the Mayor of LaValle Candy Dyer, and my grandfather, Billy Kidd. They all lived purely as themselves. They always had a good story to tell. The realest one ever.

ACKNOWLEDGEMENTS

I would like to thank the staff at the Eastern Caribbean Center and the Department of the Interior's Office of Insular Affairs' Basil Ottley for making this project possible. Thank you to my original advisor Craig Miller for believing in this project, and current co-advisors Cecil Jennings and Michael Tarrant for sticking with me to the end. Thanks for Paul Chakroff for the initial suggestion to work on the National Heritage Area project, also supported by the Honorable Delegate to the US Congress Donna M. Christensen, Olasee Davis, Frandelle Gerard, Claudette Hines, and many others. Thank you to the Virgin Islands Sustainable Farm Institute, who partially funded a portion of the earliest stages of this research through my tenure as program director. Thank you to all the participants in the community planning process, including the lovely people of St. Croix who are not afraid to take action and determine the island that they want to line in. Thanks to our dynamic survey team in both districts, who did a professional job and provided high quality data. Thanks for Jim and Gail Nealon for allowing me to write most of this work on their lovely porch. Thank you to my wife Shelli Brin, who without her support, this would never have been possible. Big ups to all of the members of our farm crew through these years for clearing me the time to write and seeing the bigger picture when times are challenging. Also, thanks to all the many friends and family who have been amazing supporters and provided encouragement right when I needed it. Any good thing to come out of this is because of all of you. I feel so blessed to have you in my life.

TABLE OF CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

Page

CHAPTER 1

INTRODUCTION & LITERATURE REVIEW

The number of federally designated National Heritage Areas (NHAs) in the United States of America has increased rapidly to 49 areas in 32 states since the first was designated in 1984. With additional areas currently under study for potential NHA designation, and more to be proposed, NHAs are on track to surpass the 59 units of the National Park System, which took approximately 141 years to establish in all.

However, the rapid rise of the NHA has occurred without a comprehensive system in place to anticipate, monitor, and manage tourism visitation or resource management effectiveness (Laven et al., 2010). Because NHAs are managed by local entities, which depend largely on non-federal funding, the long-term sustainability of this young resource conservation approach is difficult to measure. Heritage-based tourism and recreation provides a potential avenue for economic growth in NHAs that may support the longevity and success of NHA management. This work aims to clarify the role of tourism as a factor in the success of NHAs and identify salient management factors to be considered for adequate heritage resource protection by local management entities.

Like National Parks, NHAs are charged with a dual mandate of protecting important historic, natural, and cultural resources while providing access for education, recreation, and tourism. However, NHAs must do so solely under the leadership of local management across a

patchwork of public and private lands with ongoing cooperation of local stakeholders. As such, the primary focus of proposed NHA designation guidelines are centered on the quality of historic, natural, and cultural resources as they relate to the overall story of American heritage and the willingness and ability of a community to manage a NHA (NPS, 2003).

Although NHAs are not considered management units of the National Park Service (NPS), they are guided, in large part, by NPS technical assistance. The NPS also provides a limited amount of federal funding to local NHA management entities to supplement annual management budgets. These entities are usually private organizations, non-profits, local government, or a hybrid of management entities. Unlike NPS units, the management of NHAs must be funded primarily by outside sources, such as grants and local funds associated with tourism and recreation management. Therefore, the sustainability of NHAs hinges on the ability of the local management entity to anticipate the quantity and quality of heritage-related tourism growth and to identify potential resource effects that require management actions.

Background of the Problem

Heritage Area Concept

The idea of a heritage area was originally conceived as an alternative conservation strategy to the established National Park model. The conservation approach of heritage areas involves a wider domain of resources and landscapes than traditional parks. The theme of a given heritage area may be centered on natural resources, historic resources, or both, but it generally puts a strong emphasis on features that tie into the story of humankind on a national or global level.

The anthropocentric slant of the heritage area concept is implicit in the definition of heritage, which is associated with the word inheritance. Heritage implies a recurrent intergenerational action, described as "a transfer from one generation to another" (Nuryanti, 1996). The authors of the text Heritage Tourism summarized, "Heritage is not simply the past, but the modern-day use of elements of the past" (Timothy & Boyd, 2003, p. 4). Thus, a heritage area is a place where historic, natural, and cultural resources combine in a cohesive manner to tell a greater story.

Although designated heritage areas did not originate in the US, the country had a substantial influence in their creation. Prior to the first NHA, the first World Heritage Area was established by the United Nations in 1972 by the popular World Heritage Convention, and ratified by 191 of 193 member nations. According to Stott (2011), the idea to list parks around the world that deserved global recognition was initially presented in a 1959 proposal from American conservationist, Harold J. Coolidge, to the Swiss-based International Union for the Conservation of Nature and Natural Resources (IUCN). Later in 1965, the US Committee on Natural Resources and Development, chaired by Joseph Fisher, called on the international community to recognize issues facing areas with "scenic, historic, and natural resources that are a part of man's heritage" (Stott, 2011, p. 283). This was the first international proposal to list both natural and cultural heritage areas, and called for "A Trust for the World Heritage." This provided a basis for the framework of the subsequent World Heritage Convention, which in 1972 would formalize the international listing of designated sites "that are of outstanding universal value to humanity and as such, have been inscribed on the World Heritage List to be

protected for future generations to appreciate and enjoy" (UNESCO, 2015). Of the current 1,007 world heritage sites, 22 are in the United States.

The NHA concept in the US closely mirrors the natural and cultural resource conservation purpose of the World Heritage Convention on a national level. But there are key differences in the structure of protected land governance that evolved. During a period of slowdown in National Park creation in the latter half of the twentieth century, there was movement towards more citizen-owned protected resources and involvement in management, less federal land acquisition, and conservation initiatives encompassing more populated areas (Barrett, 2003; Little, 1975).

In 1961, the Cape Cod National Seashore was created as the first large US park with integrated public and private resource management. A citizen advisory board was included, but the park was still primarily managed and regulated by the NPS. In 1978, following the creation of the Heritage Conservation and Recreation Service within the US Department of the Interior, the idea of a reserve was established, along with four new areas that were precursors to the NHA. Barrett (2003) recalled, "The development of a reserve concept was in part motivated by a series of legislative proposals that were based on community desire to conserve special places (usually large landscapes) and the agency's concern that, if approached with the usual buy-and-hold strategy, these proposals would be prohibitively expensive" (p. 44). In these four new reserves, Barrett observed the following traits that would later be merged into the NHA concept:

1) Establishing a boundary based more on the definition of the resource than on the government's ability to acquire the land in question;
2) Harnessing the power of local land use authorities to preserve resources;
3) Embracing other agencies' parks and less-than-fee-simple ownership to preserve resources within the boundaries without federal acquisition;
4) Involving the local community and other interest groups through advisory commissions; and
5) Limiting funding by setting fixed dollar limits, matching requirements, or both. (Barret, 2003, p. 46)

These traits came together with the creation of the first NHA in 1984, now known as the Illinois & Michigan Canal National Heritage Corridor. This ushered in a new level of NPS area citizen ownership and leadership, including control of visitor and resource management and the responsibility to fund it. Yet, the official definition of a NHA by the NPS was not articulated until 1999 before the US Congress:

> A National Heritage Area is a place designated by Congress where natural, cultural, historic and scenic resources combine to form a cohesive, nationally distinctive landscape arising from patterns of human activity shaped by geography. These patterns make National Heritage Areas representative of the national experience through the physical features that remain and the traditions that have evolved in them. Continued use of National Heritage Areas by people whose traditions helped to shape the landscapes enhances their significance. (NPS, 2003, p. 2)

NHAs were created as a national version of the World Heritage Sites. The purpose of these areas, according to federal NHA legislation, is to "Recognize certain areas of the United States that tell nationally significant stories and to conserve, enhance, and interpret the areas' natural, historic, scenic, and cultural resources" (H.R. 581, 2015).

Currently, the NPS provides feasibility studies for NHA designation, although these are not always required. In 2003, the NPS issued its first draft standards to provide guidelines in the absence of a federally-established NHA designation system or any previously-issued NHA management policies (NPS, 2003). The NPS provides, at most, technical assistance to a designated, locally-run NHA management entity. Federal funding is limited to "seed" costs for establishing a viable management entity, with spending caps on annual funding and a sunset clause on total amount of federal support, although funds have been routinely extended past sunsets.

On January 28, 2015, proposed federal legislation that had expired with the close of the previous congress was re-introduced to the US House of Representatives, calling for the creation of national system to organize and guide current and future NHAs. If approved, the National Heritage Act of 2015 would formalize a structure for the loosely-regulated NHA program by directing the Secretary of the Interior to conduct designation feasibility studies, evaluate local entity management plans for approval, and conduct evaluations on the accomplishments of NHAs nationwide. To ease the federal funding burden and promote self-sustaining operations of NHAs, the bill also directs management plans to "include a business plan for the local coordinating entity that, at minimum, addresses management and operation,

products or services offered, the target market for products and services, and revenue streams" (H.R. 581, 2015). In contrast to previous NPS conservation strategies that federally fund visitor management programs, this underscores the importance of structuring NHAs so that tourism can provide a significant revenue for the implantation of management plans.

Since the first NHA designation 31 years ago, many more NHAs have been created under various configurations of resource types and places that range from mostly undeveloped to highly urban. Yet, regardless of content, each NHA operates in the same context: There is a necessity for a strong emphasis on education, recreation, and tourism to both satisfy the interactive purpose and provide resulting economic development to the areas for utilizing the NHA conservation land use strategy (Jarvis, 2012). This need calls for a greater understanding of tourism management, tourism-related benefits and effects, and indicators for assessing the effectiveness of NHA resource management.

Heritage Area Resources

The array of tangible and intangible heritage destination resources draws from a range of related area attributes including natural, cultural, and built heritage resources. These resources are not mutually exclusive in areas with a history of human habitation. Often, they are in a state of interaction with one another, such as how natural geography, flora, and fauna affect cultural land management practices, traditions, and cuisines. In turn, cultural practices through time shape aspects of the natural environment. Built heritage resources often reveal tangible interactions between natural and cultural resources. Together, these resources help construct a perceived reality of what a place is, which may be interpreted in many ways.

A study by the Caribbean Tourism Organization on the sustainable development of heritage tourism in the region stated that tangible resources are the primary focus of tourism development, and less emphasis is placed on intangible forms of heritage (Nurse, 2008). Tangible natural resources include elements such as climate, mountains, mangroves, guts (or ephemeral creeks), rain forests, beaches, coral reefs, flora, and fauna. Less tangible natural resources, such as natural history, also exist and are integrated with culture in inherited agricultural practices. Tangible or built cultural resources include historical buildings, locally-distinct architecture, monuments, and ruins. They also can include festivals, carnivals, and performance arts. Intangible cultural heritage resources include philosophies, traditions, definitive historical eras, sacred beliefs, ceremonies, and cultural practices (Nuryanti, 1996; Nuyaupane, 2006; Nurse, 2008).

Heritage Area Tourism

At its root, heritage tourism is a social phenomenon that tells the story of a place through tangible and intangible exchanges between a visitor and a destination's historic, natural, and cultural resources (Nurse, 2008). In practice, heritage tourism is often defined as a modern economic activity where these exchanges occur within the larger tourism market, whether as a primary interest or by way of peripheral exposure (McKercher et al., 2002). Without recreation and tourism, heritage areas would likely fail to meet the educational goals of heritage storytelling, and, in most cases, fail to provide the economic development needed to support or justify conservation alternatives.

The National Trust for Historic Preservation defined heritage tourism as "traveling to experience the places, artifacts and activities that authentically represent the stories and people of the past" (NTHP, 2013). While this definition leaves out the purpose of the NHA to also include current and future living landscapes as a component of heritage and not only historical elements, it does make the key distinction that heritage tourism is more than an activity; it represents an intention on the behalf of the visitor to seek out heritage experiences. In other words, it suggests that heritage tourism is underpinned by motivating factors that draw visitors in to learn its story.

Not all visitors to heritage areas are necessarily heritage tourists as defined above, and out of those whom may be considered heritage tourists, there are varying types and levels of intention behind their reasons to visit a given destination (Nyaupane, 2006). This creates difficulty in accurately assessing the specific traits of the heritage tourism market. As Acott et al. (2003) found in the well-developed field of ecotourism research, visitors exhibit varying depths of interest and inferring group homogeneity based on destination choice alone would be a mistake. The intent-based distinguishing trait of heritage tourists has naturally made travel motivation a key factor in identifying heritage tourism markets.

Later research attempted to tease out the motivational drivers among cultural tourists and isolate the market for further study. For example, McKercher et al. (2002) expanded on Acott's (2003) depth model to plot against the level of importance that cultural tourism played in decision to visit a destination. The study found five discrete market segments within the tourist population that were associated with distinct patterns in behavior. They ranged from

purposeful cultural tourists, who were strongly motivated to experience cultural tourism, to incidental cultural tourists, who also visited the site but demonstrated little interest in the cultural tourism experience.

The same line of market segmentation research has been applied specifically to heritage tourism to isolate heritage tourists and compare them with other groups within a given tourism population. Studies have challenged previous assumptions that the experience and benefit gained by heritage tourists is reliably explained by sociodemographic attributes, as has been the case in other niches (Prentice et al.,1998; Ryan & Huyton, 2000).

In other branches of tourism research, tourist typologies have been used extensively to understand the general orientation of tourists by groupings based on survey responses. This scientific approach is extremely useful for market research, as it may be used to identify and contrast separate markets within a given visitor population. Some example studies have categorized types of nature tourists (Mehmetoglu, 2006), perceptions of tourism service value (Gallarza & Saura, 2004), various labels of special interest tourism (Trauer, 2005), types of tourism innovations in response to tourist environmental concerns (Hjalager, 1997), and even the perceptions of photography used in promotional materials (Hunter, 2007). Others have used existing typologies to analyze collective spending patterns between groups (Valdez et. al, 2005).

A segmentation by motivation study by Nyaupane et al. (2006) on cultural heritage tourism found that visitors vary significantly in their desire for the depth of heritage experience on a continuum of heritage orientation. Those who were more strongly motivated for a deep

experience were the most seasoned and educated travelers and represented a desirable target market because of their increased participation in heritage activities, higher number of nights stayed at the destination, and openness to appreciate the story of the heritage area. The study rejected the notion that heritage tourists are largely generalists participating in secondary attractions and found that more than 80% of the visitors were strongly motivated to have meaningful interactions with heritage resources and attractions.

Heritage Tourism Motivation, Satisfaction, & Loyalty

As seen above, motivation has proven to be a distinguishing construct in estimating the size and characterizations of an area's heritage tourism market. These understandings can better inform NHA feasibility and impact studies when compared to previous studies that assumed homogeneity in an area's tourism population. Without a deep understanding of the available tourism market, well-intentioned heritage attractions may failure to support itself financially and create a burden on public financial resources (McKercher, 2001). Understanding the range of heritage tourism motivations may be especially useful in early stages of NHA planning, when assessing the likelihood that a viable market exists is important.

To understand how to keep a heritage tourism strategy viable over time or to measure the effectiveness of management actions on tourism, assessing and monitoring the quality of the tourism experience is essential. The construct of visitation satisfaction, widely studied in tourism literature, offers a useful measure of how well the destination performs in meeting the perceived experiential needs of visitors (Noe & Uysal, 1997). The construct of visitor loyalty provides a measure of how well visitors are committed to a product or, in this case, a

destination as a product (Yoon & Uysal, 2003). Loyal visitors are more likely to repeat their consumer behaviors, such as returning to a favorite destination, or to become destination advocates by recommending it to others through word of mouth. Together, these constructs provide measures that NHAs can use to estimate the quality of destination-visitor interactions and the strength of the heritage tourism market.

Yoon and Uysal (2003) used structural equation modeling to test relationships between motivations, satisfaction, and loyalty in a general tourism population. They confirmed established theory that loyalty is positively influenced by satisfaction. However, when motivation was the test subject, the type of motivation was discovered to be a significant determinant on the level of satisfaction. Pull type motivating factors, which draw a tourist to a place, were negatively associated with satisfaction, whereas satisfaction was not affected by push factors, which are more general motivations of escape from a home location and are not specific to a destination's attributes. However, loyalty was positively influenced by push motivations without the mediating effect of satisfaction.

This research suggests that while NHAs may be focused on attribute attractiveness, more general emotional needs of visitors must also be considered in the complex relationship between motivation, satisfaction, and loyalty. However, such a model has yet to be applied in a heritage tourist study. Does this model hold true in a heritage market when compared to more general tourism market in the same population? The answer to this question may help NHAs develop more precise assessments of its heritage tourism market.

Heritage Area Tourism Planning

Heritage tourism planning is a form of community-based planning that requires an approach that considers the perspectives, needs, and desires of both the resident destination population and of potential visitor markets alike. The promise of positive effects (such as preservation of natural and cultural heritage, creation of infrastructure, and growth of economy) from tourism as an economic development alternative has effectively shifted the resource demand to the local host community itself (Andriotis, 2001). This has resulted in a variety of community perceptions, preferences, and attitudes about tourism development, which are critical for planners to consider in reaching a consensus tourism policy (Andriotis, 2005).

Trends in tourism research have been moving towards more informed planning processes that include input either from local resident stakeholders or tourists, but often not both in an integrated fashion. Harrill (2004) said, "As a global means of economic development, tourism planning is moving gradually, from the edges of planning practice to the center, and with this movement will follow important questions regarding socioeconomic, political, and cultural representation and equity" (p. 263). As heritage tourism planning progresses, new processes are needed to gather information about matching visitor and resident preferences for sustainable development.

The process of planning for sustainable tourism development or rejuvenation hinges on key collaborations between a variety of stakeholders for successful implementation and subsequent management (Andriotis, 2005; Ball, 2002; Cole, 2006; Harrill, 2004; Medeiros de

Araujo & Bramwell, 1999; Weaver & Lawton, 2007). Unplanned, or poorly-planned, tourism development can contribute to many undesirable social and environmental effects that result in a stagnation or decline of tourism, which can be especially detrimental to insular areas that have a dependence on tourism as a major economic contributor (Wilkinson, 1987; Andriotis, 2001).

However, community-based tourism planning remains a difficult and daunting task because of the inextricable and unwieldy assemblage of social, biophysical, psychological, economic, and political factors that penetrate communities and peripheral markets (Wilkinson, 1987). While some researches promote the comprehensive inclusion of all market elements into a single regional plan to reduce sub-sector conflicts (Gunn & Var, 2002), others suggest an attempt to balance stakeholder input with that of government agencies, autonomous Non-Government Organizations (NGO's), community organizations, industry professionals, and resident communities (Dallen, 1998; Andriotis, 2001; Treuren & Lane, 2003). Yet even in heritage areas, while community members receive benefits and impacts, they have minimal input in overall management decision making (Su & Wall, 2014).

Benefits & Impacts of Heritage Area Tourism

From what little research has been done on NHA economic development impacts specifically, heritage tourism has been found to play a primary role in being the most important economic development contributor among leading economic impact factors. A recent study funded by the NPS estimated that, together, the 49 NHAs directly and indirectly produce 12.9 billion dollars in area economies, support 140,000 jobs, and create 1.2 billion dollars in tax

revenue (Umbach, 2014). These NHA benefit figures are extrapolations from case studies of six NHAs that use the entire tourism population in each area as a basis for estimation, and include direct and indirect tourism expenditures such as lodging, restaurants, transportation, and activities. Results in those six areas were then applied to the total tourism populations of every other NHA and totaled. Yet, because of the methods by which these figures were obtained, the resulting estimations were applied with liberation.

A limitation of the current approach used above to assess economic impacts and other aspects of NHA effectiveness, is that an entire area tourism population with NHA status is assumed to have been visited because of the heritage area. However, previous segmentation studies show that visitation to heritage areas is not always motived by unique destination attributes (Nyaupane, 2006). Often, heritage attractions are visited as secondary attractions. This demonstrates a need for more precise measurement in how actual heritage tourists are identified within the larger tourism population in initial NHA feasibility studies and for the assessment and monitoring of designated NHA benefits and impacts.

From the destination's viewpoint, perhaps the most salient potential benefit of a well-defined heritage tourism strategy is that its distinguishing heritage story lived out through its heritage resources is generally not substitutable with other destinations. In other words, one can only get that experience in one place, if it is to be authentic. Mass tourism strategies focus primarily on quantity and largely substitutable experiences - "get away" beaches, all-inclusive themed resorts, casinos, and so on. Heritage and other niche tourism strategies, such as ecotourism and cultural tourism, tends to focus more on the quality or meaning of the

experience for both the visitor and destination population. However, in practice, they are not mutually exclusive.

While heritage tourism may lend itself to smaller travel service providers, smaller hotels and alternative lodging (such as home-stays, family inns, campgrounds or farm stays), it may also be scaled up as primary or secondary offerings for the larger mass tourism market, with caution. Associated risks at any scale of operation include commodification of natural and cultural resources, and a degradation of those resources or loss of meaning. Risks are considered greater as volume and development increases. However, the primary key attribute of heritage tourism from a market perspective lies in the non-substitutability of well-planned heritage tourism strategies, because it's unique set of natural and cultural resources and how a destination chooses to use them to tell their story.

Research has indicated that heritage tourism comes with a set of potentially significant negative impacts that should also be carefully considered and managed. Endreson (1999) argued for the recognition of a place's cultural resources as a finite pool potentially exhaustible by tourism development and exploitation, often overlooked by ecotourism strategies and attractions. The author listed, from a state-of-knowledge review of relevant literature on niche sustainable tourism, the positive and negative impacts of social identity and culture (Table 1.1). Impacts may be specific to regional areas, such as the Caribbean, which served as the study area for this research. Some threatening impacts that are characteristic of the transitional period between the final stages of tourism development in the Caribbean include: construction

and waste management, mangrove and reef destruction, decline in fisheries, marine and terrestrial biodiversity loss, ecosystem service failure, water and power shortages, overcrowding, increased social tensions between classes, real estate inflation, and a decline in visitor satisfaction and the quality of life for residents (Beekhuis, 1981; Holden, 1988; McElroy, 2003).

Table 1.1

Potential Impacts of Heritage Tourism

Positive	Negative
Building community pride	Commodification and cheapening of culture and traditions
Providing a non-substitutable form of tourism and economic development	Degraded natural resource and eco-system services
Enhancing the sense of identity of a community or region	Alienation and loss of cultural identity
Promoting intercultural/international understanding	Undermining of local traditions and ways of life
Encouraging revival or maintenance of traditional crafts	Displacement of traditional residents
Enhancing external support for minority groups and preservation of their culture	Increased division between those who do and do not benefit from tourism
Providing funding for heritage site preservation and management	Conflict over (and at times loss of) land rights and access to resources (including the attractions themselves)
Enhancing local and external appreciation and support for cultural heritage.	Damage to attractions and facilities
	Loss of authenticity and historical accuracy in interpretation

Notes: Adapted from Endreson, 1999, p. 7

McCool (1995) explained that poor planning and execution may result in potential loss of natural and cultural heritage with economic consequences when he wrote, “Many of these decisions are irreversible because once communities lose the character that makes them distinctive and attractive to nonresidents, they have lost their ability to vie for tourist-based income in an increasingly global and competitive marketplace (p. 2).”

Whether mass tourism or heritage tourism is being developed, they are often subject to what has been described as the “destination life-cycle model” (Albuquerque & McElroy, 1992). This model asserts that tourism development often makes a familiar rise and fall, as destinations move through an early stage of low-density exploration, to rapid consolidating development after the place is “discovered,” to a third stage called “maturity,” where natural amenities are largely replaced by man-made attractions and tourism either is rejuvenated or it declines.

The Caribbean Research and Development Center (Holden, 1988) considered a “self-destruct theory” for insular destinations, in that tourism activities are ultimately dependent on environmental and social health, and that impacts to both can cross thresholds of sustainability for the local community. When this occurs, peaks in growth are followed by decline after the attractive leisure resources are exhausted or impacted enough to a point where future tourists choose alternate locations with more attractive conditions. Additionally, traveler preferences may change over time, so potential shifts in product packaging should carefully consider the carrying capacity and exhaustible limits of heritage resources over time. Thus, if benefits and impacts are not understood and managed properly over time, they may result in undesirable

consequences and, ultimately, a failure in heritage tourism management goals (Manning, 1993).

The science of resource impact monitoring has become commonplace in most national parks and other federally managed lands, and more recently in world heritage sites, but no such methods have been standardized for NHAs. Management frameworks to inventory and monitor impacts have been applied in many other types of conservation areas in the US and to international sites, such as the Limits of Acceptable Change (LAC), the Recreation Opportunity Spectrum (ROS), the Process for Visitor Impact Management (VIM), the Visitor Experience and Resource Protection process (VERP), and the Management Process for Visitor Activities (VAMP) (Nilsen & Tayler, 1997). While all have common traits, they were developed in different contexts of management applications and impact control purposes and, thus, vary in form and function.

Yet, in considering tourism visitor management, Manning (1999) pointed to the difficulty in applying previous indictor-based frameworks for tourism impacts. Given the wide scope of tourism management dimensions and variation in the sets of important indicators for specific location impacts, lists of indicators can be lengthy and too unwieldy to incorporate in ongoing impact monitoring systems (Monz & Leung, 2006). Manning recalled the 1993 World Tourism Organization task force that struggled to develop uniform indicators. While a few members suggested only one single measure of impact, he wrote, “Some scientists suggested hundreds of specific indicators [including] as many as 50 just to describe the quality of seawater” (Manning, 1999, p. 179).

To pare down impacts on community-based tourism areas such as NHAs, Choi and Sirakaya (2006) developed an extensive expert panel list of 125 sustainable tourism impact indicators reduced and organized into six dimensions: economic, social, cultural, ecological, political, and technological. The authors ranked the importance of impact indicators by the mean and soundness of expert respondent agreement scores. Each indicator in the study was categorized under a key theme belonging to one of the six dimensions. For example, a key theme in the cultural dimension was cultural site management, which included high-ranking indicators such as the 1) maintenance level of sites and 2) the number of officially designated sites and their management. The top three social dimension indicators were: 1) Resident involvement in tourism industry, 2) Visitor satisfaction toward the tourism destination, and 3) litter/pollution. In all, the rankings provide a systematic basis for area managers to select and prioritize what indicators are relevant to monitor.

To develop ecological impact indicators for several NPS coastal park networks, Monz and Leung (2006) employed a three-step process, including: 1) scoping from management stakeholders fundamental impact concerns, 2) conceptually modeling systematic impact processes, and 3) selection of key indicators and their ranking of importance. Each indicator was then assigned a monitoring approach and, finally, a unit of measure. This same approach of indicator development can be applied in a NHA tourism management framework.

Importantly, Monz and Leung (2006) stressed a balance between the accuracy, reliability, and efficiency of indicator selections. A process is needed to make manageable the most effective measures. The authors wrote, “Not all of the candidate vital sign measures

identified can or should be implemented in a monitoring program. With all monitoring efforts, practical considerations, such as the monetary cost, staff time, measurement protocol complexity, and importance to park management should play a role in determining a feasible approach" (Monz & Leung, 2006, p. 22).

An approach to assess heritage tourism impacts by UNESCO (2011) utilized a similar process, however, with the majority of indicators leading to one primarily important measure product, the Outstanding Universal Value (OUV). Because world heritage sites are designated on the basis of their OUV, this measure is used as an overall metric to summate an area's status within the world heritage site network and, when needed, identify areas at risk of losing OUV to resource impacts. Yet, given the subjective nature of OUV assignment, ranking on world heritage sites by a single measure could prove problematic if not controversial.

Clearly, there is much development needed in NHA tourism management for objective measures of tourism market estimation, a greater understanding of heritage tourist attitudes and behaviors, and the types of impacts that are associated with heritage tourism for sustainable area management. As a relatively new, yet popular, area conservation strategy, the specific aspects of NHA visitor management require additional inquiry to: 1) properly assess the feasibility of NHA designation, and 2) evaluate its management priorities through resource assessment and monitoring methods. The following research attempts to provide applied methodology to meet these needs.

Statement of the Problem

Despite the growing prevalence of NHA designations, systematic approaches are not available for objectively determining the feasibility of NHA tourism development with consideration of the unique aspects of the heritage market. Additionally, there is a lack of predictive and results-oriented performance measures for evaluating the efficacy of heritage resource conservation and visitation management. As a result, current feasibility guidelines ignore visitor perspectives, leading to few NHAs that have achieved financial sustainability and management goals. However, increased understanding of the sensitivities of the heritage tourist market can help predict the success of heritage tourism development. This understanding is particularly important for areas with insular tourism economies that provide a large percentage of the gross domestic product, such as in the Caribbean, the study area for this research.

Purpose of the Study

The purpose of this study was to provide a methodological framework that compliments community based planning efforts to: 1) determine the feasibility of NHA tourism development from a market assessment approach, and 2) identify results-oriented performance measures for evaluating the efficacy of NHA tourism management.

Research Questions

This study was guided by research questions produced by a review of the gaps in the literature and current NHA planning procedures. The research questions were:

- Does heritage tourism constitute a niche market?

- How can the suitability of heritage tourism development be assessed for potential NHAs?
- How can NHAs prioritize heritage tourism management actions in a regional context?
- How can heritage tourism market research be integrated with existing community-based planning methods in a comprehensive framework?

Significance of Study

Heritage areas, including NHAs and World Heritage Sites, have suffered from a lack of comprehensive planning and ongoing resource monitoring protocols. This work is important so that the well-developed community-based planning procedures may be adequately informed by objective, scientifically sound heritage market information. Past research has demonstrated that even well-planned and well-executed heritage tourism development initiatives may fail if they are not guided with accurate and reliable knowledge about their regional market's needs and preferences (McKercher, 2001). When economic sustainability is not achieved, the ongoing conservation of natural and cultural heritage resources may be at risk. Results of this study are intended to provide new insights into the heritage tourism market and integrative planning methodologies for the sustainable management and further development of the NHA system.

Layout of Study

This work presents two manuscripts for peer-reviewed publication in academic journals in the field of tourism management. Each is a case study that provides an example of methods required to develop a heritage tourism planning framework for NHAs. The final chapter

synthesizes these results in a proposed planning and management framework that integrates local stakeholder and visitor input for NHA.

Methodology

The methodology used in this research was adapted from prior tourism study literature (Oh, 2001; Yoon & Uysal, 2005) and was used to test research hypotheses, which represent common concerns for NHA tourism planning and management. In doing so, this work provides applied examples of how such methodologies may be applied in other areas and for eventual integration into a heritage tourism planning framework. Such a framework should be able to combine local stakeholder input with visitor input to provide a more comprehensive approach to heritage tourism planning and management, which, in practice, has previously ignored visitor perceptions. Because the stakeholder study methods are already well-developed and regularly applied (NHA, 2003), they are outside the scope of this study. Instead, this research in chapters 2 and 3 focuses exclusively on the exploration of methods for better understanding of the heritage tourism niche market. The final chapter presents how this visitor input methodology may be integrated with existing stakeholder-based study practices.

Prior to development of the survey instrument used in both studies in this study, a participatory mapping process was undertaken that was able to define the geographic extent of the heritage area, and the destination attributes included. The methods of the mapping first included a stakeholder scoping process, which employed a snowballing technique of finding suitable stakeholders. This was achieved through the generation of lists of people who qualified in different stakeholder areas, such as government policy makers, tourism related businesses,

cultural tradition bearers, and other area residents. Out of these categorical lists, stakeholders were chosen using a randomly-generated number and invited to the meetings. During the meetings, respondents were asked write down important places on the island that represented the heritage of the place according to its natural, cultural, scenic, and historic characteristics. Following that 10-minute period, they each stood up and placed their sticky notes on the large wall map of the island.

The results of the meetings are presented in Appendix A to provide a basic descriptive understanding of the target heritage area within the study region. Each point on a map represent a place that holds meaning of heritage to a local stakeholder. Additionally, it shows how heritage attributes were grouped by stakeholders in the meetings. These maps helped inform the selection of study criteria and creation of the survey instrument.

Summary

Clearly, there is a void of research regarding the assessment and understanding of the heritage tourism market for NHAs. Furthermore, visitor input methodologies will be explored for use in NHA feasibility studies and subsequent heritage tourism planning and management activities. Considering the proliferation of NHAs in the past three decades and the growing financial commitment of federal funds to support NHA development, the development of a comprehensive heritage tourism planning framework is long overdue.

The following chapters of this research are devoted to addressing the needs that potential and established NHAs have to become sustainable destinations in the long term of their existence. Localized stakeholder community-based planning efforts already used in NHA

feasibility research will be greatly enhanced by the incorporation of heritage market knowledge and study processes presented in this research.

This study aims to offer a sound, scientifically valid alternative to the "build it and they will come" approach that has been dominant in prior NHA planning. This aim will be accomplished by contrasting heritage tourists and heritage destinations with other established tourism typologies. Furthermore, it will use and modify methods extracted from prior research and theory in the field of general tourism studies for use that is tailored to NHA planning and management. Finally, based on prior planning frameworks utilized in national parks and other conservation areas, a heritage tourism planning framework is proposed that incorporates the supply and demand sides of the heritage tourism phenomenon.

References

Albuquerque, K., & McElroy, J. (1992). Caribbean small-island tourism styles and sustainable strategies. Environmental Management 16(5), 619-632.

Acott, T. G., Trobe, H. L. L., & Howard, S. H. (1998). An Evaluation of Deep Ecotourism and Shallow Ecotourism. *Journal of Sustainable Tourism, 6*(3), 238-253. doi: 10.1080/09669589808667314

Andriotis, K. (2001). Tourism Planning and Development in Crete: Recent Tourism Policies and their Efficacy. Journal of Sustainable Tourism, 9(4), 298-316.

Andriotis, K. (2005). Community Groups' Perceptions of and Preferences for Tourism Development: Evidence from Crete. *Journal of Hospitality & Tourism Research, 29*(1), 67-90.

Baloglu, S., & Uysal, M. (1996). Market segments of push and pull motivations: a canonical correlation approach. *International Journal of Contemporary Hospitality Management, 8*(3), 32-38.

Barrett, B. (2003). Roots for the National Heritage Area Family Tree. *The George Wright Forum, 20*(2), 41-49.

Beekhuis, J. (1981). Tourism in the Caribbean: Impact on the economic social and natural environment. Ambio, 10(6), 325-331.

Choi, H. C., & Sirakaya, E. (2006). Sustainability indicators for managing community tourism. *Tourism Management, 27*(6), 1274-1289.

Dallen, T. J. (1998). Cooperative tourism planning in a developing destination. Journal of Sustainable Tourism, 6(1), 52-68.

Dunn Ross, E. L., & Iso-Ahola, S. E. (1991). Sightseeing tourists' motivation and satisfaction. *Annals of Tourism Research, 18*, 226-237.

Endreson, K. (1999). Sustainable Tourism and Cultural Heritage: a review of development assistance and its potential to promote sustainability. *Nordic World Heritage Foundation Report* (pp. 1-56).

Gunn, C., & Var, T. (2002). Tourism planning: basics, concepts, cases (4th ed.). Washington, D.C.: Taylor and Francis.

Holden, J. S. (1988). Pattern and impact of tourism on the environment of the Caribbean. Tourism Management 119-127.

Iso-Ahola, S. (1990). Perceptions of boredom in leisure: Conceptualization, reliability, and validity in the leisure boredom scale. *Journal of Leisure Research, 22*, 1-17.

Kastenholz, E., D., D., & G., P. (1999). Segmenting tourism in rural areas: the case of North and Central Portugal. *Journal of Travel Research, 37*(4), 353-363.

Laven, D. N., Krymkowski, D. H., Ventriss, C. L., Manning, R. E., & Mitchell, N. J. (2010). From partnerships to networks: New approaches for measuring U.S. National Heritage Area effectiveness. *Evaluation Review, 34*(4), 271-298. doi: 10.1177/0193841x10370668

Little, C. (1975). *Greenline Parks: An Approach to Preserving Recreational Landscapes in Urban Areas*. Library of Congress, Congressional Research Service. Environmental Policy Division, Washington, DC.

Manning, E. W. (1993). What tourism managers need to know: A practical guide to the development and use of indicators of sustainable tourism. Madrid, Spain: World Tourism Organization.

Manning, T. (1999). Indicators of tourism sustainability. Tourism Management, 20(1), 179–181.

McCool, S. F., & Martin, S. R. (1994). Community Attachment and Attitudes Toward Tourism Development. Journal of Travel Research, 32(3), 29-34.

McElroy, J. L. (2003). Tourism Development in Small Islands Across the World Geografiska Annaler, Series B: Human Geography, 85(4), 231-242.

McKercher, B. (2001). Attitudes to a non-viable community-owned heritage tourist attraction. *Journal of Sustainable Tourism, 9*(1), 29-43.

McKercher, B. (2002). Towards a classification of cultural tourists. *International Journal of*

Tourism Research, 4(1), 29–39.

Molera, L., & Pilar Albaladejo, I. (2007). Profiling segments of tourists in rural areas of South-Eastern Spain. [Article]. *Tourism Management, 28*(3), 757-767.

Monz, C., & Leung, Y.-F. (2006). Meaningful Measures: Developing Indicators of Visitor Impact in the National Park Service Inventory and Monitoring Program. *The George Wright Forum, 23*(2), 17-27.

National Park Service (2003). National Heritage Area Feasibility Study Guidelines: Draft. National Park Service.

National Park Service. (2010). St Croix National Heritage Area Feasibility Study (pp. 1-202): United States Department of the Interior: National Park Service.

National Heritage Area Act of 2015, H.R. 581, 114th Cong. (2015).

Nilsen, P., & Tayler, G. (1997). A Comparative Analysis of Protected Area Planning and Management Frameworks. *In: McCool, Stephen F.; Cole, David N., comps. 1998. Proceedings—Limits of Acceptable Change and related planning processes: progress and future directions; 1997 May 20–22; Missoula, MT. Gen. Tech. Rep. INT-GTR-371. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.* (pp. 49-58).

Noe, F. P., & Uysal, M. (1997). Evaluation of outdoor recreational settings. A problem of measuring user satisfaction. Journal of Retailing and Consumer Services, 4(4), 223–230.

Norman, W., & Carlson, M. (1999). *An investigation of the seeking-escape theory as a segmentation tool in tourism marketing.* Paper presented at the 30th Annual Travel and

Tourism Research Association Conference Proceedings, Boise, ID.

Nurse, K. (2008). Development of a strategic business management model for the sustainable development of heritage Tourism Projects in the Caribbean (p. 108). St. Michael, Barbados: Caribbean Tourism Organization.

Nuryanti, W. (1996). Heritage and postmodern tourism. Annals of Tourism Research, 23(2), 249-260.

Nyaupane, G. P., White, D. D., & Budruk, M. (2006). Motive-Based Tourist Market Segmentation: An Application to Native American Cultural Heritage Sites in Arizona, USA. *Journal of Heritage Tourism, 1*(2), 81-99.

Park, D.-B., & Yoon, Y.-S. (2009). Segmentation by motivation in rural tourism: A Korean case study. *Tourism Management, 30*(1), 99–108.

Prentice, R. C., Witt, S. F., & Hamer, C. (1998). Tourism as experience: The case of heritage parks. *Annals of Tourism Research, 25*(1), 1-24.

Ryan, C., & Huyton, J. (2000). Who is interested in Aboriginal tourism in the Northern Territory, Australia? A cluster analysis. *Journal of Sustainable Tourism, 8*(1), 53-88.

Service, N. P. (2003). National Heritage Area feasibility study guidelines: UNAPPROVED DRAFT. United States National Park Service, Department of the Interior.

Stott, P. H. (2011). The World Heritage Convention and the National Park Service,1962–1972. *The George Wright Forum, 28*(3), 279-290.

Stueve, A. M., Cook, S. D., & Drew, D. (2002). The Geotourism Study: Phase 1 executive summary. 24.

Su, M. M., & Wall, G. (2014). Community Participation in Tourism at a World Heritage Site: Mutianyu Great Wall, Beijing, China. [Article]. *International Journal of Tourism Research, 16*(2), 146-156. doi: 10.1002/jtr.1909

Timothy, D. J., & Boyd, S. W. (2003). Heritage Tourism. Harlow, U.K.: Prentice Hall.

Treuren, G., & Lane, D. (2003). The Tourism Planning Process in the Context of Organised Interests, Industry Structure, State Capacity, Accumulation and Sustainability. *Current Issues in Tourism* 6(1), 1-22.

Umbach, T. (2014). Economic and Community Impact of National heritage area Sites (pp. 1-39): National Park Service.

UNESCO. (2011). Guidance on Heritage Impact Assessments for Cultural World Heritage Properties (p. 19): International Council on Monuments and Sites.

UNESCO. (2015). Retrieved March 15, 2015, from: http://whc.unesco.org/en/faq/

Virgin Islands Bureau of Economic Research (2012a). Annual Tourism Indicators. Retrieved September 1st, 2012, from http://www.usviber.org/pdfs/TOUR11.pdf.

Wilkinson, P. F. (1987). Tourism in small island nations: a fragile dependence. Leisure Studies, 6(2), 127-146.

CHAPTER 2

DOES HERITAGE TOURISM CONSTITUTE A NICHE MARKET?[1]

[1] Olive, N. D., Tarrant, M.A., and Jennings, C. A. To be submitted to *Tourism Management*

Abstract

The recent proliferation of U.S. National Heritage Areas (NHAs) as a federally-supported conservation and economic development strategy has created a need for a better understanding of the heritage tourism market's unique characteristics. However, there is a notable lack of heritage tourism literature to address how planning may differ from the mass market or other mature tourism market niches, such as ecotourism. This study expands upon prior research by highlighting relationships between push and pull motivations, satisfaction, and destination loyalty to test assumptions about the heritage tourism market and to see how well previous mediation structural equation modelling holds up in the heritage segment. Findings from this study support the hypothesis that the orientation of a tourist to destination heritage attributes significantly moderates the mediating effect of satisfaction between motivations and loyalty between groups of varying heritage orientation, including "heritage enthusiasts," "eco-focused," and "heritage apathetics." Secondary findings show that heritage enthusiasts exhibited stronger pull than push motivations, had the highest level of loyalty, contained the highest percentage of females, had obtained the lowest educational levels and household income, and were the most likely to be traveling for reasons of personal heritage. Results suggest that heritage tourism is a niche that requires special attention to fulfill NHA management objectives.

Keywords

Heritage tourism planning, tourist motivations, tourist loyalty, moderated mediation, structural equation modeling

Introduction

The rapid proliferation of National Heritage Areas (NHAs) in the United States has raised new concerns regarding the planning and management of heritage area tourism. Shadowing the expansion of World Heritage Areas, which grew to a total of 1,031 sites since 1978 (UNESCO, 2015), 49 United States NHAs have now been designated since 1984 and more are under consideration. If this trajectory continues, NHAs may soon outnumber the 58 units of the US National Park system, now in its 100th year of establishment. As the number of heritage areas has expanded worldwide, so has a corresponding need to distinguish heritage tourists from other prevalent tourist types for more targeted and sustainable tourism planning and management. This is particularly true for NHAs, which have two consistent qualities that require focused attention. First, they embody an integrated concept of natural and cultural resources conservation and sustainable tourism. Second, they are locally-managed entities with limited federal funding for operations. Therefore, tourism market development is often essential to achieve the dual goals of conservation and economic development that are embodied in the NHA concept.

Ashworth (2010) argued that while much emphasis has been placed on marketing and management of heritage areas, basic assumptions about heritage tourism have remained untested. Ashworth (2010) placed the assumptions into three groupings: 1) The heritage tourism market's size and patterns of consumption, 2) heritage tourist behaviors, and 3) tourist relationships with the destination. Up to this point, heritage tourism planning and management has operated as if heritage tourists were not different than the general tourist.

Prior studies in tourism management have long reviewed the relationships between vacation travel constructs such as motivation, trip satisfaction, and destination loyalty to better understand tourist decision making processes and travel behavior (Pizam et al, 1978; Kozak, 2002; Hui et al., 2007; Chi & Hu, 2008; Ramseook-Munhurrun et al., 2015). In addition to the general tourist population, certain niche tourism travelers, such as eco-tourists and cultural tourists, have been substantially studied under these auspices, along with the identification of key demographic and attitudinal markers that have further characterized these markets (Weaver & Lawton, 2010; McKercher & du Cros, 2003). However, the younger phenomenon of heritage tourism, which conceptually combines natural and cultural resources in a comprehensive, experiential story of a place, has thus far received little literature attention as to how heritage tourists stand apart from other common and relatively well-understood typologies. This omission has caused heritage tourism planning and management to operate under assumptions borrowed from other adjacent types of tourism research (Ashworth, 2010).

The bulk of literature on heritage tourists has relied principally on in-situ tourism surveys at locations and attractions such as museums and parks that are of heritage interest. Therefore, such studies are limited to understanding populations with common travel behaviors and are unable to estimate or compare the heritage tourism market as it fits into the overall tourism population of an area or region. Additionally, they are prone to problems of tourist displacement.

With the proliferation of tourism destinations and unprecedented competition between a variety of global and regional travel opportunities, there is a need to understand how certain

types of tourists compare to others in their decision making processes. This is especially true for heritage tourism, which has been promoted as an economic development tool for host communities to incentivize preservation of natural and cultural heritage resources in a cohesive fashion. In practice, this must occur across a wide swath of public and private interests. At once, destination stakeholders must understand the sensitivities of their heritage tourists while also understanding the overlaps and departures from other, perhaps more familiar, tourist typologies in their regional visitor populations. Finally, the nature of heritage tourism itself, as a set of psychological patterns, needs to be distinguished on the conceptual basis of natural and cultural heritage.

Within the younger branch of heritage tourism research, studies into these constructs have often been restricted to visitor populations at specific heritage tourism attractions. Yet, none have compared how heritage tourist travel sensitivities directly differ from that of an overall area tourism population. In particular, the varying strength of structural construct relationships between visitor groups may enable the viewing of heritage tourism as a potentially distinct niche market.

In contrast to National Parks and many World Heritage Areas, NHAs are solely managed by local entities with limited centralized funding for operations, including heritage tourism marketing and management. Because of the vital role that heritage tourism serves as both a vehicle for experiential education and for providing benefits to the local community through economic development, a knowledgeable understanding of an area's heritage tourism market is paramount for sustainable NHA management.

Theoretical Model

The basis for the hypothetical model of heritage tourist experience is derived from prior research in tourism destination loyalty theory, where Yoon and Uysal (2005) identified a mediating effect of satisfaction between motivation and loyalty. Mediation effects, which are analogous to indirect effects with some distinction (Holmbeck, 1997), occur when an independent variable (motivation) has an effect on a dependent variable (loyalty) due either to a full or partial effect of a third variable, known therefore as a mediator (satisfaction; Preacher & Hayes, 2004). In Yoon and Uysal's (2005) case, pull and push motivational constructs had inverse effects on satisfaction, where pull had a negative influence on satisfaction and push a positive one. Pull effects were fully mediated by trip satisfaction, while push effects had a partial direct effect on loyalty independent of the satisfaction mediator. In doing so, the authors suggested using this model to further understand how it holds true in other destinations and specific tourism markets in a population.

As such, the purpose of the theoretical model presented herein is to learn how the category of tourist, based on heritage orientation, moderates the previously- established mediating relationship of satisfaction in a regional destination population (Fig. 2.1). The results aim to distinguish natural and cultural heritage tourists from the non-heritage market based on their critical differences of latent structural weight influence and group differences in latent mean constructs.

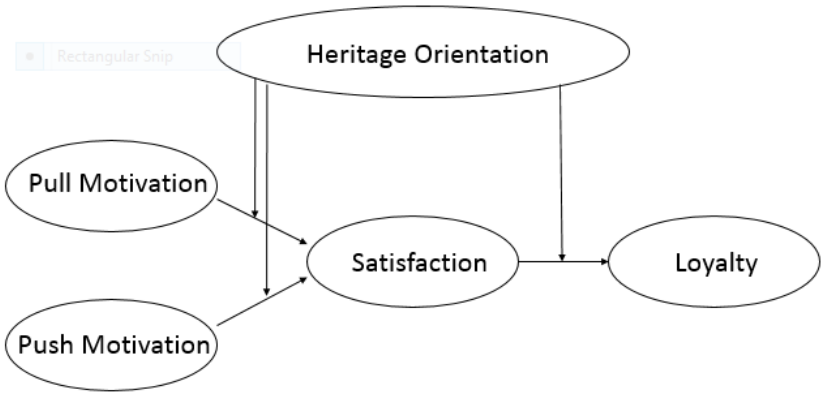


Figure 2.1. Theoretical Model of Heritage Tourist Experience.

Prior to testing the structural differences between heritage tourists and other types, characterizing the groups by examining any significant differences between demographics, trip spending behavior, attitudes towards natural and cultural heritage, measures of loyalty, and, finally, the latent constructs that comprise the theoretical model, is useful. The practice of establishing the relative differences in these measures provides a basic framework, over which the canvas of structural equation modelling (SEM) may be stretched, to illustrate each group's similarities and differences. It also may serve to identify and validate the clusters created to segment the market based on differences of heritage perspectives.

An earlier study found such differences in similar groupings of cultural heritage tourist (O'Leary et al., 1998). However, it left out natural heritage as a dynamic of the heritage-based clustering despite Hughes' call for clustering populations on an integrated concept that captures both natural and cultural components (Hughes, 1989; Hughes, 1994). Because there are currently no driving theories to suggest patterns of differences in the published relevant

literature, this research set out to establish whether two-way differences are present in the following hypotheses:

H1: There is a significant mean difference of visitor sex, age, income, and education amongst groups of tourists based on the grouping factor of heritage orientation.

H2: There is a significant mean difference of spending amongst groups of tourists based on the grouping factor of heritage orientation.

The next three hypotheses are based on the logic that tourists who are heritage oriented are more likely than others to have positive attitudes toward their destination's unique characteristics and the preservation of its heritage resources:

H3: Heritage tourists have significantly higher mean averages in willingness to pay more for natural and cultural heritage protection than other types of tourists in the population.

H4: Heritage tourists have significantly higher mean averages in how often they seek out companies that provide natural and cultural heritage protection than other types of tourists in the population.

H5: Heritage tourists have significantly higher mean averages in likeliness to return and to recommend their destination to others than other types of tourists in the population.

Next, we test the assumption that heritage tourists are more likely to exhibit stronger pull motivations than other tourists. Prior research suggests that heritage tourists represent a larger tourism shift away from escape to enrichment, and therefore are driven more by pull-type motivations than other groups (Nyaupane et al., 1996; Silberberg, 1995). Therefore, we test for the following differences between groups:

H6: There is a significant mean difference of motivations between groups of varying heritage orientation.

H7: Heritage tourists have significantly higher pull motivations than tourists classified as non-heritage tourists.

Without prior studies to distinguish the levels of trip satisfaction or loyalty of heritage tourists compared to other tourists, we test for two-way difference as follows:

H8: There is a significant difference of measures of satisfaction amongst groups of varying heritage orientation.

H9: There is a significant difference of measures of loyalty amongst groups of varying heritage orientation.

Finally, we test for structural differences among the constructs of motivation, satisfaction, and loyalty between the groups. The first step is to confirm the Yoon and Uysal's (2005) model fits our population. The next is to test whether the heritage orientation-based population segmenting moderates these relationships, and if so, how. Based on the logic of the assumption that heritage tourists a have more positive attitudes towards their specific destination (Chen & Chen, 2010), we reasoned that the measurement of trip performance,

satisfaction, has less of a mediating effect on the relationship between motivation and loyalty. Therefore, we test for moderated mediation effects, which also may be referred to as a conditional indirect effect. In this instance, the condition is the type of tourist and the indirect effect is the mediating influence of satisfaction in between travel motivation and destination loyalty (Preacher & Hayes, 2004; Muller et al., 2005). The null hypothesis for the following alternatives is that there is no such moderation effect.

H10: Heritage tourism orientation moderates the mediating relationship between motivation, satisfaction and visitor loyalty, such that groups who are heritage oriented have a positive and strong relationship between pull motivation and loyalty, while groups that are non-heritage oriented have relationships between these variables that are positive and weak.

H11: Heritage tourism orientation moderates the mediating relationship between motivation, satisfaction and visitor loyalty, such that groups who are heritage oriented have a positive and weak relationship between trip satisfaction and loyalty, while groups that are non-heritage oriented have relationships between these variables that are positive and strong.

Theoretical Overview of Constructs

Travel Motivation

The construct of Motivation was succinctly defined by Touré-Tillery and Fishbach (2014), who described it as "the psychological force that enables action" (p. 328). Based on this definition, motivation is an internally logical antecedent, and possibly a causal force, to

subsequent outward actions or a particular state of mind. Hence, research on the construct has commonly focused in applied situations on how certain types and/or strengths of motivations are linked to actions of a given study interest. In cognitive and affective motivation theory, motivations are compared against other psychological measures, such as memory recall ability and mood evaluations. In behavioral theory, motivations are often compared against performance (i.e., speed, accuracy, productivity) and choice (i.e., selection of products, or vacation destinations). Regardless of the theoretical underpinnings of a study, motivation remains an unobservable, dynamic force that must be clearly defined by the researcher and carefully measured indirectly to accurately and reliably reflect the study purposes and contexts of the construct inclusion. Thus, the study of travel motivation is concerned largely with the determination of why someone would choose one vacation destination over another. More specifically, it attempts to discover patterns in which motivational factors play the strongest role in destination selection to better understand the psychological forces at work that lead to vacation experience and assessment. Therefore, travel motivation in this paper is defined as the psychological force that enables primary destination vacation selection.

Motivations that drive destination choice are complex and should be approached carefully in applied tourism research. Motivations may depend on a variety of intrinsic and extrinsic factors that can act independently or together in chained stages over time. For example, one may have an initial motivation to take a vacation to escape their normal environment, followed by a secondary motivation to use the opportunity for personal achievement, such as visiting a place on a person's life list of destinations. Thus, careful

wording and placement of survey questions is required to capture the motivational factors of interest. Using the example above, the question that asks, "What motivated you to take a vacation?" tests a different decision making component than the more useful question that asks, "What motivated you to choose this destination?"

The difficulty in accurately and reliably assessing complex motivational factors about an individual in a 5-10 minute travel survey is substantial. Therefore, researchers have applied well-tested motivational scales to survey instruments. These include the Leisure Motivation Scale (Beard & Ragheb, 1983; Ryan & Glendon, 1998) to associate with trip attributes and the Fodness Motivational Scale to measure the effects of authenticity in trip enjoyment (Fodness, 1994; Waller & Lea, 1998). Such scaling of motivational factors is based on various psychological domains of motivation such as interpersonal social dimensions, personal intellectual dimensions, and dimensions of escape and seeking (Ryan & Glendon, 1998) that are salient to research objectives. Additionally, Iso-Ahola (1982; 1990) proposed a 4-dimensional model of motivation with scaled factors of personal seeking, personal escape, interpersonal seeking, and interpersonal escape (Dunn Ross & Iso-Ahola, 1991; Norman & Carlson, 1999; Snepenger et al., 2006).

At the forefront of travel motivational theories used for assessing the substitutability of destinations are those that group various dimensions of motivations into 2-dimensional scales of push and pull (Baloglu & Uysal, 1996; Molera & Albaladejo 2007; Park & Yoon, 2009; Pesonen, 2012; Kastenholz et al., 1999). Examining push and pull motivations together can integrate both intrinsic and extrinsic constructs. One is to be "pushed" to travel from

emotional factors such as a desire to "get away" from a town or busy lifestyle, to "just relax" somewhere, or to "spend time away from others." Alternatively, one may be "pulled" to a destination from underlying psychological anticipations, such as a desire to "explore a specific place" or "experience a different culture than my own." Moreover, since choice motivation is complex and not often based on a single factor, one may possibly exhibit both push and pull motivational factors simultaneously.

A primary assumption of heritage tourism is that it is a specific place-based activity or experience. Yet, this assumption remains untested. There is much interest in understanding whether visitors are pulled to the destination because of its unique, presumably un-substitutable experience that it offers, or if visitors are more driven by more intrinsic push forces associated with factors unrelated to specific attributes of a destination.

Travel Satisfaction

Satisfaction is another complex psychological construct, which is widely regarded as a central and crucial study aspect in marketing and travel literature (Yoon & Uysal, 2005; Agiomirgianakis & Mihiotis, 2008). Satisfaction indicates how well needs, desires, and expectations are fulfilled for a given product, service, or experience. High satisfaction has been linked to increased repeat purchases, utilization of services, and word-of-mouth advertising (loyalty), while low satisfaction resulted in opposite effects (Kozak & Rimmington, 2000; Park & Nunkoo, 2013). For a tourism destination, travel satisfaction encompasses an evaluative reflection of a package of destination attributes, including services, accommodations, excursions, activities, attractions, entertainment, and so forth. Because dissatisfaction could

result in any of the destination experience dimensions, identifying and measuring the performance of each relevant dimension to accurately assess areas of high or low satisfaction is important (Andriotis, et al., 2008).

Oliver (1980) noted that accurately measuring satisfaction is a complex endeavor because preconceived expectations present a relative frame of reference from which the quality of experience is judged by consumers. He proposed measuring satisfaction through the disconfirmation of expectations based on the ratings of performance in each product dimension. Using this approach, one can determine whether the satisfaction level met, exceeded, or failed to meet expectations for each component. This is simply done by comparing the ratings of expectation to ratings of satisfaction on each item, such that negative disconfirmation scores indicate a state of dissatisfaction, equal scores are satisfied, and positive disconfirmation indicates that satisfaction exceeds expectations. Although this method has merits of being able to discern line-item product components, expectations themselves do not indicate how important a destination attribute is to a visitor. For example, although a visitor may report negative disconfirmation about a taxi ride from the airport, it may not be an important factor to the overall assessment of the vacation destination.

Therefore, subsequent studies have utilized importance-performance measures (IPA) to assess with greater weight the relative importance of product dimensions. However, Matzler et al. (2004) found that the aggregation of individual product terms was asymmetric to measures of overall satisfaction, promoting additional revisions with the IPA framework for more accurately measuring satisfaction. Andriotis et al. (2008) found that tourists may be statistically

clustered based on satisfaction factor analysis, which resulted in factors including tourism products, airports, host attitude, road transport, accommodations and service quality, natural environment, entertainment, and language/communication. Another study by Park and Nunkoo (2013) used factor analysis to reduce individual items of satisfaction into three reliable composites related to the importance of technical service, program, and functional service categories, with the two former affecting satisfaction significantly.

Other studies have used assessed value measures to test if tourists were satisfied with the perceived worth of their vacation expense (Mingfeng & Shenzhen, 2011). Huang et al. (2015), using a SEM, included perceived value as a separate construct from satisfaction. With both satisfaction and perceived value functioning as mediators between motivations and recommendations, value also was a significant for its effect on satisfaction, confirming prior studies.

The level of travel satisfaction can also vary significantly between subgroups within a destination's tourism population, such as nationality. For example, Kozak (2001) found that British visitors were more likely than German visitors to be satisfied with their vacations to Mallorca and Turkey. Although it did not contrast with other types of tourists, Chen and Chen (2010) conducted one of the few studies on satisfaction specific to heritage tourists who visited certain sites. Results in the chain of tourism behavior was consistent with other studies of the larger tourism population, in that experience quality influences perceived value and satisfaction, which in turn mediated the effect towards behavioral intentions. However, a search of the relevant literature did not uncover any existing studies that test the motivation ->

satisfaction -> loyalty specifically for the heritage tourism market as did Yoon and Uysal's (2005) for a general tourism population.

Destination Loyalty

Loyalty is an indicator of faithfulness, or a feeling of support and allegiance towards a person, idea, object, or a product (Yoon & Uysal, 2005). In recent decades, this construct has become a central focus of tourism study as consumers have an unprecedented range of recreation and tourism travel options (Backman & Crompton, 1991; Brodie et al., 1997). Loyalty is also of major interest to brand bonding, where positive experiences with a company (such as a site tour) increase personal product involvement and brand loyalty (Mitchell & Orwig, 2002). Developing loyal customers is a goal of most enterprises as it increases profits, reduces marketing costs, and results in new purchase behaviors (Baker & Crompton, 2000; Um et al., 2006).

In travel research, destination loyalty has been studied in various dimensions. It is most often used to indicate a behavioral attachment to a place, often operationalized as return trips and willingness to refer others to the destination (Pine et al., 1995; Oom do Valle et al., 2006; Yoon & Uysal, 2005). Backman (1987) concluded that loyalty includes two measurable dimensions, behavioral and attitudinal, which refers to the feeling that drives loyalty intensity and subsequent behavioral actions. Brachman and Crompton (1991) later expanded that to three dimensions, with an additional composite dimension, which combined actual attendance with attitudinal behavioral dimensions. The emotional associations of place attachment are also a predictor of loyalty (Yuksel et al., 2010). Ramseook-Munhurrun et al. (2015) found in a

SEM analysis that destination image did not directly affect loyalty, nor did perceived value; however, satisfaction did reliably predict loyalty. For heritage tourists, loyalty may be a key distinguishing feature of that market, if the assumption that they tend to be more attached to a specific place is true.

Heritage-Based Tourism Groupings

While many studies exist about heritage tourism as a philosophy, heritage tourists as a niche market have been the subject of very few peer-reviewed papers (O'Leary et al., 1998). Particularly, there is a notable lack of research on how the constructs of motivation, satisfaction, and loyalty operate cognitively and behaviorally for the heritage tourist. From this standpoint, the heritage tourism industry has largely been operating, at best, with a borrowed scientific understanding of tourists from other markets. Does heritage tourism qualify as a niche market? We don't know. Through market segmentation, we are able to assess assumptions about heritage tourists that need to be explored (Ashworth, 2010).

Typological segmentation studies are commonplace in marketing literature for the understanding of the general orientation of tourists by groupings based on survey responses. This scientific approach is extremely useful for destination management, as it may be used to identify and contrast separate markets within a given visitor population. For example, studies have categorized types of nature tourists (Mehmetoglu, 2006), perceptions of tourism service value (Gallarza & Saura, 2004), various labels of special interest tourism (Trauer, 2005), types of tourism innovations in response to tourist environmental concerns (Hjalager, 1997), and even the perceptions of photography used in promotional materials (Hunter, 2007). Others have

used existing typologies to analyze collective spending patterns between groups (Valdez et al., 2005).

One of the most relevant, if not broad, studies done on the subject was a joint national research study conducted by the National Geographic Society (NGS) and the Travel Industry Association of America (Stueve et al., 2002). It categorized American travelers into typologies based on their inclinations towards "geotourism," which was essentially the NGS brand name of heritage tourism. Its purpose was to assess market potential and to identify target demographics. Much like heritage tourism promoted for NHAs, geotourism was defined as "Tourism that sustains or enhances the geographical character of a place—its environment, culture, aesthetics, heritage, and the well-being of its residents" (Weiss, 2004, p. 5). The author used a national polling strategy to estimate 55.1 million United States Citizens likely qualify as geotourists, and along with "potential geotourists," they comprised over 90% of the sample.

Another recent study segmented tourists based on their orientations towards cultural heritage travel, and found that using five divisions, or segmented clusters, offered highly interpretable results that fit the study sample well over the current scientific understanding of cultural heritage travelers (McKercher, 2002). Divided by the reported strength of their sought depth of experience and importance that heritage played a role in their destination choice, each member of the sample taken from mainland China visitors was assigned a label based on their place in an assumed 2-dimensional continuum of heritage motivation. In doing so, the study was able to identify and describe distinct market segments with varying degrees of interest in cultural heritage. A useful finding was that some segments would likely respond to

heritage-specific marketing, while others focus more on the depth of experience in general in making their destination decision. Thus, segments may receive targeted marketing messages to suit their interests.

As with any segmentation study, identifying the appropriate conceptual elements by which to divide the population sample into meaningful groupings is crucial. Heritage tourists are as difficult to define as heritage itself, because some world heritage sites are focused on natural heritage, others on cultural heritage, and still others with both elements simultaneously. Because this study is focused on NHA heritage tourists, which includes an integration of both of these elements, the segmenting process is based on the integration of natural and cultural dimensions of heritage as encouraged by Hughes (1996).

Thus, the central purpose of this paper is twofold. First, it aims to draw out the distinguishing characteristics of the heritage tourism market based on established tourism research constructs. Second, it tests how well prior tourist experience models fit the heritage market in comparison to other tourism typologies.

Study Area

The United States Virgin Islands (USVI), a territorial possession on the United States of America, includes three primary destination islands with a total of 107,000 residents. The USVI receives approximately 2.7 million visitors annually by way of cruise ship port harbors and two airports. Tourism-related services are a vital part of the USVI economy, accounting for 80% of the gross territorial product and approximately half of all jobs reported in the territory (CIA, 2013; VIBER, 2012). Although described as a mature tourism destination as a whole based on

McElroy's Tourism Penetration Index (1998), the nearby islands of St. Thomas (STT) and St. John (STJ) regularly receive more than 85% of the annual visitation, while the less travelled island of St. Croix (STX) gets less than 15% of the total tourism visitation (VIBER, 2012). STJ is known for ecotourism, STT for mass cruise ship tourism, and STX for being a place without a mature destination image. With an undeveloped tourism market and a cultural landscape not yet defined by tourism like so many other islands, the USVI's delegate to the US Congress proposed the designation of STX as a NHA. A subsequent congressionally-mandated study recommended NHA designation after investigating the quality of heritage resources and feasibility of locally run management (NPS, 2010). However, the process did not include a market analysis, nor any effort to judge the economic sustainability of a heritage tourism development plan, and the designation has not yet passed. Clearly, there is a need for such a place to be able to characterize the market potential for heritage tourism development to support the NHA without sole reliance on federal funding, as is the case for many other heritage areas (Silberberg, 1995).

Geographically distinct due to being on a different tectonic plate to the south, STX's most unique feature is caused by tectonic uplift. These forces pushed up above the sea areas of ancient coastal shelves and calcium carbonate coral beds. They created a relatively large amount of land that is flat and suitable for agriculture, a characteristic found nowhere else in the otherwise mountainous Virgin Islands. Thus, historically, STX was primarily colonized for commodity agriculture (cotton, indigo, and sugar cane were primary crops), while the steep hilled STT/STJ district was more focused on mercantile goods and shipping, with its excellent

natural ports, dramatic scenery, and proximity to other islands. Consequently, the tourism boom of the 1960's and 1970's had a much greater effect in STT/STJ than on STX. Meanwhile, STX switched its primary economic activity from sugar cane to oil refining in 1965; the refinery was recently shuttered and left the island without economic alternatives. The result, over time, has left a number of historic farm estates, architecturally-unique stone buildings and monuments, and Danish windmills behind on the landscape. Among many little-known historical facts, one such estate was the boyhood home of Alexander Hamilton, who is often credited as a founding father of the United States and founder of the country's financial system.

The islands together, with each island's distinguishing market and site characteristics considered, presented an appropriate and practical regional tourism population in which to contrast tourists based upon their preferences regarding heritage tourism. Drawing a sample of tourists in the same regional area, but who exhibited difference choices in primary destination, allows an opportunity to draw meaningful contrasts to the subsets of this population. Additionally, small islands present a unique study area because of the population isolation and limited channels of travel available (Bull & Weed, 1999).

Methods & Materials

The initial phase of this research included a series of three destination resident heritage tourism workshops. The primary aim of this phase was to gain a resident perspective of the heritage-related sites and historical dates and eras that tell the story of the area from local stakeholders to guide questionnaire development, particularly in regards to the activities that are considered to be heritage-related for the purposes of defining which area visitors would be

later identified as heritage tourists in our survey. A list of stakeholders was identified in interviews through the snowballing technique, in which each interview produced a list of other potential stakeholders to be interviewed. Each list member was defined as either a resident, tourism provider, policy maker, port representative, or community organization representative, and workshop participants were chosen using a random number generator from the lists created to limit bias. Results of this phase indicated that both natural and cultural elements were strongly present and often intertwined (NPS, 2010).

Next, based on the stakeholder workshops and prior literature, a three-part questionnaire was developed (Appendix B), including a two-page (front and back) questionnaire with 16 questions, including multiple response batteries, totaling 63 response items. The questions were divided into sections including willingness to pay for heritage preservation, destination selection motivations, trip spending, destination attribute importance and performance, and demographics. Many of the questions were adapted from the national Geotourism Study conducted by the Travel Industry Association of America (Stueve, et al., 2002).

A motivational battery was included to assess psychological factors behind the visitor's choice to visit their primary destination. Respondents were asked, "Thinking of reasons you chose to visit here, please indicate how important the following motivations were when you made your travel plans." The responses were a Likert-like scale of 1-4, with 1=not important, 2=somewhat important, 3=very important, and 4=extremely important. A total of 14 statements included items for the 2-dimensional theory of push vs. pull motivational factors

(Baloglu & Uysal, 1996; Kastenholz et al., 1999; Molera & Albaladejo 2007; Park & Yoon, 2009; Pesonen, 2012), and also for the 4-dimensional theory of escape and seeking, both on personal and interpersonal levels (Iso-Ahola, 1982, 1983, 1990; Dunn Ross & Iso-Ahola, 1991; Norman & Carlson, 1999; Snepenger et al, 2006).

Measures of satisfaction were derived from the difference between the reported importance and performance of specific destination attributes such as for attractions, activities, services, and experiences. In this question battery, each destination attribute of the current trip was rated on the same row by two columns of importance (1 = not important, 2 = important, 3 = very important, and 4 = extremely important) and performance (1 = poor, 2 = average, 3 = good, 4 = excellent). Calculation of differences in between these two ratings resulted in a 7-point scale from -3 to 3. For ease of interpretability and analyses, these data were inversed by multiplying each by -1 so that a higher score reflected higher satisfaction and vice versa. Finally, the number of response categories (4) was added to each score so the final scale was 1 to 7, to avoid problematic negative integers and zeros during analyses. Scores below 3 were an increase in dissatisfaction, while over 3 were increasing in a state of satisfaction, and 3 indicated an effective zero point, where importance and performance were equal.

Loyalty was measured by two questions concerning the tourist's stated intentions for future behavior, including how likely they are to return and how likely to recommend the destination to others. On both questions, possible responses included 1 = very unlikely, 2 = unlikely, 3 = likely, and 4 = very likely.

Sample

The questionnaire was administered to a random sample at ports of departure in both airports and all cruise docks in the U.S.V.I., resulting in 3,476 returned with an overall 65% response rate. The self-fill survey instrument was administered by professional survey staff assistants who used a screening instrument to distinguish between tourists and other types of travelers in the departure area of each port as visitors were leaving the territory. The survey took place during three peak season weeks, two months apart, in December 2012 and February 2013. A total of 351 surveys were removed with a list wise procedure as incomplete, ineligible, or cases for not truly qualifying as a tourist (10%), leaving 3,125 cases in the population sample. The remaining missing values were imputed by nearest median method.

Questionnaires were scanned by project staff at the ECC using Remark Optical Mark Recognition (OMR) software. Using a response coding system, two staff members reviewed the dataset and corrected errors and added misread or unread data manually to ensure data accuracy and reliability from paper form to digital spreadsheet.

Once entered, data were exported to IBM Statistical Package for Social Sciences Version 21 (SPSS) and SPSS AMOS for analyses. Frequencies and descriptive analyses testing for skew and normality were conducted to detect abnormalities and outliers, which were investigated against original questionnaire forms to test for accurate data entry and cases of potential measurement error. The only response variable with outliers was the continuous measure of trip spending, where 10 exceptionally large reported amounts in between $16K and $65K USD

caused unacceptable skew. The removal of these 10 rare scores reduced the skew to an acceptable level.

Data Analysis

To set up comparisons between tourism groups, the sample was segmented by scores of the reported importance of heritage-type activities in the overall destination experience. K-means cluster analysis was applied on 3,125 sample cases based on responses to how important the following five natural and cultural heritage related destination attributes were to each visitor's vacation:

1) Opportunities to learn about local culture
2) Opportunities to explore a natural setting
3) Opportunities to learn about natural history
4) Opportunities to learn about local architectural history
5) Opportunities to visit historical buildings

The list of items reflects different dimensions that have been indicated as relevant heritage tourism aspects for the study area. They were selected through tourism market research literature, such as the Geotourism Study (Stueve et al., 2002), and from themes found through stakeholder focus groups concerning participatory planning heritage tourism development and the St. Croix National Heritage Area Feasibility Study (NPS, 2010). While the use of these factors do not provide a completely exhaustive review of all heritage dimensions, they directly ask the visitor how important these common aspects of heritage tourism are to

them. The dimensions of heritage tourism included reflect cultural, natural, and authentic dimensions of heritage.

K-means analysis permits the researcher to select the number of groups, based on its application and data. Scores from each case on a scale of 1-4 (1= not important, 2=somewhat important, 3=very important, 4=extremely important) were analyzed to create statistically different clusters ($p < 0.01$). The procedure groups cases based on common dissimilarities between a cases across a matrix of responses. Like other similar studies, this study initially used 5 groups, to allow for comparison of the expected diversity of visitors and interpretability (McKercher, 2002; Nyaupane, 2006).

To provide an adequate factor structure for subsequent multi-group structural modeling, exploratory factor analyses (EFA) were performed in SPSS 23 to determine the correlation among the variables in the dataset that may support study constructs of interest and to reduce the study to reliable measures under each factor. Due to the large sample size, results were extracted using the maximum likelihood method and rotated by Promax with Kaiser normalization. Extractions were based on Eigenvalues greater than 1.

To confirm the factor structure as derived from the EFA and based on theory from prior research, the measurement model was tested in Confirmatory Factor Analyses (CFA) in SPSS AMOS. The strength of CFA verses EFA is its ability to measure construct validity, or how well the measured items reflect the latent construct identified with each theoretical factor within the model. Maximum likelihood estimations were calculated to estimate the statistical parameters of the model with the population sample data. An assumption of this model

discrepancy approach is multivariate normality, when normality across the set of measurement variables and minimal kurtosis is achieved. However, previous SEM research has shown the method to be robust with violations of normality with large sample sizes (1990 Curran, West, & Finch, 1996; Hu, Bentler, & Kano, 1992; Mass & Hox, 2004). To be safe, an additional asymptotical extraction method, which has no assumption of normality (Amemiya & Anderson, 1988), was also performed and results were consistent with the maximum likelihood method used in this paper. Therefore, the critical ratio (i.e., z-score) of Mardia's normalized estimate of multivariate kurtosis was considered acceptable even with signs suggestive of non-normal, multivariate positive kurtotic distribution (C.R. = 37.03), while univariate measures were all within acceptable levels, within the absolute value of 3.0 (Mardia, 1974).

Because this study's hypothesis involved multi-group moderation, testing for the requirement of metric invariance during the CFA was necessary. Therefore, a series of critical ratio tests were performed between all groups of interest as defined by the prior cluster analysis. In order to achieve this, at least one measurement item within each latent factor must be non-significant ($p > 0.05$). Finally, to test for Common method bias (CMB), another EFA was run constrained to a single factor of travel type, which was either by airplane or cruise ship. If this single factor explained a majority of the variation in the Harman's Single Factor Test, then CMB would be a problem.

Moving forward with the validated measurement model, study constructs were assembled in a structural form to test the moderation effects of groups on the relationships between constructs as configured in the hypothetical model. The assumptions of linearity,

multicollinearity, and homogeneity were examined prior to the application of the multi-group SEM procedure.

To compare results between the groups' potentially moderating effects on the latent constructs in the hypothetical model, differences in critical ratios of unstandardized correlation coefficients effects were analyzed in a series of t-tests. Analysis of Variance (ANOVA) was used to identify significant differences between treatments on dependent variables, for which a p-value of less than 0.05 was accepted. Stronger significant differences were included for relative comparison of effects, when p was less than 0.01. Post-hoc comparison among group means were performed with a Tukey's HSD test.

Results

Segmentation

Results indicated that a 3 group solution resulted in the most interpretable scenario while preserving the distinctive patterns of these groups. Groups were highly distinguishable and statistically dissimilar ($p < .01$) based on their orientation to heritage tourism factors, with a minimum Euclidean distance of 5.20, which was more distinct from the prior 5 group analysis.

Each segment was assigned a label to describe its distinguishing characteristics in relation to heritage tourism aspects in the USVI. For ease of interpretation, the 3 resulting groups were labeled: Heritage Enthusiasts, Eco-Focused, and Heritage Apathetics. Heritage Enthusiasts were the most all-around heritage oriented across all variables included in analysis, while Heritage Apathetics displayed the least amount of heritage orientation.

Table 2.1 presents final cluster centers of *K*-means cluster analysis. The first group reported that all 5 heritage tourism variables were very important attributes to their vacation, and were thus labeled "Heritage Enthusiasts". In contrast, the second group found only the opportunity to explore natural settings as very important, with natural history and the remaining cultural related variables as only somewhat important, prompting the label "Eco Focused". The label eco-tourist was avoided because of other loaded meanings, and due to the fact this study was about comparing tourists on natural and cultural heritage dimensions. The final group was labeled "heritage apathetics" due to historical buildings being not important to their trip, all other variables as somewhat important, and with none of these items being very important to their experience.

Table 2.1

Final Cluster Centers of Total Sample Based on Measures of Importance of Heritage Attributes

Importance of opportunities to…	Heritage Enthusiasts n = 716	Eco-Focused Tourists n =1,212	Heritage Apathetics n = 1,197
…learn about local culture	3	2	2
…visit historical buildings	3	2	1
… learn about natural history	3	2	2
…learn about local architectural history	3	2	2
…explore a natural setting	3	3	2

1 = Not important; 2 = somewhat important; 3 = very important; 4 = extremely important.

After the segmentation process, each segment was characterized by their responses on other survey items, including demographics, motivations, travel history, willingness to pay for

heritage, the attributes of their trip, travel mode, trip expenditures, and willingness to return. The resulting market segment profiles are summarized in the next section.

Differences in Segment Characteristics

One-way Analysis of Variance tests (ANOVA; Table 2.2) found strongly significant mean differences among groups ($p < 0.01$) in all demographic variables, with sex ($F = 11.44$), education ($F = 4.71$), household income ($F = 35.15$), and whether travel was for personal heritage ($F = 57.61$). However, age ($F = 4.51$) was significantly different to a lesser degree of $p < 0.05$. Because these differences were all found to be significant, the null of the first hypothesis, no difference, was rejected. The alternative H1 was supported because all demographics were significantly different among groups of varying heritage orientation.

Tukey's HSD post-hoc comparisons showed contrasts between groups (Table 2.2). Heritage tourists ($\bar{x} = 0.60$) and eco-focused tourists ($\bar{x} = 0.60$) were significantly more female than male compared to heritage apathetics ($\bar{x} = 0.50$; $p < 0.01$). Heritage tourists were no different from other groups in age. Surprisingly, heritage tourists were less educated ($\bar{x} = 3.45$; $p < 0.05$) and had lower household income ($\bar{x} = 2.45$; $p < 0.01$) than the other segments, and heritage apathetics reported the highest income ($\bar{x} = 3.09$; $p < 0.01$ against heritage and $p < 0.05$ against eco-focused). As expected, heritage tourists reported the highest levels of those traveling to explore their own personal heritage ($\bar{x} = 0.11$; $p < 0.01$) when compared to the other groups. Despite differences in income levels between groups, trip spending was not statistically different between groups. Therefore, it resulted in a failure to reject the null hypothesis of H2.

As expected, there were very strong inter-group differences with large F values in their attitudes toward natural and cultural heritage and post-trip behavior (Table 2.3; all F values significant at $p < 0.01$). Post-hoc comparisons revealed heritage tourists to be significantly stronger in every category than other groups, and eco-focused stronger than heritage apathetics ($p < 0.01$).

Table 2.2

Demographics and Trip Spending Differences Among Tourism Groups

Category	Total Sample n = 3,215	Heritage Enthusiast n = 716	Eco-Focused n = 1,212	Heritage Apathetic n = 1,197	F-Value
Sex	0.56	0.60^{A**}	0.58^{A**}	0.50^{H**E**}	11.44**
Age	2.15	2.12	2.10^{A*}	2.22^{E*}	4.51*
Education	3.59	$3.45^{E*\ A*}$	3.62	3.63^{H*}	4.71**
Household income	2.87	2.47^{E**A**}	2.90^{H**A*}	$3.09^{H**\ E*}$	35.15**
Did you travel for personal heritage?	0.04	$0.11^{\ E**A**}$	$0.04^{\ H**A**}$	$0.01^{\ H**E**}$	57.61**
Trip Expenses $USD[t]	1,894.73	1,790.24	1894.39	1955.36	1.02

Notes: Sex (0 = male, 1 = female); Age (0 = 18-24, 1 = 25-39, 2 = 40-54, 3 = 55-69, 4 = 70+); Education (0 = less than high school, 1 = High School/GED, 2 = Some College, 3 = Associate Degree, 4 = Bachelor's Degree, 5 = Graduate Degree); Household income (0 = Under $40K, 1 = $40-59K, 2 = $60-84K, 3 = $85-99K, 4 = $100-249K, 5 = $250K+); Personal Heritage (0 = no, 1 = yes).
[t]Ten outliers in between $16-65K were removed from trip expenditures.
One-way ANOVA. Welches F. * $p < 0.05$; ** $p < 0.01$. Tukey HSD post-hoc comparisons. Superscripts indicate mean is different from: ^{T} = Total Sample; ^{H} = Heritage tourists; ^{E} = Eco Focused; ^{A} = Heritage Apathetic.

Because heritage tourists had the highest mean scores of willingness to pay more for natural and cultural heritage protection ($\overline{x}$ = 1.24; $\overline{x}$ = 1.26), and were the most often to seek for natural and cultural heritage information ($\overline{x}$ = 1.15; $\overline{x}$ = 1.19), the null hypotheses of no difference in H3 and H4 were rejected and alterative hypotheses supported.

Table 2.3

Attitude Differences Among Tourism Groups Compared to the Total Sample

Attitudes	Total Sample n = 3,215	Heritage Enthusiast n = 716	Eco-Focused n = 1,212	Heritage Apathetic n = 1,197	F-Value
Willing to pay more for nature	0.97	1.24 ^{E**A**}	1.01 ^{H**A**}	0.76 ^{H**E**}	78.76**
How often seeking for nature	0.73	1.15 ^{E**A**}	0.77 ^{H**A**}	0.44 ^{H**E**}	178.35**
Willing to pay more for culture	0.91	1.26 ^{E**A**}	0.95 ^{H**A**}	0.67 ^{H**E**}	119.99**
How often seeking for culture	0.70	1.19 ^{E**A**}	0.71 ^{H**A**}	0.40 ^{H**E**}	232.86**
How likely to Return	3.30	3.45 ^{E**A**}	3.33 ^{H**A**}	3.19 ^{H**E**}	26.18**
How likely to Recommend	3.43	3.54 ^{E**A**}	3.48 ^{H**A**}	3.32 ^{H**E**}	25.96**

Notes: Willing to pay for nature/culture (0 = would not pay more, 1 = 1-9% more, 2 = 10-19% more, 3 = 20% or more); How often seeking for nature/culture (0 = Never, 1 = Occasionally, 2 = Regularly, 3 = Always); How likely to return/recommend (1 = Very Unlikely, 2 = Unlikely, 3 = Likely, 4 Very Likely).
One-way ANOVA. Welches F. * $p < 0.05$; ** $p < 0.01$. Tukey HSD post-hoc comparisons. Superscripts indicate mean is different from: ^{T} = Total Sample; ^{H} = Heritage tourists; ^{E} = Eco Focused; ^{A} = Heritage Apathetic.

Similarly, heritage tourists were strongly the most likely to return ($\bar{x}$ = 3.45; p < 0.01) and to recommend their primary destination to others ($\bar{x}$ = 3.54; p < 0.01) of all groups. Therefore, the null hypothesis of H5 was rejected and the alternative hypothesis supported. In order to test the next hypotheses including composite latent variables based on research constructs, we move to the next steps of multi-group moderation.

Exploratory Factor Analysis

The EFA procedure converged in 6 iterations and resulted in a total of 6 base factors. Beginning with all potential items, multiple iterations were run while manually eliminating items with weak loadings (less than 0.4), strong cross-loadings (over 0.3), and those with low extraction communalities (less than 0.3). Sampling adequacy of the final EFA model was confirmed by the Kaiser-Meyer-Olkin measure of 0.739, which was acceptable with the large sample size and statistically significant (Chi-square=14,182.657; df =120; p<.001). Convergent validity was confirmed with all factor loadings over 0.45. Discriminant validity was determined with no cross-loadings over 0.2 and a review of the factor correlation matrix which revealed no correlation values over 0.5. Finally, Cronbach's Alpha was used to test each factor's items together for reliability one factor at a time, which were all over the 0.60 threshold for large sample sizes. The resulting EFA model explained 55.36% of the variance (Table 2.4).

Each of the 6 factors occurring in EFA results were labeled according to the associated construct related meaning (Table 2.4). The result of satisfaction gap measures naturally grouping into three distinct factors was unexpected, however, each measurement conceptually grouped well into categories of destination attribute satisfaction. These included the following

factors: 1) Satisfaction of attractions, 2) Satisfaction of service, and 3) Satisfaction of marine recreation.

Table 2.4

Results of Exploratory Factor Analysis of Destination Attributes on Total Sample

Factors	Factor Loadings	% of Explained Variance	Composite Mean	Cronbach's Alpha
Factor 1: Satisfaction of attractions		10.8	4.43	.767
Sat_gap_arch	0.838			
Sat_gap_nathist	0.701			
Sat_gap_histb	0.674			
Sat_gap_maps	0.453			
Factor 2: Satisfaction of Service		18	3.88	.772
Sat_gap_service	0.849			
Sat_gap_taxi	0.746			
Sat_gap_clean	0.586			
Factor 3: Satisfaction of marine recreation		5	2.48	.694
Sat_gap_reefs	0.887			
Sat_gap_scuba	0.578			
Factor 4: Push Motivation		10.39	2.31	.723
MotGetAwyStress_1	1.000			
MotOvercome_1	0.524			
MotRelax_1	0.486			
Factor 5: Pull Motivation		4	2.48	.636
MotExpCulture_1	0.743			
MotExplore_1	0.601			
Factor 6: Destination Loyalty		7	3.67	.858
How likely to return	0.896			
How Likely to Recommend to others	0.844			

Notes: Extraction Method: Maximum Likelihood.
Rotation Method: Promax with Kaiser Normalization. Rotation converged in 6 iterations.
Total explained variance = 55.36%

As expected from prior theory, measures of motivation were reduced into two distinct factors, both of which represented either Push (Factor 4) or Pull (Factor 5) latent variables. The final Factor 6 was comprised of the two anticipated actions of referral and return trips, forming the Loyalty latent variable. Overall, the EFA confirmed conceptual groupings required for confirmatory factor analysis and later modeling of the hypothetical structure.

Confirmatory Factor Analysis

Because the EFA previously resulted in 3 factors of satisfaction, a 2nd order CFA procedure was required to consolidate these into one latent variable (Fig. 2.2). This method treats this overall satisfaction construct as an endogenous latent variable, which includes the combination of the three theoretically related factors of satisfaction (attractions, service, and marine recreation) as a single measure for subsequent confirmatory analyses (Byrne, 2010). Using this approach, a minimum was identified (Chi-squared 582.82; df = 95; p > 0.001). Results indicated that data fit the initial model with decent, yet unacceptable, fit using the Likelihood Ratio Test statistic (x^2), or minimum discrepancy (CMIN) divided by the degrees of freedom (df), of 6.167 (CMIN/DF), which should be under 5.0. Because the Chi-squared statistic is heavily influenced by sample size relative to the degrees of freedom, other fit measures are required to adequately assess the model. But first, an examination of modification indices was performed to further improve the model for more definitive evaluation.

Using the criteria that loadings should be individually above 0.5 and average over 0.7, no measurement items were removed. However, due to some large modification indices, covariance terms were added within the attraction satisfaction factor between the error terms

of availability of opportunities to learn about natural history and maps, and between historic buildings and maps. These additions improved model fit (CMIN/DF = 3.994) to an acceptable level, with the goodness-of-fit index (GFI) = 0.985, root mean square error of approximation (RMSEA) = 0.31 (should be less than 0.50) which was appropriately not significant (PCLOSE = 1.0), and baseline comparisons of comparative fit index (CFI) = 0.981, incremental fit index (IFI) = 0.981 and relative fit index (RFI) = 0.967 (with a threshold of > 0.95 for each of the three latter indices). Figure 2.2 displays the graphic final specified measurement model.

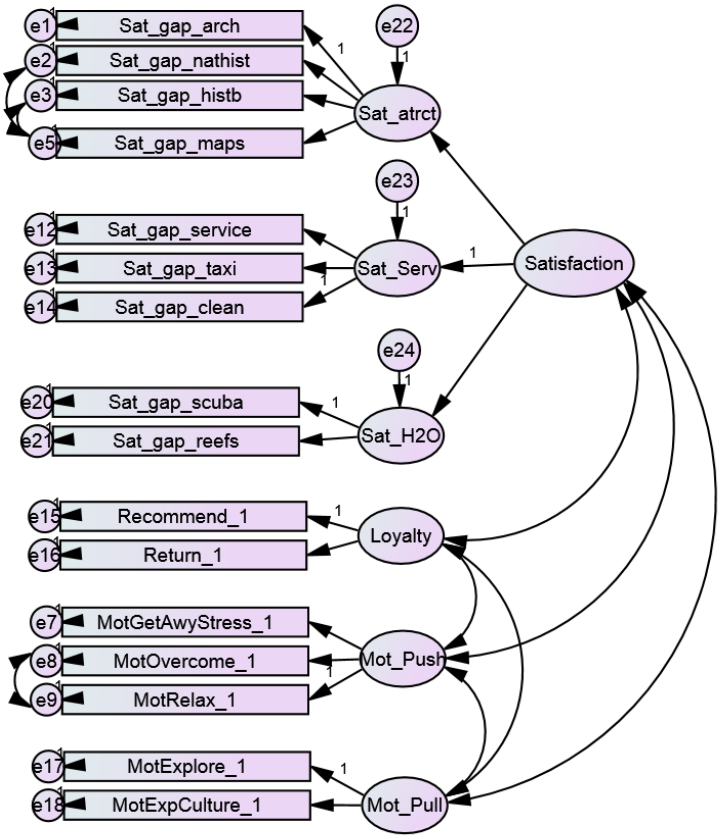


Figure 2.2. Final Measurement Model of Confirmatory Factor Analysis.

By comparing the calculated regression weights and critical ratios for differences between parameters between each group (heritage tourists, eco-focused, heritage apathetics, and all, or total sample), results were confirmed as metrically invariant. The only exception to this was between the groups "heritage apathetic" and "all", for the satisfaction of marine recreation factor, where both measures were significantly different ($p < .01$). However, this comparison was not of interest in this study, so metric invariance was confirmed for study purposes.

Convergent validity and reliability were above the 0.7 critical ratio thresholds for latent factors of push motivation, loyalty, and satisfaction, yet pull motivation was slightly under the threshold (CR = 0.646, AVE = 0.479; Table 2.5). However close to the limit, this is suggestive of a potential limitation to the model, yet for the established theoretical basis and study purposes, it was considered acceptable for SEM analyses.

Table 2.5

Validity and Reliability of Latent Variables

Construct	**CR**	**AVE**	**MSV**	**ASV**
Pull motivation	0.646	0.479	0.153	0.060
Push motivation	0.825	0.615	0.153	0.056
Loyalty	0.885	0.797	0.040	0.021
Satisfaction	0.714	0.462	0.040	0.020

Note: CR = Critical Ratio; AVE = Average Variance Extracted; MSV = Maximum Shared Squared Variance; ASV = Average Shared Squared Variance

The test for CMB, based on the response item of travel type, explained less than 20% of the explained variance (Table 2.6). This result indicated that CMB was not present in the model.

Table 2.6

Factor Correlation Matrix with Square Root of the AVE on the Diagonal

Pull Motivation	Push Motivation	Loyalty	Satisfaction
0.692			
0.391	0.785		
0.126	0.087	0.893	
-0.105	-0.092	0.201	0.680

The final measurement model, now revised with appropriate covariances and multiple groups, showed a further improved fit (CMIN/DF = 2.958; GFI = 0.981; RMSEA = 0.16; PCLOSE = 1.0; CFI = 0.978; IFI = 0.978; RFI = 0.954). Therefore, the measurement model was adequately specified in preparation for structural equation modeling.

Multi-Group Analysis Structural Equation Model

First, the assumption of linearity was confirmed through examination of curve parameter regression estimates between each path between the dependent and independent variable composites, as each F statistic was significantly linear ($p<0.001$) and stronger (at least 2 times larger) than all other potential equation model forms. Next, multicollinearity was confirmed through linear regression estimates with all VIF statistics less than 1.34. Finally, because study hypotheses expect to find heterogeneous results between groups, the SEM assumption of homogeneity was addressed in the later stages of multi-group comparisons. With assumptions being met, conducting SEM to test the mediating effects of satisfaction between pull and push motivation and loyalty as moderated by tourist type was possible.

The first run was a fully specified model. All the latent factor path weights were significant ($p<0.01$) in the full sample other than the path from push motivation to satisfaction

(p = 0.96). This relationship was also insignificant in all sub group moderators. Therefore, the path of push motivation to satisfaction was dropped from further analyses. The resulting structural model improved fit indices from the CFA model.

To identify the initial path model in the multi-group analysis, adding equality constraints to the measurement parameters (weights and residuals) was necessary so that structural path estimates, variances, and covariances could be freely estimated across groups on the latent variables of interest. The initial model was revised to include control variables, because these earlier proved to differ between groups. Three demographic control variables (age, sex, and education) were added to the model to test for confounding relationships between endogenous variables satisfaction and loyalty. As such, covariances were added between controls and exogenous push and pull motivation composites. Regression weights between control variables and endogenous latents in the overall sample and in each group were insignificant (Fig. 2.3). They did have a lowering effect across the board on path estimates, and were thus left in the model to retain covariance control throughout the remaining SEM.

A comparison of model fit estimates between the unconstrained and constrained models (Table 2.7) showed the control model had the best fit in absolute measures (CMIN/DF = 2.392; GFI = 0.978; RMSEA = 0.015) and CFI baseline comparison (0.971; PCLOSE = 1.00). However, the revised model with constraints also had very good fit (CMIN/DF = 2.581; GFI = 0.972; RMSEA = 0.016), and had the best parsimonious fit measures of all three models (PGFI = 0.837; PCFI = 0.822).

Table 2.7

Structural Equation Model Fit Comparisons

Models	Absolute Fit Measures					Baseline Comparisons		Parsimonious Fit Measures	
	df	X2	CMIN/DF	GFI	RMSEA	P-CLOSE	CFI	PGFI	PCFI
Initial model (unconstrained)	372	962.02*	2.598	0.975	0.016	1.00	0.975	0.664	0.750
With controls	567	1356.434*	2.392	0.978	0.015	1.00	0.971	0.729	0.805
Constrained with controls	654	1688.130*	2.581	0.972	0.016	1.00	0.962	0.837	0.822

Note: * $p < 0.01$

Because parsimonious fit measures take into account the added complexity of the model, they adjust for the differences in the numbers of parameters and present the least biased (in regards to parameters) fit estimate and are generally acceptable at lower levels than GFI and CFI, higher than 0.60 (Blunch, 2013; Byrne, 2013). Therefore, the constrained with controls model was selected as the most appropriate fit to test the hypotheses of interest.

The final SEM for heritage tourists (Fig. 2.3), with controls and constraints, displays the strength of relationship standardized path estimates between measurement variables (in boxes) and latent constructs (in ovals), and inter-latent paths. Control variables are at the bottom of the figure, co-varied with the exogenous pull and push motivation independent variables to maintain the controls throughout SEM analyses. The directional paths represented in this figure were all significant in the total population model ($p < 0.01$).

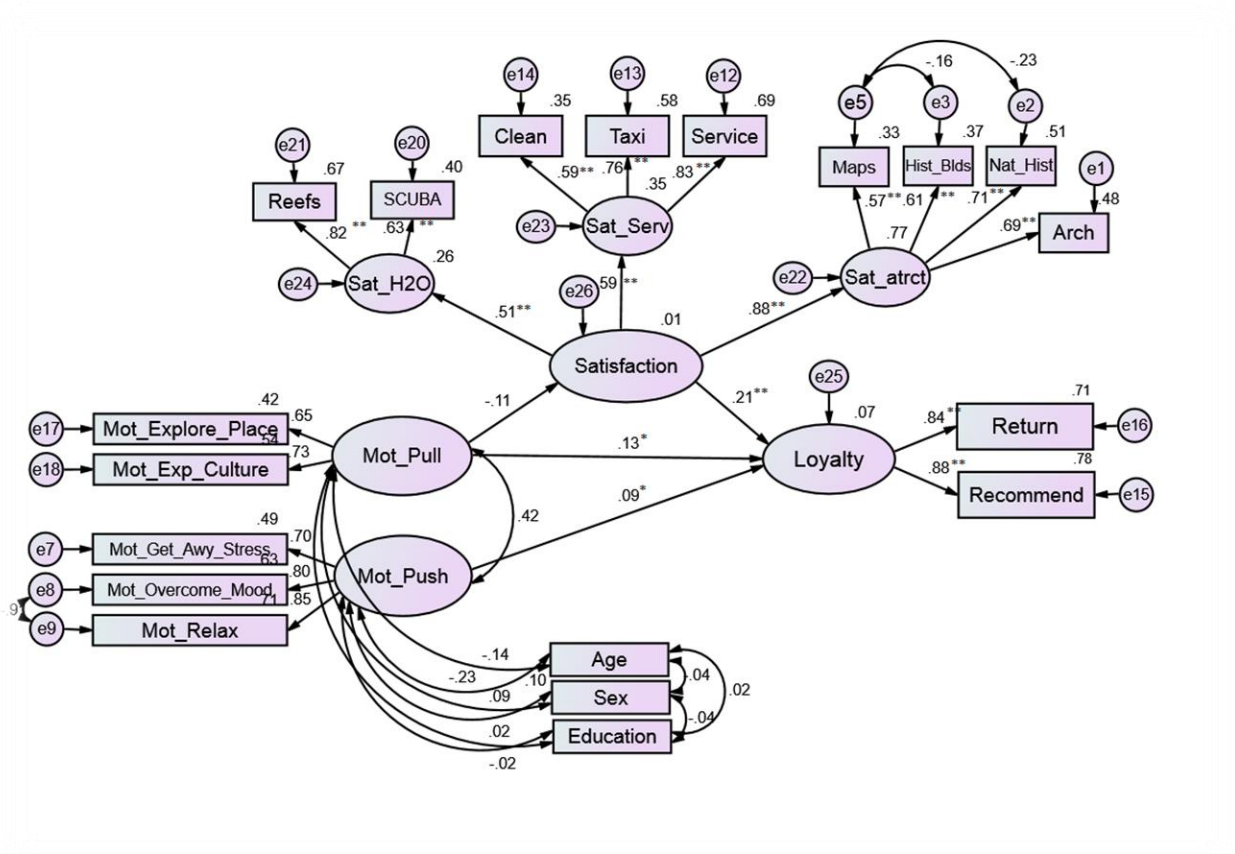


Figure 2.3. Structural Equation Model of the Heritage Enthusiast Tourist Group.
Note: Standardized estimates.

Results indicated that the latent factor of push motivation did not have a direct effect on satisfaction, and pull motivation had a negative effect on it, whereas pull motivation increased, satisfaction decreased. Comparing the heritage segment with the total destination population, which had all paths in the model significant to a level of $p < 0.01$, the heritage tourists had a few significant differences under the moderating effect of group membership. Notably, the previously mediating latent construct of satisfaction was not a part of the relationship between pull or push motivations and loyalty for heritage tourists. Rather, both pull and push motivations only had a direct effect on loyalty, with pull motivation being the

stronger of the two (standardized coefficients = 0.13 & 0.09, respectively; $p < 0.05$). Also, as seen previously, satisfaction had a strong direct effect on loyalty with an estimate of 0.22 ($p < 0.01$).

Findings of Construct Relationships Moderated by Heritage Orientation

One-way Analysis of Variance (ANOVA; Table 2.8) revealed significant mean differences between all composite latent constructs pull motivation ($p<0.01$), push motivation ($p<0.01$), satisfaction ($p<0.01$), and loyalty ($p<0.01$) when moderated by heritage orientation groupings. Welches F statistic was used, which does not assume homogeneity of variances commonly associated with unequal dependent group sizes, and offers a robust test of equality of means.

Table 2.8

Composite Latent Constructs ANOVA Among Groups of Tourists

Latent Constructs	Total Sample n = 3,215	Heritage Enthusiast n = 716	Eco-Focused n = 1,212	Heritage Apathetic n = 1,197	F-Value
Push Motivation	0.00	0.21 ^{E**A**}	0.03 ^{H**A**}	-0.16 ^{H**E**}	57.58**
Pull Motivation	0.00	0.39 ^{E*A**}	0.08 ^{H*A**}	-0.31 ^{H**E**}	534.06**
Satisfaction	0.00	-0.28 ^{E**A**}	-0.05 ^{H**A**}	0.22 ^{H**E**}	629.76**
Loyalty	0.00	0.10 ^{E*A**}	0.03 ^{H*A**}	-0.09 ^{H**E**}	28.89**

NOTE: Composite means for segments represent average differences from total sample mean of 0.0. One-way ANOVA. Welches F. * $p < 0.05$; ** $p < 0.01$. Tukey HSD post-hoc comparisons. Superscripts indicate mean is different from: T = Total Sample; H = Heritage tourists; E = Eco Focused; A = Heritage Apathetic.

Tukey's HSD post-hoc comparisons showed that heritage enthusiasts had significantly higher pull and push motivations than both other groups ($p<0.01$, thus rejecting the null of H6,

and supporting the alternative hypothesis H7. In contrast, heritage apathetics had the highest satisfaction, more than eco focused travelers ($p<0.01$) and heritage tourists ($p<0.01$), resulting in rejection of the null of H8. Heritage tourist loyalty ratings were significantly higher than heritage apathetics ($p<0.01$), and to a lesser degree of certainty, eco focused travelers ($p<0.05$). Therefore, the null of H9 was rejected and the alternative hypothesis supported.

The statistical significance of the resulting Z-scores of moderation effects are presented alongside path estimates in Table 2.9. Heritage tourists, like the two other segments, varied strongly from the total sample in the path of pull motivation -> satisfaction ($p < 0.01$); however, they were not statistically different from eco-focused or heritage apathetics. However, the eco-focused stood out from the other groups in that pull motivation did not have an effect on satisfaction. In contrast, eco-focused travelers had significantly more effect in the push → loyalty relationship than heritage tourists ($p < 0.01$).

Similarly, pull motivation had a significant effect on loyalty for both heritage enthusiasts ($p < 0.05$) and apathetics ($p < 0.01$), but there was no such effect for the eco-focused, pointing to the mediating force of satisfaction in the motivation → loyalty relationship for that group. For all three subgroups, the satisfaction → loyalty relationship was strongest of the inter-latent loadings, suggesting that the direct effect was strong without any positive mediating effect of motivations on satisfaction evaluations. Yet even as heritage tourist satisfaction had a strong effect on loyalty like the other groups, it was significantly less powerful of a force than the eco-focused ($p < 0.05$) and heritage apathetics ($p < 0.05$).

Table 2.9

Structural Weights Differences Among Groups

Latent Factor	Total Sample n = 3,215		Heritage Enthusiasts n = 716		Eco-Focused n = 1,212		Heritage Apathetic n = 1,197	
	Estimate	P	Estimate	P	Estimate	P	Estimate	P
Satisfaction←Pull Motivation	-0.250 ^{H***E***A***}	0.01	-0.076^{T***}	0.05	-0.027 ^{T***A*}	0.55	-0.138 ^{T***E*}	0.01
Loyalty←Push Motivation	0.113	0.01	0.065 ^{E**}	0.05	0.162 ^{H**}	0.01	0.120	0.01
Loyalty←Pull Motivation	0.179 ^{E***}	0.01	0.106 ^{E*}	0.03	-0.021 ^{T***H*A**}	0.72	0.163^{E**}	0.01
Loyalty←Satisfaction	0.308	0.01	0.250 ^{E*A*}	0.01	0.412 ^{H*}	0.01	0.423^{H*}	0.01

Notes: Maximum Likelihood Estimates, unstandardized. *** p-value < 0.01; ** p-value < 0.05; * p-value < 0.10.
Critical Ratio (z-statistic) post-hoc comparisons: Superscripts indicate estimate is different from: ^{T} = Total Sample; ^{H} = Heritage tourists; ^{E} = Eco Focused; ^{A} = Heritage Apathetic.

Results indicated that heritage tourists had a stronger relationship between the direct effect of pull motivation on loyalty than eco-focused travelers (p = 0.05), but it was not different from heritage apathetics, leading to the acceptance of the null hypothesis H10. However, the H11 null was rejected and alternative hypothesis supported, because heritage enthusiasts had less of a mediating effect of satisfaction, although it should be noted this association was only confident at the +/- 90% interval (p < 0.10).

Discussion

Results of this study provided empirical evidence of distinguishing characteristics of heritage tourists as a potential niche form of tourism when compared with other tourists in a single regional tourism population. Furthermore, this study showed that the mediating effect of satisfaction between travel motivations and loyalty as found in prior research (Yoon & Uysal, 2005) held well in the general population sample. The same latent construct intercepts and paths between constructs were moderated by categorical group assignments based on a given tourist's heritage orientation (i.e., how important natural, cultural, and built heritage destination attributes were to the tourism experience). Cluster analysis based on these attributes produced 3 groups within the population: heritage enthusiasts for those who scored high on all three dimensions of heritage, eco-focused for those who only scored high on natural dimensions, and, finally, heritage apathetics, who reported low importance on all three heritage dimensions.

Firstly, of the three types of tourists as defined in this study, heritage enthusiasts had the highest percent of females, the lowest educational levels and household income, and were the most likely to be traveling for reasons of personal heritage. The low level of income and education may be caused by the disparity of female-to-male ratios across the wider United States population, who made up the majority of tourists in this study. Despite lower income levels, heritage tourist trip expenditures were not statistically different from the other groups. Additionally, heritage enthusiasts were the most willing to pay additional money for services that preserve natural and cultural heritage. As such, they were also the most likely group to

seek information about their destination's natural and cultural heritage prior to their trip. These findings suggest that heritage tourists are more specific about their choices in travel destinations than other groups and have strong attitudes about the concepts of natural and cultural tourism.

Secondly, exploratory factor analysis produced composite reliable measures of the major constructs of study, including push and pull motivation, satisfaction, and loyalty. Heritage enthusiasts exhibited the strongest overall motivations, with pull motivations being the stronger force in their destination selection. This finding indicates that heritage enthusiasts are the most likely to make a destination selection based on specific destination attributes, and further suggest they are the least likely to substitute destinations based on internal psychological forces. In contrast, heritage enthusiasts were the least satisfied with their travel experience of all the groups. However, they remained the most loyal, being the most likely to tell others and to return to their destination.

Thirdly, and most importantly, although the causal factor structure as found by Yoon and Uysal (2005) was confirmed in this study, albeit with less power of estimates, the factor of heritage orientation exhibited a moderating effect on path estimates among the chain of motivations, satisfaction, and loyalty. Notably, heritage apathetics maintained the strong negative mediating effect of pull motivation on satisfaction while heritage enthusiasts and eco-focused travelers only showed a weakly marginal mediating effect. This finding suggests that the non-heritage tourism market follows a more traditional motivation to satisfaction to loyalty relationship while niche groups of heritage and eco-tourism do not and warrant special

consideration to how their motivations play into their overall perception of the experience. All groups had significant direct relationships between push and pull motivations, other than eco-focused travelers, for whom pull motivation did not directly affect loyalty, but push motivation was a strong factor. Satisfaction still played a key role with all groups with its effect on loyalty, but the effect was marginally weaker in the heritage enthusiast group.

The major summary finding in this moderation mediation structural equation model is that the apparent heterogeneity found in a regional tourism sample should be considered in studies on heritage tourists when considering the feasibility of heritage area development. While studies that rely on heritage-attraction specific survey data suffer from the inability to capture the perspectives of displaced potential visitors, large general tourism surveys may fail to detect the heterogeneity present in the population based on heritage orientation. Thereby they often miscalculate the probability of success of heritage tourism development. In studying the entire population with a heritage orientation moderator, determining the sensitivities of heritage enthusiasts, as well as discovering overlaps that exist in other present groups, are both possible. This can help build a larger heritage tourism market segment out of the wider tourism population. For example, while heritage enthusiasts in this study were driven by both cultural and natural heritage attributes of the destination, the natural heritage interest of eco-focused travelers presents a gateway to introduce cultural heritage components as they relate to natural history. Given the need for many destinations to provide a range of tourism opportunities to support wider economic development, the ability of moderated structural equation modeling to simultaneously analyze mass and niche tourism populations side-by-side

may permit more focused and targeted information for heritage tourism marketing, development, and management strategies than traditional segmentation study approaches.

The findings of this study also imply that heritage tourists represent a desirable tourism population segment to grow for destinations concerned with increasing competition from other substitutable destinations. As the most pull motivated and loyal segment who seek experiences that are specific to a given location, it is logical to conclude that heritage tourists are less likely to substitute destinations in vacation selections than other types of tourists. In contrast, this study found that eco focused tourists operated more on push motivations, suggesting that natural area tourism and natural heritage is more substitutable as it is subject to more internal motivational drives that are less dependent on site specificity. In the Caribbean region where this study took place, many tourism-centered island nations, most with small annual tourist populations, are threatened by the impending opening of United States tourism to Cuba, which is estimated to deflect over 1.6 million tourists annually from other destinations in the region (Padilla & McElroy, 2007). Because many of these locations have attractive and sandy beaches, clear warm water, and other features common to the region, they are highly prone to destination substitution. Therefore, destination policy makers and managers should consider promoting unique natural and cultural heritage attributes to attract more reliable tourism base for long-term sustainability.

Limitations

Several limitations should be considered when interpreting this study. First, the study population consisted of a majority of United States Citizens (90%) in the region of the United

States Virgin Islands, so this study should be expanded to additional regional and heritage area populations for greater applicability of results for NHAs and World heritage areas. Second, the heritage orientation groups may not be applicable to heritage sites that are solely focused on natural heritage without prominent cultural attributes, because this paper used cultural aspects, along with natural, to define groups in line the concept of heritage exemplified in the designation of NHAs. Third, the construct of satisfaction in this study was only based on gap comparisons between destination attribute importance and performance. Whereas the structural results closely matched that of Yoon and Uysal's work (2005), additional measures of satisfaction may strengthen future studies with this important psychological construct. Finally, while the structural form of the hypothetical model fit very well, path estimates were lower than previous research and a large portion of unexplained variance remains, partly as a result of a large sample size. Future studies should reduce sample sizes or follow an experimental study format to make stronger statements with a greater power of estimates.

Conclusion

As a relatively new form of natural and cultural resource conservation that has seen considerable expansion in the past 30 years, heritage areas have been touted as a vehicle to save special places, ecologies, buildings, monuments, customs, and other facets that tell important stories of mankind, all while providing a sustainable economic development alternative. As locally managed entities with limited federal funding, NHAs have required advances in heritage tourism planning literature to be able to more accurately and efficiently assess its demand-side feasibly and ability to sustain its dual purposes of preservation and

visitation. Unlike the National Park System and National Trails System, the collection of NHAs currently has no systematic, established procedures for feasibly study, designation, or management. However, recent congressional attempts to formalize a NHA system have included an emphasis on understanding economic potential of a NHA to sustain itself beyond limited federal funding in ways that are consistent with an area's economic character.

The outcomes of this study can help guide policy makers and area managers with specific, comparative information about this relatively unknown group of heritage enthusiasts. In addition, the methodological techniques used in this paper should be replicated for areas to better understand the local distinctions of a market and help grow a sustainable heritage tourism industry.

This study laid down initial ground work for the study of heritage tourism as a niche within a larger tourism population. This niche represents a relatively new and novel approach of resource conservation that combines natural and cultural conservation with interpretation. The proliferation of heritage areas continues to increase the need for scientifically-sound methodological approaches to incorporate in systematic planning frameworks seen in other managed areas, such as Limits of Acceptable Change and Visitor Experience and Resource Protection resource inventory and monitoring programs. In addition to better understanding the heritage tourism market, new research is needed in resource monitoring to ensure that increases in tourism enhance, not negatively impact, valuable natural and cultural resources.

Clearly, the results of this paper indicate that heritage tourism is a unique travel phenomenon apart from the mass tourism market, as other tourism niches studied

substantially before it. If the concept of heritage areas as a conservation strategy is to be successful and sustainable over time, visitor experiences and resource conditions must be balanced through sound management in all stages of the planning and management process. This study has tested assumptions about heritage tourists, and produced the beginning of the needed demand-side framework to incorporate with currently practiced supply-side destination specific NHA feasibility methods. The integration of visitor perceptions into heritage tourism planning should increase the ability of heritage destinations in the U.S. and around the world to be economically sustainable so that they, in turn, can be successful in conserving natural and cultural heritage resources.

References

Anderson, T. W.; Amemiya, Yazoo (1998). The Asymptotic Normal Distribution of Estimators in Factor Analysis under General Conditions. Ann. Statist. 16, no. 2, 759-771. doi:10.1214/aos/1176350834. http://projecteuclid.org/euclid.aos/1176350834

Andriotis, K., Agiomirgianakis, G., & Mihiotis, A. (2008). Measuring tourist satisfaction: A factor-cluster segmentation approach. *Journal of Vacation Marketing, 14*(3), 221-235.

Ashworth, G. J. (2010). Consuming Heritage Places: Revisiting Established Assumptions. *Tourism Recreation Research, 35*(3), 281-290.

Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions. *Annals of Tourism Research, 27*(3), 785-804.

Brodie, R. J., Coviello, N. E., Brookes, R. W., & Little, V. (1997). Towards a paradigm shift in marketing? An examination of current marketing practices. *Journal of Marketing Management, 13*(5), 383-406. doi: 10.1080/0267257X.1997.9964481

Byrne, B. M. (2013). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*: Routledge.

Chen, C.-F., & Chen, F.-S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism Management, 31*(1), 29-35. doi: http://dx.doi.org/10.1016/j.tourman.2009.02.008

Curran, P. J., West, S. G, & Finch, J. F. (1996). The robustness of test statistics to non-normality and specification error in confirmatory factor analysis. Psychological Methods, 1, 16-29.

Hu, L., Bentler, P.M., & Kano, Y. (1992). Can test statistics in covariance structure analysis be trusted? Psychological Bulletin, 112, 351-362

Hughes, H. L. (1989). Tourism and the arts: A potentially destructive relationship? *Tourism Management, 10*(2), 97-99. doi: http://dx.doi.org/10.1016/0261-5177(89)90050-2

Hughes, H. L. (1996). Redefining Cultural Tourism. *Annals of Tourism Research, 23*(3), 707-709. doi: http://dx.doi.org/10.1016/0160-7383(95)00099-2

Hui, T. K., Wan, D., & Ho, A. (2007). Tourists? Satisfaction, recommendation and revisiting Singapore. *Tourism Management, 28*(4), 965-975. doi: http://dx.doi.org/10.1016/j.tourman.2006.08.008

Huang, S., Shen, Y., & Choi, C. (2015). The Effects of Motivation, Satisfaction and Perceived Value on Tourist Recommendation.

Kozak, M., & Rimmington, M. (2000). Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination. *Journal of Travel Research, 38*(3), 260-269.

Kozak, M. (2001). Comparative assessment of tourist satisfaction with destinations across two nationalities. *Tourism Management, 22*(4), 391-401. doi: http://dx.doi.org/10.1016/S0261-5177(00)00064-9.

Kozak, M. (2002). Comparative analysis of tourist motivations by nationality and destinations. *Tourism Management, 23*(3), 221-232.

McKercher, B., & du Cros, H. (2003). Testing a cultural tourism typology. *International Journal of Tourism Research, 5*(1), 45-58. doi: 10.1002/jtr.417

Mingfeng, Z., & Shenzhen, P. R. (2011). *Examining the structural relationships of tourist characteristics and destination satisfaction.* Paper presented at the 2010 International Conference on E-Business, Management, and Economics, Hong Kong.

Padilla, A., & McElroy, J. L. (2007). Cuba and Caribbean Tourism after Castro. *Annals of Tourism Research, 34*(3), 649-672.

Park, D.-B., & R., N. (2013). *Structural Relationships among Service Quality, Satisfaction, and Loyalty: The Moderating Effects of Tourists' Motivation.* Paper presented at the 3rd International Conference on International Trade and Investment Special Conference Theme: 'Non-tariff measures, the new frontier of trade policy?', Mauritius.

Pine, B. J., Peppers, D., & Rogers, M. (1995). *Do you want to keep your customers forever?*: Harvard Business Press.

Matzler, K., Bailom, F., Hinterhuber, H. H., Renzl, B., & Pichler, J. (2004). The asymmetric relationship between attribute-level performance and overall customer satisfaction: a reconsideration of the importance–performance analysis. *Industrial Marketing Management, 33*(4), 271-277. doi: http://dx.doi.org/10.1016/S0019-8501(03)00055-5

Mass, C.J.M. & Hox, J.J. (2004). The influence of violations of assumptions on multilevel parameter estimates and their standard errors. Computational Statistics and Data Analysis. pp. 427-440.

Mardia, K. V. (1974). Applications of Some Measures of Multivariate Skewness and Kurtosis in Testing Normality and Robustness Studies. *Sankhyā: The Indian Journal of Statistics, Series B (1960-2002)*. Vol. 36, No. 2. pp. 115-128.

Mitchell, M. A., & Orwig, R. A. (2002). Consumer experience tourism and brand bonding. *Journal of Product & Brand Management, 11*(1), 30-41. doi: doi:10.1108/10610420210419531

Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. Journal of personality and social psychology, 89(6), 852.

Nyaupane, G. P., White, D. D., & Budruk, M. (2006). Motive-Based Tourist Market Segmentation: An Application to Native American Cultural Heritage Sites in Arizona, USA. *Journal of Heritage Tourism, 1*(2), 81-99.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. Journal of Marketing Research, 17, 46–49.

Oom do Valle, P., Silva, J. A., Mendes, J., & Guerreiro, M. (2006). Tourist Satisfaction and Destination Loyalty intention: A Structural and Categorical Analysis. *International Journal of Business Science and Applied Management, 1*(1), 25-44.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers, 36*(4), 717-731.

Um, S., & Crompton, J. L. (1990). Attitude determinants in tourism destination choice. *Annals of Tourism Research, 17*(3), 432-448.

Silberberg, T. (1995). Cultural tourism and business opportunities for museums and heritage sites. *Tourism Management, 16*(5), 361-365. doi: http://dx.doi.org/10.1016/0261-5177(95)00039-Q

Stueve, A. M., Cook, S. D., & Drew, D. (2002). The Geotourism study: phase 1 executive summary. pp 24.

Weaver, D. B., & Lawton, L. J. (2007). Twenty years on: The state of contemporary ecotourism research. *Tourism Management, 28*(5), 1168-1179. doi: http://dx.doi.org/10.1016/j.tourman.2007.03.004

Yuksel, A., Yuksel, F., & Bilim, Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. *Tourism Management, 31*(2), 274-284. doi: http://dx.doi.org/10.1016/j.tourman.2009.03.007

CHAPTER 3

PERFORMANCE MEASURES FOR HERITAGE AREA TOURISM MANAGEMENT[2]

[2] Olive, N. D., Tarrant, M.A., and Jennings, C.A. To be submitted to *Journal of Destination Marketing and Management*

Abstract

Federal guidelines for the designation of a United States National Heritage Area (NHA) require that it is consistent with existing economic activity. However, there is lack of research in assessing and monitoring the heritage tourism markets. This study proposed an importance-performance disconfirmation assessment (IPDA) to: 1) assess the comparative performance of heritage tourism in a regional destination market, and 2) identify destination management priorities among cultural, natural, and service-related factors. One-way MANOVA of tourist survey data (n = 1,964) was performed among three U.S. Virgin Islands destinations that typify heritage, mass, and eco-tourism to test for differences in destination attribute importance and satisfaction disconfirmation measures. Results showed that heritage destination tourists rated the importance of cultural destination attributes significantly higher ($\overline{X}$ = 2.40) than visitors to the mass ($\overline{X}$ = 2.23) and eco-tourism destinations ($\overline{X}$ = 2.17), and they rated natural attributes higher ($\overline{X}$ = 2.78) than the mass tourism destination ($\overline{X}$ = 2.39; all results $p < 0.001$). Additionally, heritage destination visitors were the least satisfied (I-P = -.318) group in the performance of cultural factors ($p < 0.025$). Conclusions implied that natural and cultural heritage tourism is consistent with current economic activity of the proposed NHA. Also, managers should prioritize the quality of cultural heritage experiences highly, but not more than the improvement of general tourism services. The proposed IPDA provides a quantitative basis for performance-based NHA planning and long term monitoring of management efficacy.

Keywords: Heritage tourism planning, importance-performance assessment, small island tourism, national heritage areas, disconfirmation theory

Introduction

In the past 3 decades, heritage tourism has grown out of its status a secondary attraction within a destination's larger tourism profile into a primary attraction brand at the destination level (Cela & Knowles, 2009). Once contained to individual museums and cultural history sites, heritage tourism has become an overall brand of sustainable development that ties together a collection of natural and cultural heritage resources into a common-themed heritage area (Chhabra, 2010; Garrod & Fall, 2000; Fisher, 2006; Prentice, 1993; Umbach, 2014; Underberg-Goode, 2014). For example, a total of 49 designated National Heritage Areas (NHAs) in the United States were estimated to bring host communities a combined $12.9 billion USD annually, primarily due to visitor expenditures across a wide swath of tourism services, accommodations, fees, and taxes (Umbach, 2014). This expansion from individual heritage sites to larger geographic areas means that today's heritage tourism planners and managers must attend to a wider range of manageable destination attributes and services than previously considered.

Despite the recent proliferation of heritage areas, there is a notable dearth of research in how the heritage area tourism market may differ from other established forms of tourism, like eco-tourism and mass tourism (Prentice, 1993). In contrast, the unique characteristics of eco-tourists have been juxtaposed many times with the mass tourism market in a well-formed body of niche tourism market literature (Weaver & Lawton, 2007). Indeed, most studies of heritage tourists have been constrained to visitors at individual heritage sites (Cela et al., 2009; Vong, & Ung, 2012) with the exception of an increasing number of market segmentation studies

that have compared heritage tourists with other types in a single destination's visitor population (Kaufman & Weaver, 2006; Nyaupane et al., 2006; Yan et al., 2007). Few known studies have taken a regional approach to see how heritage area tourism differs from other modes of tourism (Sinani, 2013). Therefore, new research approaches are needed that are capable of distinguishing the heritage area tourism market to 1) determine the relative suitability and feasibility of heritage area tourism development, and 2) guide the prioritization of heritage area management actions.

Reviews of the relevant literature reveal an absence of objective destination-level performance measures for heritage-area tourism management. Such measures are required to prioritize management actions, provide data for planning frameworks, and for the continued monitoring of management efficacy (Millar, 1989; Prentice et al., 1998; CTO, 2008; Schuster, 2011; Patuelli, 2013). To be designated as a NHA, federal guidelines state that that whether heritage tourism "is consistent with continued economic activity in the area" (NPS, 2003, Criteria 8) must be determined. However, there is no guiding methodology available to accomplish this task. Henceforth, the primary purpose of this article is to identify the most salient managerial factors and destination tourism performance measures from the perspective of visitor experience for use in assessing and monitoring the efficacy of NHA tourism destination management. Secondly, this paper explores the use of a modified importance-performance assessment as a useful metric with increased managerial relevance, called an importance-performance disconfirmation assessment.

Heritage Area Tourism Planning & Monitoring

Like national parks, NHAs operate under a dual mandate to provide resource protection and high quality visitor experiences. The difference for the locally-run NHAs is that tourism often serves a double role: as a mechanism for public access and in providing funding for the host management community to operate through direct visitor spending and taxes levied on tourism activities. The literature on the effectiveness of NHAs to achieve their goals have been limited to peripheral topics, such as the strength of NHA management networks (Laven at al., 2010) and economic impacts of heritage area related revenue (Umbach, 2014). Although comprehensive resource and visitor management frameworks have been fully developed for national parks and forests, heritage areas have no formal methodologies with which to assess areas of tourism management concerns or to tell how well the activity fits in the economic profile of a destination or larger region with multiple destinations.

Garrod and Fyall (2000) argued that unlike other forms of tourism, the business of heritage tourism has largely been overlooked by heritage managers primarily focused on site-level conservation and preservation initiatives. The authors explained, "This [approach] implies a heritage tourism mission that is primarily one of caring for the property and maintaining it in as pristine a state as possible, with issues such as financial solvency and public access entering in the decision-making process only as secondary considerations" (Garrod & Fyall, 2000, p. 684). Other research has suggested that after heritage areas are established and conservation measures take effect, the influence of tourism falls further in importance to heritage managers as the burden of site management takes precedent (Hede, 2008). As such, tourist perspectives

of overall heritage area destination experiences have been largely ignored in initial planning efforts (Prentice, 1993).

In some cases, the lack of understanding of or focus on tourists' interests has threatened the financial sustainability of well-intended heritage attractions. A study by McKercher (2001) recorded such a case in a cultural heritage Riverboat attraction developed by local stakeholders in Australia, where tourism interest was overestimated. In that case, large annual subsidies of public council money were required to keep it floating, posing a long-term threat to the viability of the heritage attraction. The same could be said for NHAs, for which the process of determining the feasibility and efficacy of heritage area development is primarily performed through resident stakeholder engagement studies and site analyses (NPS, 2003). Although NHAs are supposed to be gradually weaned off of federal support start-up funding, in practice, few of them have achieved this goal (Hill, 2004). The failure to do so has led to questioning by lawmakers whether some potential heritage areas should truly be designated as such, in fear that they will add to a growing federal financial burden (Umbach, 2014).

As such, much of heritage tourism planning has remained a largely subjective practice in the arena of market speculation. If locally-managed heritage areas like NHAs fail in their ability to sustain themselves financially, then the natural and cultural resources of conservation interest could be at risk for degradation or targeted for alternative, and potentially more exploitative, development options. Therefore, it is essential for heritage area tourism planning to account for demand-side tourist perspectives. Further, it must be able to gauge the interests of visitors and guide management actions to most efficiently provide a high-quality visitor

experience, while upholding standards of resource protection. For this accounting to take place, reliable measures of heritage tourism are required to establish baseline levels for feasibility assessments and subsequent long-term monitoring.

Planning frameworks have been commonly applied to national park management, such as the Visitor Experience and Resource Protection (VERP) framework. However, no such format has been provided for NHA management. The VERP framework encapsulates an approach to inventory and monitor both park resource conditions and the array of visitor experiences through baseline and long term monitoring studies. Elements of VERP also are used to allocate a range of visitation opportunities to certain zones in a comprehensive planning approach. In order to implement planning frameworks like VERP, a survey of park resources and visitor use must provide suitable data that can indicate quality levels for the later creation of quality standards (Manning, 2001).

Tourism Performance Measures

Creating and maintaining high levels of performance at destinations has long been a central issue in literature of tourism and consumer studies. Despite the reluctance of many heritage planners and managers to embrace the business of tourism, continual attention to the quality of any tourism experience is paramount to avoid issues of stagnation and decline (Butler, 1980; McElroy, 2006). It has been argued that, as an industry, the ultimate product of tourism is satisfactory experiences (Gunn & Var, 2002). Therefore, the primary measure of tourism performance in decades of research has been the construct of visitor satisfaction. High satisfaction has influenced repeated consumer purchases (Oliver, 1980) and caused greater

tourism destination loyalty, including reported willingness to take return trips and to spread word-of-mouth promotions (Oliver, 1999; Yoon & Uysal, 2005; Chi & Qu, 2008).

Much of the research on satisfaction theory stems from the expectancy-disconfirmation model. It theorizes that expectations formed prior to product experience form the basis of subsequent evaluative judgements of satisfaction (Oliver, 1980). If the performance exceeds expectations, then this difference is called a positive disconfirmation, which then leads to satisfaction and correlative purchase behaviors, and vice versa (Chi & Qu, 2008). The additive effect of disconfirmation over multiple products or attributes can influence an overall perception of a brand or destination. This has prompted a debate in the literature as to whether the attribute level or overall satisfaction are the most important to consider. From a managerial perspective, Oliver (1980) argued that attribute level reveals the most useful detail, since it is on those individual items where disconfirmation effects occur. Theoretically, if half of a destination's attributes were equally disconfirmed in both positive and negative directions, then the average mean would indicate a perfectly-confirmed fit of expectations and performance. This scenario could result in type II error of accepting the null hypothesis of no difference (overall satisfaction) between subjects when there, in fact, was a difference (attributes performed unevenly). This issue belies the usefulness of the often-asked study question of overall trip satisfaction, since it has little managerial relevance at a destination level and can have misleading implications in either direction. Therefore, researchers must choose measures of satisfaction according to study purposes with both internal and external validity in mind.

Oliver (1980) explained a two-dimensional nature of satisfaction through the lens of disconfirmation theory when he wrote in his conclusions, “Specifically, post-usage ratings of satisfaction appear to be a function of a linear combination of an adaptation level component (expectations or prior attitude) and disconfirmation (p. 466).” This linear association has been widely applied in the importance-performance assessment framework (IPA), also known as action grid analysis. It is used widely in consumer studies and in recreation and tourism applications to provide specific managerial guidance and policy decisions (Martilla & James, 1977; Oh, 2001). The IPA approach plots perceived importance against performance ratings. It yields a highly interpretable visual, in which mean scores fall into one of four quadrants with assigned management implications (Fig. 3.1). For example, scores with high importance and performance fall in the “keep up the good work” quadrant, while high importance and low performance fall in “concentrate here.” Low importance with high performance items are labeled “possible overkill”, while low importance and low performance fall in the “low priority” quadrant (Oh, 2001). This straightforward method has guided management recommendations in many visitor applications, such as outdoor recreation settings (Tarrant & Smith, 2002; Luck, 2011), culinary tourism (Smith & Costello, 2009), wildlife tourism (Taplin, 2012), religious theme sites (Rivera et al., 2009) and in tourism guide services (Zhang and Chow, 2004).

Despite its widespread use, numerous criticisms with importance-performance methodologies have been raised in literature (Oh, 2001; Feng et al., 2004; Lai & Hitchcock, 2015). A principal concern regarding IPA studies lies in the subjective decision by the

researcher on where to draw the hard line between acceptable and unacceptable mean scores for items of interest in the study.

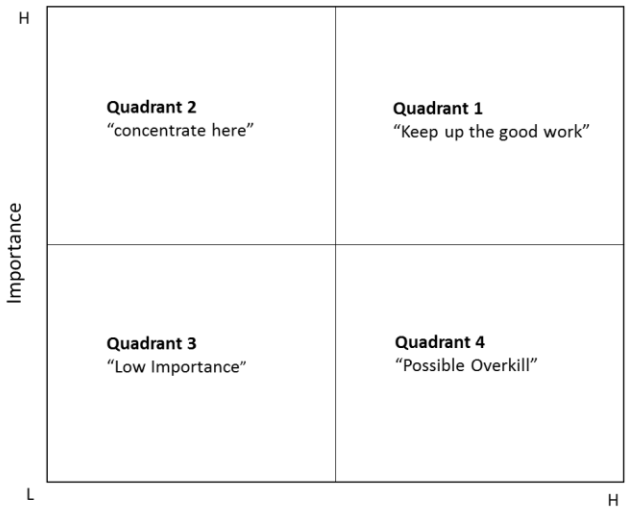


Figure 3.1. Traditional Importance-Performance Grid.

Prior studies have used more objective approaches, including overall means, medians, scale-centered means and other custom methods to set the placement of quadrant crosshairs on the axes of importance and performance. In a review of the many approaches used in tourism applications, Lai and Hitchcock (2015) found that the method of crosshair placement often delivered different results in quadrant assignment. This called into question the reliability of the traditional IPA method for delivering accurate maintenance prescriptions. Further, Tarrant and Smith (2002) found that when attribute standard errors are added on plotted points, those close the crosshair lines sometimes cross over the lines and are, thus, frequently and inaccurately assigned to the wrong quadrants.

Because points may fall in disparate locations within a single quadrant, Bacon (2003) developed a diagonal line method using a continuous score measure to present an interpretable ranking of priorities within and across quadrants. Finally, Oh (2001) argued that the axis of importance should be placed on a relative verses absolute measure in order to provide the most useful research conclusions for the highly competitive hospitality industry. As these various IPA modifications illustrate, researchers often choose to adapt their IPA approaches based on the purpose of analysis at hand.

Notwithstanding the roots of IPA in expectancy-disconfirmation theory as a basis to evaluate satisfaction, many IPA studies do not incorporate the difference between importance and performance in their study explicitly (Feng, 2011). Known in the literature as gap analysis, a number of IPA studies use this difference to provide a continuous measure of satisfaction disconfirmation to be compared against the importance of attributes. As a departure from traditional IPA, Feng (2011) reviewed studies that use gap analysis and identified two primary levels of gap analysis. The first compared gaps between attribute importance and performance, and the second went a step further, employing a total benchmark of importance by which to compare groups of competitors. Taplin provided an example of the latter, which was coined competitive importance performance analysis (CIPA; 2012). In the study, CIPA was used to compare visitor perceptions in different wildlife areas using benchmarks of mean importance and performance from a collection of parks against the target park of interest (Taplin, 2012). This solved issues of subjective crosshair placement and the incorporation of gap scores, however, the final result suffered from interpretability in plot matrices.

Additionally, although it was not the focus of the study, the binary comparison between one park and an aggregation of others does not allow post-hoc understandings of how the target park differed from specific members of the contrasted group. For example, characteristic differences of parks may explain discrepancies if one park was a riparian area while another was a mountain, it may attract visitors with different sets of motivations and interests. Oh (2001) argued that modifications of IPA are needed in such cases to assess differences in absolute verses relative importance of attributes. For measuring destination competition, CIPA is a suitable method, but since the purpose of this study is to compare heritage tourism with other popular forms of tourism, expansion on this recent approach is necessary.

Theoretical Framework

For the purpose of establishing a baseline of heritage tourism to see how well it is represented in the visitor population in comparison to other places, this paper explores the use of destination attribute importance comparisons. Prior research has identified established attributes of heritage including dimensions of natural, cultural, and authenticity (Nuryanti, 2006; Apostolakis, 2003; Chan, 2009). Visitor contact with destination attributes within these dimensions translate into experiences that are of varying importance to tourists, such as exploring cultural or natural history, visiting a museum, learning about local architecture, and having access to historical sites. If a good portion of the visitor population reports heritage related attributes are highly important, it will imply that heritage tourism development is consistent with the area. The question then is what constitutes a good enough portion?

By comparing the reported importance of attributes of potential destination with other regional destination tourism populations, a scale of reference can help distinguish the market, such as a recent study that compared national and international tourists (Sörensson & Freidrichs, 2013). Therefore, the first study objective is to assess if there are significant differences between the levels of perceived importance of site attributes across domains of heritage tourism attributes (natural, cultural, or service related) amongst visitors to three different regional destinations. This will serve the purpose of identifying salient management issues for heritage destinations. Thus, the null hypothesis is that there is no difference of the visitor reported importance of management factors between three regional destinations. The first alternative hypothesis (H1) tests the assumption that visitors to heritage destinations report higher levels of importance for cultural heritage management factors than visitors to mass tourism or ecotourism destinations. The second alternative hypothesis (H2) tests the assumption that visitors to heritage destinations report higher levels of importance for natural heritage management factors than visitors to mass tourism, but not ecotourism destinations.

Next, for the purpose of prioritizing heritage area tourism management in order to maintain satisfaction and subsequent positive purchase behaviors, this paper proposes a comparative importance-performance disconfirmation analysis to answer the question: Do destinations with higher concentrations of heritage tourists have the same kind of management concerns as other areas in the same region? Rooted in disconfirmation theory (Oliver, 1980), this modified IPA approach allows a focus on the gaps between importance and performance at a case level to provide a more objective approach than traditional IPA. Comparison of the gaps

can help determine if and how heritage tourism management priorities are different from other destinations, based on this measure of user satisfaction. By comparing the average disconfirmation with the baseline of zero from equal importance and performance, this approach can simultaneously identify destination attributes that are not satisfactory while benchmarking against the average disconfirmation score to gauge the relative importance of the attribute (Fig. 3.2).

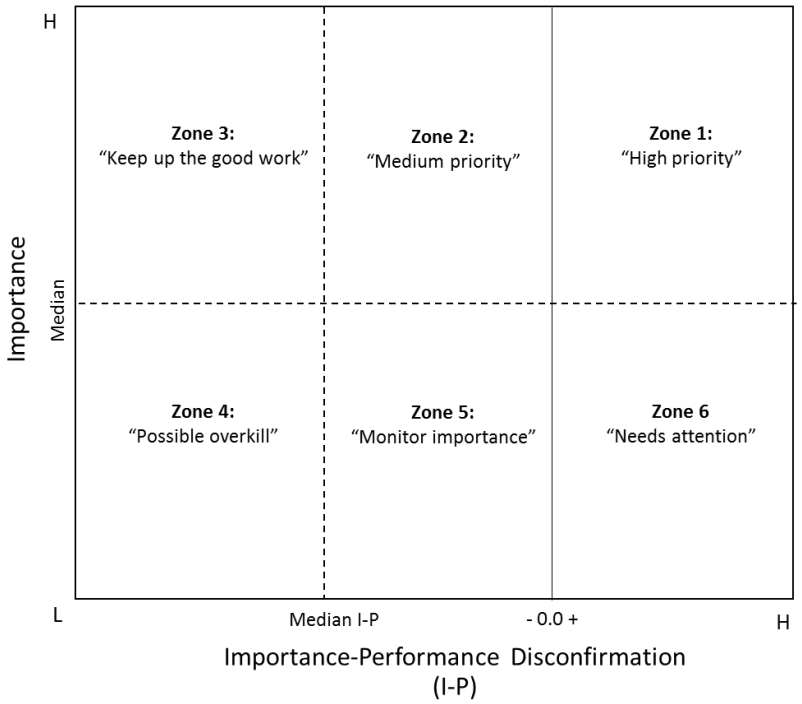


Figure 3.2. Proposed Comparative Importance-Performance Disconfirmation Grid.

Thus, the second research objective is to test for differences between visitor ratings of importance and performance of individual destination attributes between three regional destinations to comparatively rank the priority of tourism management factors between

heritage and non-heritage areas. Hence, the null hypothesis here is that there is no difference of disconfirmation between importance and performance (i.e., satisfaction) between visitors to heritage or non-heritage areas. The first alternative hypothesis (H3) is that there is a significant difference of satisfaction between visitors to heritage or non-heritage areas. Following the reasoning that tourists to heritage areas may be more critical of heritage-related destination attributes, the second alternative hypothesis (H4) proposes that visitors to heritage destinations have significantly lower satisfaction on those items than visitors to non-heritage destinations.

Study Area

The United States Virgin Islands (USVI), with 2.7 million visitors annually for the three primary island destinations of St. Thomas (STT), St. John (STJ), and St. Croix (STX), served as the study region. While all three islands share proximity and possess archetypical features of small Caribbean island coastal landscapes, including beaches and clear waters, their brands of tourism differ substantially. Their otherwise distinct site characteristics are representative of three common tourism destination themes: mass tourism (STT), ecotourism (STJ), and heritage tourism (STX). For example, as a mass tourism destination, STT one of the most active cruise ports in the Caribbean, with an average of 670 port calls per year from 2005-2014 (VIBER, 2016). STT also has the busiest airports in the small-island region (excluding Puerto Rico) and caters to its guests with ample duty free shopping, major flag luxury and expensive hotels, and a wide diversity of attractions and commercial tourism activities in an environment that is highly penetrated by tourism (McElroy, 1998).

In contrast, two-thirds of the area of STJ is a US National Park and access is provided by frequent boat ferry service from STT and other nearby British Virgin Islands. Development is restricted to several tightly-concentrated commercial districts and residential areas, and primary activities focus on a narrower range including boutique shopping, hiking, boating, SCUBA, and other forms of outdoor recreation.

Next, STX is of a more industrial than tourism character, both in the modern oil and rum refining and the historical remnants of hundreds of years of intensive agriculture that are memorialized in the stone and coral ruins of over 200 Danish sugar estates. However, tourism plays a significant role in the local economy. In 2003, the US Congress mandated a feasibility study for the designation of St. Croix as a National Heritage Area (NPS, 2010). Results of that study recommended that the entire island should receive the designation; however, this designation has not yet been enacted.

Together, the three-island region offers an opportunity to compare visitors to mass, eco, and heritage tourism destinations, where natural environmental and seasonal factors are controlled and managed by a single government authority. Additionally, small islands present a unique study area due to the population isolation and limited channels of travel available (Bull & Weed, 1999). Finally, the USVI and other Caribbean islands that depend on US travel are seeking to strengthen their tourism image in anticipation of the opening of Cuba to US travelers. The change is estimated to divert from existing destinations more than two thirds (1.6 million) of US tourists who are travelling for their first time to the Caribbean (Padilla, 2007).

Materials and Methods

Survey Instrument

This study is an extension of a heritage visitation study for the USVI (Olive, 2014) conducted under the United States Office of Interior's technical assistance program to assess the viability of heritage tourism development in the territory as a potential avenue for sustainable tourism. It followed prior research assisted by this author and the National Park Service (2010) to assess the feasibility of STX being designated as a NHA from a supply-side and stakeholder management perspective.

Results of the NPS study informed questionnaire development as to what local destination attributes that may have management implications were important to visitor experience. A list of over 40 destination attributes were identified and reduced to 23 relevant items for an importance-performance side-by-side response matrix. These attributes included items such as cultural and natural heritage resources, natural environment attractions, tourism activities and experiences, and general tourism services. The final questionnaire also included items on demographics and motivations, and asked which island was the visitor's primary destination, in order to account for inter-island travel.

The survey was administered in-situ to vacation visitors exiting the USVI during five weeks of the beginning and peak 2012-2013 winter season, from the airports and cruise ports of STT and STX. Visitors were randomly chosen to complete a self-response questionnaire procedure assisted by a survey attendant, and non-tourists and language barriers were screened out in the process.

Study Measures

The independent categorical variable, primary destination, consisted of the three destinations, St. Croix, St. Thomas, and St. John. The dependent variables included ratings of destination attribute importance and disconfirmation measures, which were the case-by-case differences between ratings of importance and performance. Both of these were based on the set of selected destination attributes with a 4-point Likert-like response format including, 1 = "not important", 2 = "somewhat important", 3 = "very important", and 4 = "extremely important." Performance ratings were alongside each line item importance rating, and responses ranged from 1 = "Poor", 2 = "Average", 3 = "Good", and 4 = "Excellent."

Dependent variables were reviewed for missing data and excluded if they exceeded the threshold of 12%. All of the importance variables had less than 12% missing values and those remaining were imputed by nearest median method. The performance attribute had more missing values, but most were under 12% other than "opportunities for clubs and nightlife" at 14.6%, with "golf" and "casino" at 19%. This is likely due to the inability to rate this experience if the visitor had no basis on which to rate it, as many cruise ship visitors only stayed during the daytime so could not rate clubs and nightlife, and golf and casino are not available on all three islands. Indeed, these three problem items were the lowest ranked of all 23 destination attributes and were subsequently removed from analyses, which left 20 attributes for analyses for both importance and performance.

Disconfirmation measures were calculated as simple differences between importance and performance which ranged from -3 to 3. As this difference moves towards negative, it

suggests a higher satisfactory performance and vice versa. For example, a "very important" attribute that was rated to perform "excellent" would result in 3 – 4 = -1, while if it were rated "poor," it would equal 3 – 1 = 2. This continuous measure variable provided a natural two-directional y-axis of 0.0, where to the left performance was satisfactory and to the right, unsatisfactory.

Data Analysis

Survey data were analyzed using SPSS 23 and the Amos 23 graphic extension. First, a principal component analysis (PCA) procedure was used to reduce the number of attributes into meaningful factors of destination management. For the purposes of the study, many attributes, by nature, fit cleanly into the factors of natural and/or cultural heritage, or service oriented. For example, "opportunities to learn about local culture" fits clearly into a cultural construct. However, some items, such as "opportunities for duty free shopping," could be considered a service factor or a cultural factor. Therefore, PCA was used to see where the data naturally grouped together according to its correlative tendencies around these attribute constructs. Factors were rotated obliquely using Promax rotation with Kaiser normalization, because the correlation matrix revealed component correlations above 0.32 which indicated an overlap in variance among factors (Tabachnick & Fiddell, 2007). The procedure was run unrestricted in the number of factors it could produce. Extractions were based on Eigenvalues greater than 1.

Next, a one-way multivariate analysis of variance (MANOVA) was performed with type III sum of squares to test for differences among destinations in attribute importance and

disconfirmation I-P scores. This statistical analysis has been used in prior destination research (Aziz & Zainol, 2010). MANOVA examines the linear composites of the means of dependent variables among independent grouping variables while testing for significant differences among them in a series of F-tests. The results inform which dependent variables have significant variation in between groups, and subsequent post-hoc tests are required to pinpoint where the variation occurred. The most appropriate post-hoc test can be determined after understanding how well the data conform to assumptions of normality and the presence of homogeneity of variance-covariance matrices. Significant differences with a p-value of less than 0.05 was accepted. Stronger significant differences were included for relative comparison of effects, when p was less than 0.01. Post-hoc comparison among group means were performed with a Tukey's HSD test.

Wilkes-Shapiro test of normality showed violations of the normality assumption, ($p<.001$); however, the test is influenced by large sample sizes. Skew was detected among importance, performance dependent variables. However, because MANOVA is considered robust against violations of normality and groups were large, the use of these variables was accepted for analysis. Indeed, subsequent visual inspection of Q-Q plots showed that all the variables were approximately normal. Because the variance of all items were not homogenous as assessed by Levene's Test of Homogeneity of Variance, Games-Howell pairwise comparison tests were used to separate group means. This *post hoc* test was preferred for unequal variances because it accounts for unequal sample sizes in the categorical independent variable. For the same reason, Pillai's Trace was used as the multivariate test for its added robustness.

To test study hypotheses regarding how the heritage destination varied from two other destinations, the effects of primary destination on importance and disconfirmation scores were again analyzed with MANOVA. The procedure included the three destinations as independent variables and the importance and disconfirmation scores of all 20 attributes and the three latent component factors (cultural, natural, service), resulting in 43 dependent variables. Homogeneity of variance-covariances matrices was not detected, as assessed by Box's test of equality of covariance matrices ($p < .001$). Next, to detect how the significant differences occurred in response variables, alpha levels were adjusted with the Bonferroni correction for a minimum acceptable p value of 0.025.

Results

Study Sample

Random sampling yielded 3,125 total completed questionnaires with a 65% response rate, out of which 2,677 cases categorically qualified for analyses. Because this study was interested in contrasting the three islands for their distinctive tourism market qualities, cases of travelers who answered "other" or Water Island were excluded. Of these 2,677 cases, there were 669 for STJ (25%), 581 for STX (22%), and 1427 for STT (53%). These percentages of the sample were reflective of the actual visitor base for the USVI region (VIBER, 2014). For example, the average visitation between the years of 2010 and 2011 was 11% for STX, and 89% for STT and STJ, whose ports are shared and, therefore, preexisting data to show them separately was not available.

To retain statistical robustness against assumptions of normality during analyses, the number of STT cases needed to be further reduced systematically so each group would be within 1.5 times the size of any other (Leech et al., 2005). This balance was achieved by removing every other case starting with a randomly selected number. The final subsampled STT group consisted of 714 cases, and the reduction procedure lowered the total number of cases in the study to 1,964 for analysis, providing a sampling error of ± 5% of the population (Salant & Dillman, 1994). Of the final sample, 76% were traveling by plane and 24% by cruise ship. Each destination had similar gender distribution, ranging from 56% female on St. Thomas, 58% on St. Croix, to 59% female on St. John. The average age for all three groups fell in a categorical range of 40-54 years old.

Principal Components Analysis

Principal components analysis conducted on the full sample (n = 1,964) returned a three-factor solution that explained of 58 percent of the total variance. The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) indicated a marvelous sample for analysis (KMO = 0.925). Bartlett's test of sphericity was significant, indicating adequate correlations between the variables ($p < 0.01$). The PCA, produced 3 primary factors, cultural, natural and service related (Fig. 3.3). Many of the attributes loaded strongly on factors, with a few exceptions. "Opportunities for duty-free shopping" loaded poorly onto the Cultural factor (0.37). Additionally, "access to internet" in the services factor loaded poorly (0.41). However, these items were retained for their importance to a management and association, however peripheral, for the purposes of this study.

Factor 1, labeled cultural, explained the largest amount of variance (38%) and high reliability (Eigenvalue = 7.652; Cronbach's α = 0.866; Table 3.1). It included items directly or peripherally related to human-created facets of heritage like built heritage (architectural history & historical buildings), learning about culture, features such as maps, brochures, and roadside stops, shopping, and cuisine, which could be considered tools or vehicles of cultural experience.

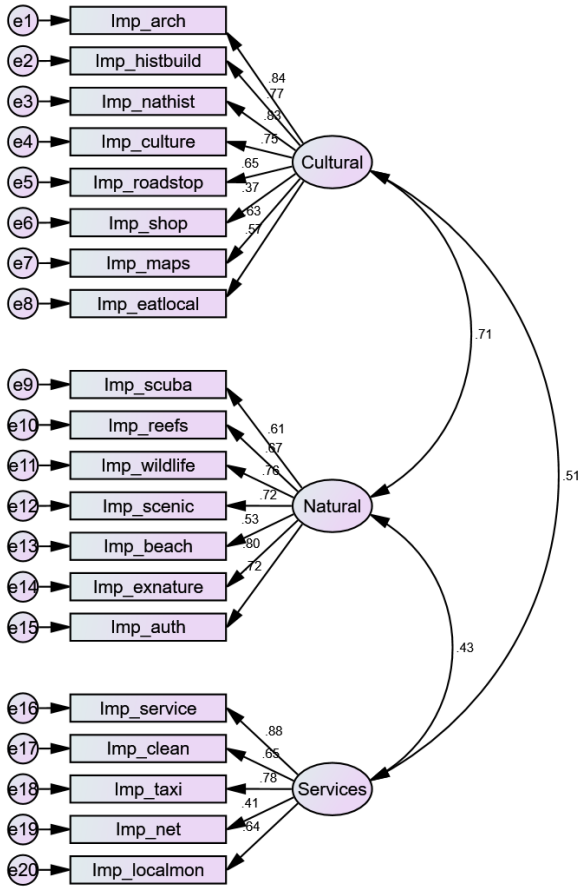


Figure 3.3. Principle Components Analysis of Reported Destination Attribute Importance by U.S.V.I. Tourists.
Note: Standardized estimates.

Mean importance averages showed the cultural component attributes were less important than nature and service attributes across the total sample. The highest importance rating within the factor was “availability of brochures and maps” ($\bar{x}$ 2.453) and "opportunities to eat local cuisine” ($\bar{x}$ 2.51). Both of these were lower than the lowest factor 3 attributes (Fig. 3.3).

The second factor, labeled natural, explained less than a third of the prior factor’s variance (11%) and was similarly reliable (Eigenvalue = 2.244; Cronbach’s α = 0.862; Table 3.1). These attributes were primarily related to direct experiences with nature, such as visiting coral reefs and viewing wildlife. The one non-nature specific attribute was “authentic experience,” which had the lowest factor 2 loading (0.476) but ranked higher than any factor 1 in mean importance ($\bar{x}$ = 2.692). The two most important items in factor 2 were “opportunities to view scenic areas” ($\bar{x}$ = 3.047) and “access to beaches” ($\bar{x}$ = 3.036). None of the factor 2 items were anthropocentric and, rather, more bio centric in character.

Finally, Factor 3 was labeled services and explained 8.9% of the variance and had good reliability (Eigenvalue = 1.796; Cronbach’s α = 0.783). These attributes were associated with the quality and availability of services. The two highest loading factors “friendliness of customer service workers” (0.858; $\bar{x}$ = 3.079) and “cleanliness of accommodations” (0.840; $\bar{x}$ = 3.319) were also rated the two most important attributes across all destination attributes in all three factor components. The item “knowing that money spent stays in the local economy” loaded the least strongly among factors (0.486; $\bar{x}$ = 2.835). However, it was still higher in mean importance than most of the factor 2 items and all of those in factor 1.

Table 3.1

Principal Component Analysis of U.S.V.I. Regional Tourism Sample 2012-2013

Component/Attribute	Factor Loading	Mean Importance	sd	Eigenvalue	% Variance Explained	Cronbach's Alpha
Factor 1) Cultural				7.652	38.258	.866
Opportunities to learn about architectural history	.902	2.220	.9038			
Opportunities to visit historical buildings	.877	2.191	.9271			
Opportunities to learn about natural history	.859	2.273	.8794			
Opportunities to learn about local culture	.843	2.355	.8541			
Availability of roadside scenic stops	.556	2.258	.9357			
Opportunities for duty free shopping	.495	1.813	1.0062			
Availability of local brochures and maps	.517	2.453	.9601			
Opportunities to eat local cuisine	.361	2.51	.915			
Factor 2) Natural				2.244	11.22	.862
Availability of snorkeling or SCUBA	.905	2.437	1.1283			
Opportunities to visit coral reefs	.831	2.309	1.0217			
Opportunities to view wildlife	.694	2.506	.9376			
Opportunities to view scenic areas	.614	3.047	.8371			
Easy access to beaches	.551	3.036	.8939			
Opportunities to explore a natural setting	.548	2.706	.9027			
To have an authentic experience	.467	2.692	.9523			
Factor 3) Services				1.796	8.981	.783
Friendliness of customer service workers	.858	3.079	.8146			
Cleanliness of accommodations	.840	3.319	.7755			
Friendliness of taxi drivers	.797	2.817	.9694			
Access to the Internet	.568	2.400	1.1208			
Knowing money spent stays in the local community	.486	2.835	.9224			
Total					58.461	

Multivariate Analysis of Variance

Results indicated highly significant differences among the combined dependent variables attribute between the independent variable primarily destination. (F (80, 3,846) = 15.159; $p < 0.001$; partial $\eta^2 = 0.240$). Follow-up tests of between-subjects' effects using a series of one-way analysis of variance (ANOVA) showed significant differences among destinations between attribute component factors of both culture and nature ($p < 0.001$), but service attributes were no different.

For the "cultural" factor component 1, STX visitors had significantly higher ratings of importance ($\overline{X}$ = 2.4; $p < 0.025$) than both STJ ($\overline{X}$ = 2.165) and STT ($\overline{X}$ = 2.234), which were no different from each other. For the "natural" factor 2, STJ had the highest rated importance of the three groups ($\overline{X}$ = 2.952; $p < 0.025$), and STX ($\overline{X}$ = 2.708) was significantly higher than STT ($\overline{X}$ = 2.392; $p < 0.025$). In contrast, the service factor 3 was equally important for all three destinations (Table 3.1).

On the individual attribute level, there were significant differences detected for all importance items ($p < 0.025$) other than the service factor items "cleanliness of accommodations" ($p = 0.392$) and "friendliness of customer service workers" ($p = 0.187$; Table 3.1). For disconfirmation measures (I-P), all of the items were significantly different ($p < 0.01$) other than "access to beaches" ($p = 0.448$), "friendliness of taxi drivers" ($p = 0.216$), and "friendliness of customer service workers" ($p = 0.059$).

The following results first describe the importance variable on overall component factors and individual attributes, and second, with scores of disconfirmation (I-P). Within the

cultural component (factor 1), STX visitors placed significantly higher importance on all cultural factors than STT ($p < 0.025$). They were also higher than STJ on all attributes ($p < 0.025$) except there was no difference in the importance of "availability of roadside scenic stops" and "opportunities to eat local cuisine" between the two destinations. There were few differences between STJ and STT importance levels: The importance of "duty free shopping" was significantly higher in STT ($\bar{X}$ = 2.130) than STJ ($\bar{X}$ =1.462) and STJ ($\bar{X}$ =2.58) was significantly higher than STT ($\bar{X}$ =2.32) in the importance of "opportunities to eat local cuisine" ($p < 0.025$). Disconfirmation scores followed a stronger pattern of overall factor 1 differences, in that visitors to STX had significantly higher disconfirmation scores than STJ and STT on all items ($p < 0.025$).

However, like STJ and STT, STX scores still had higher performance ratings than importance ratings, indicating high satisfactory state for those items across groups. For example, the highest disconfirmation score in factor 1 for STX was for "opportunities to learn about local culture" (I-P = -0.1558), meaning the performance on average exceeded the importance. This was significantly higher than the same scores for STJ (I-P = -0.3543) and STT (I-P = -0.3606), which were statistically no different. Yet, all three of these scores reflect positive disconfirmation, (i.e., still in a range of satisfactory performance (x <= 0)).

Importance scores in the natural component items (factor 2) were generally the highest in STJ, the ecotourism destination, with one exception: The mean importance of "having authentic experience" was not significantly different in STX ($\bar{X}$ = 2.812) from STJ ($\bar{X}$ = 2.859). However, both were higher than STT ($\bar{X}$ = 2.438; $p < 0.025$).

Table 3.2

Post-Hoc Comparisons of Destination Attributes of U.S.V.I. Regional Tourism Sample 2012-2013

	Total		St Croix[a]			St. John[b]			St. Thomas[c]			Games- Howell	
Components/attributes	I	sd	I	sd	I-P	I	sd	I-P	I	sd	I-P	Imp	I-P
Factor 1) Cultural	2.260	.6632	2.400	.6462	-.3183	2.165	.5517	-.6581	2.234	.7490	-.5541	a>b,c	a>b>c
Opportunities to learn about architectural history	2.220	.9038	2.404	.9021	-.2435	2.106	.8257	-.3543	2.178	.9522	-.3606	a>b, c	a>b,c
Opportunities to visit historical buildings	2.191	.9271	2.453	.9191	-.2384	2.039	.8432	-.5508	2.120	.9648	-.4230	a>b, c	a>b,c
Opportunities to learn about natural history	2.273	.8794	2.429	.8732	-.2065	2.221	.8091	-.4694	2.196	.9314	-.4804	a>b,c	a>b,c
Opportunities to learn about local culture	2.355	.8541	2.527	.8313	-.1558	2.239	.7379	-.3543	2.325	.9479	-.3606	a>b, c	a>b,c
Availability of roadside scenic stops	2.258	.9357	2.321	.9540	-.2186	2.291	.8989	-.7818	2.176	.9498	-.5504	a>c	a>b>c
Opportunities for duty free shopping	1.813	1.0062	1.827	.9790	-.8554	1.462	.8082	-1.4103	2.130	1.0862	-.9860	a>b<c	a>b<c>a
Availability of local brochures and maps	2.453	.9601	2.564	.9993	-.3993	2.380	.9196	-.7885	2.430	.9581	-.5609	a>b	a>b<c<a
Opportunities to eat local cuisine	2.51	.9152	2.680	.8951	-.2289	2.580	.8613	-.4462	2.321	.9451	-.5924	a,b>c	a>b>c
Factor 2) Natural	2.676	.7087	2.708	.6747	-.2849	2.952	.6432	-.4118	2.392	.6869	-.4960	a<b>c<a	a>b,c
Availability of snorkeling or SCUBA	2.437	1.1283	2.408	1.1086	-.6343	2.900	1.0527	-.5717	2.026	1.0468	-.8319	a<b>c	a,b>c<a
Opportunities to visit coral reefs	2.309	1.0217	2.333	.9998	-.6231	2.649	.9962	-.6801	1.971	.9525	-.8375	a<b>c	a,b>c
Opportunities to view wildlife	2.506	.9376	2.573	.8810	-.1592	2.768	.8858	-.4178	2.207	.9469	-.4482	a<b>c<a	a>b,c
Opportunities to view scenic areas	3.047	.8371	3.060	.8077	-.0465	3.259	.7798	-.2706	2.838	.8615	-.2339	a<b>c>a	a>b,c
Easy access to beaches	3.036	.8939	3.022	.8798	-.2298	3.247	.8063	-.2937	2.851	.9406	-.2808	a<b>c	n/d
Opportunities to explore a natural setting	2.706	.9027	2.750	.8738	-.2358	2.981	.8395	-.3662	2.413	.8966	-.4860	a<b>c	a>c
To have an authentic experience	2.692	.9523	2.812	.9308	-.0654	2.859	.9097	-.2825	2.438	.9561	-.3536	a,b>c	a>b,c
Factor 3) Service	2.890	.6800	2.891	.6869	.1186	2.858	.6619	-.0318	2.920	.6897	.0063	n/d	a>b
Friendliness of customer service workers	3.079	.8146	3.078	.8249	.1850	3.037	.8208	.0493	3.118	.7994	.0819	n/d	n/d
Cleanliness of accommodations	3.319	.7755	3.287	.8036	.3614	3.347	.7695	.1891	3.319	.7576	.2941	n/d	a>b
Friendliness of taxi drivers	2.817	.9694	2.650	1.0521	-.1282	2.800	.9263	-.1667	2.971	.9146	-.0623	a>b<c<a	n/d
Access to the Internet	2.400	1.1208	2.508	1.1105	.0258	2.378	1.1017	-.1629	2.333	1.1419	-.2591	a>c	a>c
Knowing that money spent stays in the local community	2.835	.9224	2.931	.9014	.1489	2.727	.9273	-.0680	2.858	.9256	-.0231	a>b<c<a	a>b,c

Games-Howell Post Hoc tests, p<.025.

In fact, STT had the lowest scores across factor 2 in natural-related attributes. Disconfirmation scores revealed less simple results: STX visitors had the highest disconfirmation score on "opportunities to view wildlife," "scenic areas," and "authentic experiences" ($p <$ 0.025), but were no different from STJ on the remaining items.

The third component factor, services, revealed no difference between destinations on the importance items of "friendliness of customer service workers" (total $\overline{x}$ 3.079) and "cleanliness of accommodations" (total $\overline{x}$ 3.319), the latter of which was the most important attribute of all in the total sample. For the remaining importance items, STX was significantly higher than the other two destinations (p = 0.025) except for "access to internet", which was no different than STJ. Disconfirmation scores were significantly higher for STX on "cleanliness of accommodation" (I-P = 0.3614) when compared to STJ (I-P = 0.1891), but neither of those destinations were different from STT (I-P = 0.2941). Because all of these scores were positive numbers. The final attribute, "knowing that money spent stays in the local community" crossed the line of disconfirmation between destinations. It was significantly highest on STX with a positive difference (I-P = 0.1489) compared to both STJ (I-P = -0.0680), and STT (I-P = -0.0231) with a negative difference, which indicated better satisfaction in the latter two destinations.

Importance-Performance Disconfirmation Assessment

Resulting dependent variable means of the 20 destination attributes were plotted on the importance-disconfirmation grid paneled by row for each destination. The zero point of disconfirmation scores served as the hard line horizontal axis separating satisfaction to the left and dissatisfaction to the right, with the grand median scores of importance ($\tilde{x}$ = 2.47) and disconfirmation ($\tilde{x}$ = -0.34) comprising the other dotted axes for regional comparison. Figure

3.4 shows that the majority of items across all destinations fell in the negative range of disconfirmation, and the only items in positive ranges were all service-related and of high importance.

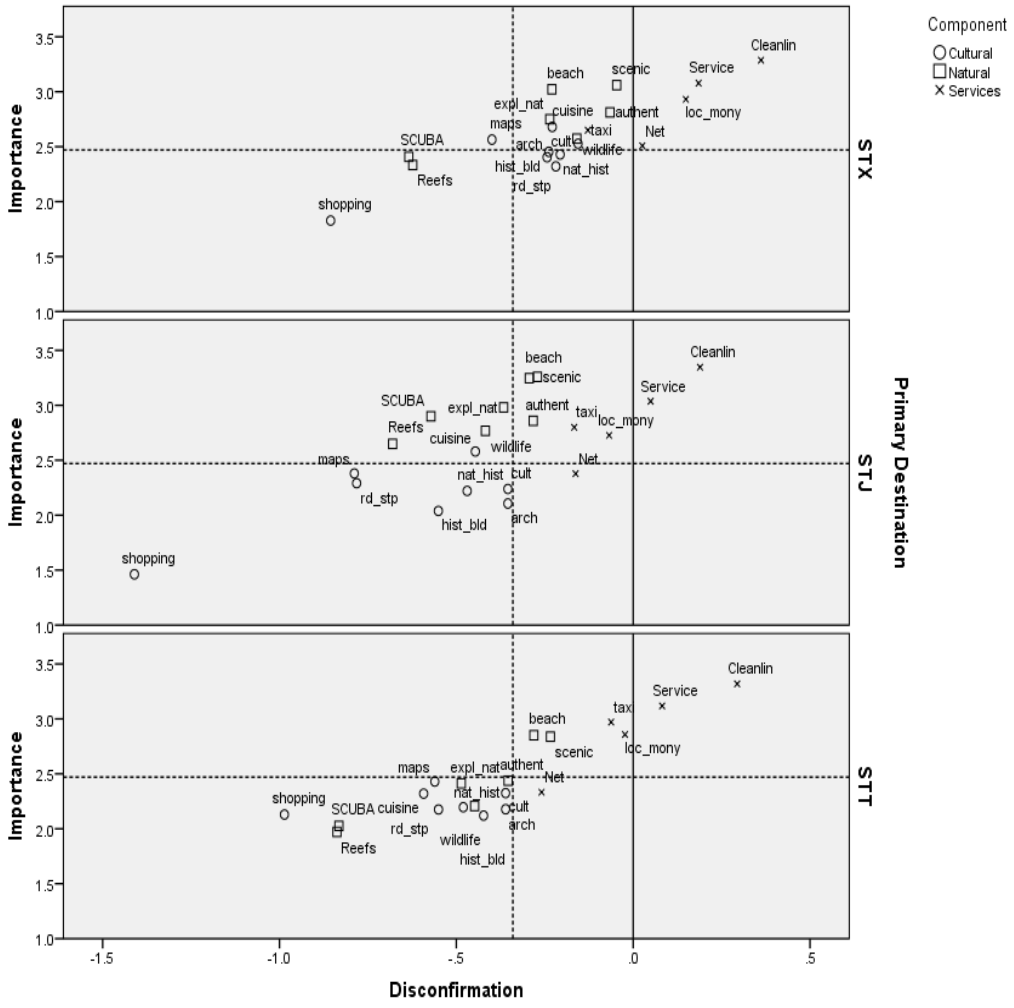


Figure 3.4. Importance – Performance Disconfirmation Grid of Regional Tourism Sample

The distribution of dependent variable scores (Fig. 3.4) showed a relatively tight STX point grouping of items towards the upper right in zone 2 “medium priority” and zone 5 “monitor importance.” In contrast, STJ points were centrally scattered while STT towards the

lower left in zone 4 “possible overkill.” STX had twice as many attribute in zone 1 (4) than STJ and STT and 8 attributes (5 natural, 2 cultural, & 1 service) in zone 2, more than STJ (5) and STT (4). STJ had the only items in zone 3 “keep up the good work” (5) except for 1 “maps and brochures” in STX.

Discussion

Results suggest that heritage destination tourists have different sets of experiential priorities and corresponding levels of satisfaction regarding destination attributes than tourists at ecotourism or mass tourism destinations. In support of this notion, 4 principal hypothetical findings confirmed the following distinctions of heritage destination tourists when compared to two other types of destinations: 1) Heritage area tourists placed significantly higher emphasis on cultural attributes of a destination than tourists to eco and mass tourism destinations, 2) They placed higher emphasis on natural attributes than mass tourism destination visitors, but less than ecotourism destination visitors, 3) Satisfaction levels of destination attribute performance varied across destination types, and 4) Visitors to the heritage destination were the least satisfied among groups with cultural, natural, and service-related factors of their destination. In sum, the heritage destination exhibited the highest demand for cultural experiences between groups, with natural experiences secondary, and they were the least satisfied with destination performance.

Despite differences between islands, destination performance was largely positive as measured by disconfirmation scores, which implied satisfactory levels in the region (Oliver, 1980) for all cultural and natural attributes. Indeed, only service-related attributes fell in the range of dissatisfaction (Fig. 3.4), with the heritage area having 4 of 5 of those items in the

"high priority" zone compared to only 2 for the other places. Overall, results suggest that the heritage destination requires more medium and high priority management actions to increase or maintain visitor satisfaction.

A secondary finding was that while the heritage destination group placed the highest importance on cultural factor items between groups, within the heritage group, many natural factor items such as "easy access to beaches" and "opportunities to view scenic areas" ranked higher in importance. This result reinforces the notion that nature and culture together form an important role in the overall heritage tourism experience. Additionally, authenticity played an equally important role in both the heritage and ecotourism group experiences; however, the item correlated with the nature construct more strongly as a principal component. Apostolakis (2003) argued that authenticity is a convergent construct between visitors and destination hosts. Here, it demonstrates that heritage tourism and eco-tourism are not exclusive phenomena from the tourist perspective. Both place emphasis on experiences perceived to be "real" in natural and cultural settings, which, in turn, are not impacted away from their perceived "true" character or sullied by commodification (Halewood & Hannam, 2001).

By contrasting destination types in a region with common destination attributes, this study established a baseline of representation for heritage tourism interests and employed a modified importance-performance method to prioritize management actions. In doing so, it demonstrated that the approach can be used to estimate the tourism market. For example, as a potential NHA in between the feasibility assessment stage and designation process, St. Croix visitors showed a significantly-higher emphasis on cultural heritage tourism components benchmarked against its neighbors. This approach also provided both regional- and

destination-specific information relevant to policy makers and managers. For example, since the USVI is managed under one governmental tourism authority, high-priority issues for the entire region like “cleanliness of accommodations” (#1 priority for all destinations; Table 3.3) can be confronted with territory-wide accommodation training campaigns. Concurrently, resources can be shifted more efficiently to smaller targets such as improvement of “internet access” at the heritage destination (#4, high priority) where needed. To illustrate, the highest priority items were common across destinations, while the other rankings displayed more variability (Table 3.3).

Rankings of management priorities against the proposed importance-disconfirmation study framework utilized the continuous measure of disconfirmation as a measure of performance. As demonstrated in Figure 3.4, rankings follow “high priority” where unsatisfactory conditions must be urgently addressed, to “medium priority” where they are highly important and approaching lower levels of satisfaction. Next, “needs attention” are dissatisfied issues of low importance, while “monitor importance” indicates items that should be watched if they become greater concern to visitors. Finally, “keep up the good work” and “possible overkill” items show successful attribute management with high satisfaction.

Consequently, this provided a more objective and sensitive approach than traditional IPA, which does not provide a continuous variable to rank, relies on quadrant assignments that are often too simplistic for management concerns, and suffers from subjective placements of crosshairs that can result in profoundly different management prescriptions (Tarrant & Smith, 2002; Lai & Hitchcock, 2015).

Table 3.3

Ranking of Tourism Management Priorities for Heritage Destination, St. Croix

Rank*	Heritage Destination Attributes	Management Action Zone	Component	Rank Difference	
				Eco Dest.	Mass Tour. Dest.
1	Cleanliness of accommodations	"High Priority"	Service	n/d	n/d
2	Friendliness of customer service workers		Service	n/d	n/d
3	Knowing that money spent stays in the local community		Service	n/d	n/d
4	Access to the Internet		Service	-4	-3
5	Opportunities to view scenic areas	"Medium Priority"	Natural	n/d	n/d
6	To have an authentic experience		Natural	n/d	-4
7	Friendliness of taxi drivers		Service	+4	+3
8	Opportunities to view wildlife		Natural	-2	-5
9	Opportunities to learn about local culture		Cultural	-5	-1
10	Easy access to beaches		Natural	+3	+4
11	Opportunities to eat local cuisine		Cultural	n/d	-8
12	Opportunities to explore a natural setting		Natural	-3	-2
13	Opportunities to learn about architectural history		Cultural	-2	+4
14	Opportunities to learn about natural history	"Monitor Importance"	Cultural	-2	+2
15	Availability of roadside scenic stops		Cultural	-3	n/d
16	Opportunities to visit historical buildings		Cultural	-1	+5
17	Availability of local brochures and maps	"Keep up the good work"	Cultural	-2	-1
18	Opportunities to visit coral reefs	"Possible Overkill"	Natural	+5	-1
19	Availability of snorkeling or SCUBA		Natural	+7	-1
20	Opportunities for duty free shopping		Cultural	n/d	n/d

*Ranks in descending disconfirmation score and importance-disconfirmation zone assignments.
Note: Destinations: Heritage = St. Croix; Ecotourism = St. John; Mass Tourism = St. Thomas.

For example, an item near the line between "keep up the good work" and "focus here" from traditional IPA could statistically overlap with a wide standard error and result in either action or no action. In contrast, the modified approach used in this study provides a lateral wide area for error along the satisfaction continuum (I-P). Additionally, the true zero of disconfirmation provides an objectively-placed vertical axis where visitors have clearly indicated

that on the left side the attribute is acceptable, and on the right side it is not. In using the grand median average for both the remaining vertical and horizontal axes, a benchmark of comparison provides softer lines for determining priorities than the former, yet still a true measure of data driven crosshair placement. However, the horizontal axis is still subject to potential zone crossover, so standard errors should be considered and conservative estimates preferred to recommending no action. These methodological improvements in recent studies that highlight the subjective downfalls of the IPA method, which has had many disadvantages in a trade-off between ease of interpretation and accuracy of results (Feng et al., 2014; Lai & Hitchcock, 2015).

Results of this study are limited to the tourism population of the USVI, which is made up primarily US travelers (> 90%). Further studies are needed to replicate this approach in other regions where heritage tourism is a proposed or needing management direction. Many places are familiar with traditional forms of tourism and as a relatively young phenomenon, heritage tourism still stands to be distinguished as a niche market for both economic and management concerns. Another limit of this study is that "visitors to heritage destinations" does not exclusively describe a primary heritage tourist, since all visitors cannot be assumed to have traveled to STX primarily for reasons of heritage.

The modified IPA framework used in this study provides information that can be useful as a metric for a NHA planning and monitoring frameworks such as VERP, the Limits of Acceptable Change and the Recreation Opportunity Spectrum (Tarrant & Smith, 2002; Nilsen & Tayler, 1997). In such strategies, a baseline is required to assess the efficacy of management through resource monitoring over time. Given the unique economic development reliance

requirement of NHAs in the profile of United States' natural and cultural resource area conservation strategies (Umbach, 2014), an adaption to incorporate the market perspective of heritage area tourism is appropriate for further development. This approach should complement, not replace, the well-developed host community participatory planning methodologies already in place, as both sides are crucial for sound heritage area planning (McKercher, 2001) and negative social and environmental impact mitigation (Grant, 2004).

Conclusion

This study approach expanded upon competitive IPA strategies (CIPA) used to assess competitive advantages through the application of a comparative important-disconfirmation assessment. Modifications provided a quantitative framework for the growing needs of assessing the market feasibility of heritage area development and for the guidance of regional destination tourism management. Finally, this study created new market perspective understandings of how heritage tourism differs from other types of tourism that are far more familiar to destination managers. Results are immediately applicable to NHA planning needs, and should be further applied for other heritage areas such as World Heritage sites and Geotourism areas (Stueve, 2002) that need to bolster regional diversification and economic sustainability of the heritage tourism destination level phenomenon.

References

Apostolakis, A. (2003). The convergence process in heritage tourism. Annals of Tourism Research, 30(4), 795. doi:10.1016/s0160-7383(03)00057-4

Bacon, D. R. (2003). A comparison of approaches to importance-performance analysis. International Journal of Market Research, 45(1), 55-71.

Butler, R. W. (1980). The concept of a tourist area cycle of evolution: implications for management of resources. The Canadian Geographer/Le Géographe canadien, 24(1), 5-12.

Cela, A., Lankford, S., & Knowles-Lankford, J. (2009). Visitor spending and economic impacts of heritage tourism: a case study of the Silos and Smokestacks National Heritage Area. Journal of Heritage Tourism, 4(3), 245-256.

Chan, N. (2009). Issues and challenges of managing natural heritage in Penang National Park, Malaysia. Proceedings of 2nd National Symposium on Tourism Research, Universiti Sains Malaysia, Penang, Malaysia 18 July 2009. Theories and Applications. B. Mohamed and M. Sirat. Pulau Pinang; Malaysia, Social Transformation Platform: 111-123.

Chi, C. G.-Q., & Qu, H. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. Tourism Management, 29(4), 624-636. doi: http://dx.doi.org/10.1016/j.tourman.2007.06.00

Chien-Min, C., Sheu Hua, C., & Hong Tau, L. (2011). The destination competitiveness of Kinmen's tourism industry: exploring the interrelationships between tourist perceptions, service performance, customer satisfaction and sustainable tourism. Journal of Sustainable Tourism, 19(2), 247-264. doi: 10.1080/09669582.2010.517315

Chhabra, D. (2010). Sustainable marketing of cultural and heritage tourism: Routledge.

CTO (2008). Development of a strategic business management model for the sustainable development of heritage tourism products in the Caribbean. (pp. 100). St. Michael, Barbados: Caribbean Tourism Organization.

Feng, M., Mangan, J., Wong, C., Xu, M., & Lalwani, C. (2014). Investigating the different approaches to importance–performance analysis. The Service Industries Journal, 34(12), 1021-1041. doi: 10.1080/02642069.2014.915949

Field, A. (2009). Discovering statistics using SPSS (3rd Ed.): Sage publications.

Garrod, B., & Fyall, A. (2000). Managing heritage tourism. Annals of Tourism Research, 27(3), 682-708.

Grant, M. (2004). Innovation in tourism planning processes: action learning to support a coalition of stakeholders for sustainability. Tourism and Hospitality Planning & Development, 1(3), 219-237.

Gunn, C., & Var, T. (2002). Tourism planning: basics, concepts, cases (4th ed.). Washington, D.C.: Taylor and Francis.

Halewood, C., & Hannam, K. (2001). Viking Heritage Tourism: Authenticity and Commodification. Annals of Tourism Research, 28(3), 565-580.

Hede, A.-M. (2008). World Heritage Listing and the Evolving Issues Related to Tourism and Heritage: Cases from Australia and New Zealand. Journal of Heritage Tourism, 2(3), 133-144. doi: 10.2167/jht055.0

Hill, B. T. (2004). National Park Service: A More Systematic Process for Establishing National Heritage Areas and Actions to Improve Their Accountability Are Needed: GAO-04-593T. GAO Reports, 1.

Kaufman, T. J. and P. A. Weaver (2006). Heritage tourism: A question of age. Asia Pacific Journal of Tourism Research 11(2): 135-146.

Lai, I. K. W., & Hitchcock, M. (2015). Importance–performance analysis in tourism: A framework for researchers. Tourism Management, 48, 242-267.

Laven, D. N., Krymkowski, D. H., Ventriss, C. L., Manning, R. E., & Mitchell, N. J. (2010). From partnerships to networks: New approaches for measuring U.S. National Heritage Area effectiveness. Evaluation Review, 34(4), 271-298. doi: 10.1177/0193841x10370668

Leask, A., & Goulding, P. (1996). What price our heritage? A study of the role and contribution of revenue management in Scotland's heritage based visitor attractions. Managing Cultural Resources for the Tourist, M. Robinson, N. Evans and P. Callaghan, eds, 239-270.

Leech, N. L., et al. (2005). SPSS for intermediate statistics: Use and interpretation, Psychology Press.

Manning, R. (2001). Programs that work. Visitor experience and resource protection: a framework for managing the carrying capacity of National Parks. Journal of Park and Recreation Administration, 19(1), 93-108.

Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. Journal of Marketing, 77-79.

Matzler, K., Bailom, F., Hinterhuber, H. H., Renzl, B., & Pichler, J. (2004). The asymmetric relationship between attribute-level performance and overall customer satisfaction: a reconsideration of the importance–performance analysis. Industrial Marketing Management, 33(4), 271-277. doi: http://dx.doi.org/10.1016/S001

McElroy, J. L. (2006). Small island tourist economies across the life cycle. Asia Pacific Viewpoint, 47(1), 61-77. doi:10.1111/j.1467-8373.2006.00303.

McKercher, B. (2001). Attitudes to a non-viable community-owned heritage tourist attraction. Journal of Sustainable Tourism, 9(1), 29-43.

Millar, S. (1989). Heritage management for heritage tourism. Tourism Management, 10(1), 9 -14.

NPS (2003). National Heritage Area Feasibility Study Guidelines: Draft. United States National Park Service.

National Park Service. (2010). St Croix National Heritage Area Feasibility Study (pp. 1-202): United States Department of the Interior: National Park Service.

Nilsen, P., & Tayler, G. (1997). A Comparative Analysis of Protected Area Planning and Management Frameworks *In: McCool, Stephen F.; Cole, David N., comps. 1998. Proceedings—Limits of Acceptable Change and related planning processes: progress and future directions; 1997 May 20–22; Missoula, MT. Gen. Tech. Rep. INT-GTR-371. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.* (pp. 49-58).

Nuryanti, W. (1996). Heritage and postmodern tourism. Annals of Tourism Research, 23(2), 249-260. Retrieved from http://www.sciencedirect.com/science/article/B6V7Y-3VWPMXC-1/2/283d1c65a0b32c5a0d82336a2ceb50d5

Nyaupane, G. P., White, D. D., & Budruk, M. (2006). Motive-Based Tourist Market Segmentation: An Application to Native American Cultural Heritage Sites in Arizona, USA. Journal of Heritage Tourism, 1(2), 81-99.

Oh, H. (2001). Revisiting importance-performance analysis. Tourism Management, 22(6), 617-627.

Olive, N. D. (2014). Heritage Tourism Visitation in the United States Virgin Islands. Eastern Caribbean Center: University of the Virgin Islands.

Oliver, R. L. (1999). Whence consumer loyalty? The Journal of Marketing, 33-44.

Padilla, A., & McElroy, J. L. (2007). Cuba and Caribbean Tourism after Castro. Annals of Tourism Research, 34(3), 649-672.

Patuelli, R., Mussoni, M., & Candela, G. (2013). The effects of World Heritage Sites on domestic tourism: a spatial interaction model for Italy. Journal of Geographical Systems, 15(3), 369-402. doi: 10.1007/s10109-013-0184-5

Prentice, R. (1993). Tourism and heritage attractions: Routledge.

Prentice, R. C., Witt, S. F., & Hamer, C. (1998). Tourism as experience: The case of heritage parks. Annals of Tourism Research, 25(1), 1-24.

Schuster, R. M., Sullivan, L. E., Kuehn, D. M., & Morais, D. B. (2011). Relationships among Resident Participation in Nature and Heritage Tourism Activities, Place Attachment, and Sustainability in three Hudson River Valley Communities. Journal of Park & Recreation Administration, 29(3), 55-69.

Smith, S., & Costello, C. (2009). Culinary tourism: Satisfaction with a culinary event utilizing importance-performance grid analysis. Journal of Vacation Marketing, 15(2), 99-110. doi: 10.1177/1356766708100818

Sörensson, A., & von Friedrichs, Y. (2013). An importance–performance analysis of sustainable tourism: A comparison between international and national tourists. Journal of Destination Marketing & Management, 2(1), 14-21.

Stueve, A. M., Cook, S. D., & Drew, D. (2002). The Geotourism Study: Phase 1 executive summary. 24.

Tarrant, M. A., & Smith, E. K. (2002). The use of a modified importance-performance framework to examine visitor satisfaction with attributes of outdoor recreation settings. Managing Leisure, 7(2), 69-82. doi: 10.1080/13606710210137246

Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics (5th ed.). Upper Saddle River, NJ: Pearson Allyn & Bacon.

Taplin, R. H. (2012). Competitive importance-performance analysis of an Australian wildlife park. Tourism Management, 33(1), 29-37. doi: http://dx.doi.org/10.1016/j.tourman.2011.01.020

Umbach, T. (2014). Economic and Community Impact of National heritage area Sites (pp. 1-39): National Park Service.

Underberg-Goode, N. M. (2014). Cultural heritage tourism on Peru's north coast. Worldwide Hospitality & Tourism Themes, 6(3), 200-214. doi: 10.1108/whatt-03-2014-0013

Rivera, M. A., Shani, A., & Severt, D. (2009). Perceptions of service attributes in a religious theme site: an importance–satisfaction analysis. Journal of Heritage Tourism, 4(3), 227-243.

Salant, P. D. & Dillman, D. A. (1994). How to conduct your own survey. New York, Wiley.

Service, U. S. N. P. (1997). VERP, the Visitor Experience and Resource Protection (VERP) framework: A handbook for planners and managers. Denver, Colorado: National Park Service.

Sinani, A. (2013). Cultural and heritage tourism in the region of Gjirokstra, Albania. International Journal of Ecosystems & Ecology Sciences, 3(2), 301-306.

Smith, S., & Costello, C. (2009). Culinary tourism: Satisfaction with a culinary event utilizing importance-performance grid analysis. Journal of Vacation Marketing, 15(2), 99-110. doi: 10.1177/1356766708100818

VIBER. (2014) Annual Tourism Indicators. Retrieved January 10th, 2016, from Virgin Islands Bureau of Economic Research.

Vong, L. T.-N., & Ung, A. (2012). Exploring Critical Factors of Macau's Heritage Tourism: What Heritage Tourists Are Looking for when Visiting the City's Iconic Heritage Sites. Asia Pacific Journal of Tourism Research, 17(3), 231-245. doi:10.1080/10941665.2011.625431

Weaver, D. B., & Lawton, L. J. (2007). Twenty years on: The state of contemporary ecotourism research. Tourism Management, 28(5), 1168-1179.

Yan, G., So, S.-I., Morrison, A. M., & Sun, Y.-H. (2007). Activity Segmentation of the International Heritage Tourism Market to Taiwan. Asia Pacific Journal of Tourism Research, 12(4), 333-347. doi:10.1080/10941660701761001

Zhang, H. Q., & Chow, I. (2004). Application of importance-performance model in tour guides' performance: evidence from mainland Chinese outbound visitors in Hong Kong. *Tourism Management, 25*(1), 81-91. doi: http://dx.doi.org/10.1016/S0261-5177(03)00064-5

CHAPTER 4

CONCLUSION

This work sought to assist heritage tourism planning and management for National Heritage Areas (NHAs) through a greater understanding of the heritage tourism niche market. Until now, visitor characteristics and preferences have largely been overlooked in the heritage tourism planning processes used to establish and manage NHAs. The lack of visitor input in localized NHA planning and management has been especially problematic because tourism is a key economic activity that is often essential to support natural and cultural resource conservation and sustainable tourism development.

If equipped with objective and quantitative information regarding the unique patterns and behaviors of heritage tourists, NHAs can better predict the market's preferences and needs in order to deliver satisfactory experiences and drive desirable post-purchase behaviors. Additionally, the ability to predict success for heritage tourism development is an essential component for assessing the feasibility of NHA designation, thus complimenting the established participatory planning processes.

Thus, the study purpose of this research was two-fold: 1) To provide a methodological tourism study framework for assessing NHA designation feasibility, and 2) To identify performance measures for evaluating tourism management efficacy. In order to fulfill these purposes, it was first necessary to establish a demographic and psychometric profile of heritage tourists. Therefore, Chapter 2 presented a case study in which heritage tourists were

contrasted with other types of tourists in a regional visitor population in order to discover the distinct characteristics of the heritage market. The study applied prior theory regarding the structural relationships between travel motivations, trip satisfaction, and destination loyalty to test if heritage tourists operate in the same way as other types of tourists or if they occupy their own unique niche of market preferences.

Chapter 3 built upon the understanding gained about heritage tourists as a market niche to identify performance measures for feasibility assessments and for the prioritization of heritage area management action. It tested how natural resource, cultural resource, and service provision components of destination attributes vary between types of destinations typified by common themes of tourism (mass, eco, and heritage). Furthermore, it demonstrated the use a comparative importance-performance disconfirmation assessment, which ranked the management of destination attributes by priority and compared among destination types.

Together, the studies presented in this work provided a quantitative basis for objective decision-making in heritage tourism planning, marketing, and management. First, the comparative approaches taken in both studies permitted an informed look of the relevance of the evolving heritage area tourism market in contrast to other mature segments and types of destinations. This was important because destination planners must consider a range of options for tourism development, and visitor populations often include a mixture of tourist types and market niches, with varying preferences a given destination. Indeed, even small island tourism does not exist in a vacuum, as destinations and attractions must compete to win over visitors out the same population. Second, this research filled the void of missing metrics

needed to determine the existing NHA designation criteria of estimating the suitability of heritage tourism in a NHA as an activity consistent with local economic development (NPS, 2003). Without this type of information, NHA planning has been prone to subjective market assessments overshadowed by the exemplary merits of heritage resources with a hopeful, yet naïve, approach to sound economic development planning. Third, this research provided a methodological approach for the objective prioritization of heritage area management actions. Such information is needed for sound, educated, and defensible NHA policy making. This is especially crucial for the justification of the use of public resources in tourism management and for the support of grants for natural and cultural heritage resource conservation. These grants are necessary for many NHA management agencies to operate since they have very limited federal funding unlike national parks.

However, the needs of any comprehensive destination tourism planning require more than market information alone. As the review of literature demonstrated, NHA management requires a special balance of community planning and consistent involvement that is coupled with an informed market analysis to estimate the success of heritage initiatives. The demand-side perspective of this approach lends to integration with supply-side community-based participatory planning for heritage tourism. In order for this integration to occur, a heritage planning framework must be created that incorporates NHA designation criteria assessments in a formulaic manner for resource inventory and long-term monitoring based on a set of quality standards. Given the emphasis of planning frameworks for national forests, wilderness areas, and parks, it was surprising to find that in the 34 years since the first NHA was designated, no

such frameworks have been proposed in the literature nor adopted for NHA planning processes.

In order to proceed towards a heritage area planning framework, the case studies herein hold merit in demonstrating how the market assessment criteria can be achieved. The following section will review the results of this work as they relate to heritage tourism management and framework design. Then, the contribution to knowledge section will synthesize these results and suggest how this study can be integrated with the current planning guidelines in a heritage tourism planning framework.

Summary of Findings & Conclusions

Overall, this research confirmed study hypotheses that the heritage tourism market has distinct qualities that distinguish it as a niche worthy of special management consideration. First, heritage tourists were revealed to have significantly different demographic traits and psychographic tendencies from other types of tourists. Secondly, visitors to the heritage destination, St. Croix (STX), exhibited significantly different levels of importance and satisfaction regarding manageable destination attributes when compared to visitors at other types of destinations in the same geographic destination region. Thirdly, the methods employed proved capable of providing metrics for heritage tourism planning through an innovative importance-performance disconfirmation approach and a subsequent management action ranking procedure. The following encapsulates these findings and conclusions within their relevance to tourism planning.

The heritage tourist demographic was significantly more female (60%) than heritage apathetic tourists. It also had lower income and education levels, but was no different in age,

than eco-focused (eco-tourists) or heritage apathetic tourists (mass tourists). Of these differences, the female factor was the more significant finding, because although heritage tourists made less money than other types of tourists, their spending at the destination was not statistically different. Additionally, lower income and education levels have previously been associated with females. The fact that the heritage segment was the least educated weakens the assumption that they are more highly-educated than mass tourists. However, based on their high rating of importance for learning about natural and cultural heritage, they seem to be more inclined to seek educational opportunities than mass tourists during their vacation. Thus, heritage area promoters, site managers, and service providers should emphasize educationally experiential opportunities for women for precisely targeted marketing messages, as well as tourism infrastructure design. Finally, heritage tourists were the most likely to have personal heritage connections with their destination, illuminating a pool of potential visitors who may have historic ties to the area.

Next, the attitudes of the heritage tourism market, across all three destinations, displayed a general eagerness to support local destination when compared to the other tourism types. They were the most likely to pay more for and seek out more services that protected natural and cultural resources. They were the also the most loyal to their destination, including being the most likely to return and to recommend it to other people. These results led to the conclusion that heritage tourists were the strongest advocates of their destinations. This implies that beyond the number of tourists, the type of tourist also has an effect on how well they will contribute to economic development. Specifically, a given heritage tourist appears to be worth more to her destination than an eco-tourist or mass tourist, because she provides free

marketing, double visitation, and spends money in ways that are consistent with and feed into heritage resource protection. This knowledge is useful because even areas that do not have heritage tourism as an overall brand may wish to promote it as a segment of their visitor population to minimize economic leakage and recruit word-of-mouth marketing for the destination as a whole. Indeed, as seen in the results of the second manuscript chapter, knowing that money spent went to the local community was a high priority for all three destinations in this study. The first study shows that this result was largely due to the presence of tourists classified by this study as heritage tourists among each destination's tourist population.

Additionally, heritage tourists had significant differences within the chain of causal relationships between motivations, satisfaction, and loyalty. Prior research conducted on a total tourism population showed that the level of satisfaction mediates the influence that motivations have on destination loyalty (Yoon & Uysal, 2005). However, results in this research confirmed the phenomenon in the total population, but found departures from this theory when the sample was segmented by heritage tourism interest levels. The results confirm that preferences towards heritage tourism moderates this mediating effect. Specifically, the heritage tourist segment had higher pull motivations overall, and those motivations had a more negative effect on satisfaction levels than the total sample or eco tourists. Heritage tourists also had the lowest levels of satisfaction, and these levels had significantly less effect on their destination loyalty.

Both heritage and mass tourists had significantly higher direct impacts of pull motivations on loyalty without the mediator of satisfaction involved than eco tourists. These

results led to the conclusion that heritage tourists are a highly loyal niche market attracted to specific destination attributes, and their loyalty is less dependent on their valuations of their vacation experience than other types of tourists.

From a destination standpoint, visitors to the heritage area placed a higher importance on cultural heritage attributes than their counterpart destinations, but less importance was placed on natural heritage attributes than was found in the eco-tourism destination. This result was interesting because the qualities of heritage, as described by the local resident population, included many natural component attributes (NPS, 2010), but these were seen as less important by their visitors (however, still very important). The concept of heritage in NHAs includes components of both natural and cultural factors, however this research showed that culture was the dominant concept in the desired experiences of visitors.

Additionally, service attributes were universally important issues in the study region, which suggests that heritage area managers should not ignore basic tourism service provision standards that are commonplace priorities in any destination; heritage tourists may be forgiving of minimally-acceptable cultural heritage experiences, but they still demand clean accommodations and friendly service.

Finally, results of this research demonstrated the utility of MANOVA and importance-performance disconfirmation assessments for assessing heritage tourism feasibility and prioritize management actions through a market analysis approach. Games-Howell post-hoc tests in the MANOVA procedure showed that the heritage destination indeed had the highest interest in cultural heritage tourism among the destinations. Rankings created from the modified IPA grid were able to compare the within and between group rankings of destination

attributes. This led to the conclusion that these methods were sound and could be replicated in other heritage tourism settings and incorporated in a heritage tourism planning framework.

Contribution to Knowledge

This research provided information about a heritage tourism population that has not been previously described in this manner. It effectively took heritage tourism research out of the isolated museum visitor population and placed it among a wider population to see how it functions relative to well-known tourism typologies. Indeed, other studies have analyzed heritage tourism in a larger population through market segmentation studies, but none have compared it with other tourism typologies. Consequently, it described the first-known heritage tourism regional market comparative analysis present in the tourism literature. The power of comparisons was apparent as these analyses successfully revealed the relative weight of heritage tourism factors against the current sideboards of the industry.

Whereas the history of NHA planning has long considered heritage tourism market research as an afterthought, this research was the first to address the often-ignored NHA designation criteria of economic suitability for heritage development. If the business of heritage tourism is economically unsustainable, then the long term sustainability of natural and cultural heritage resource conservation could be at risk. If an area sets up an array of supply-side attractions and activities, and tourists do not support them, these initiatives likely will fail. As well, if NHAs cannot wean themselves off of federal funding as designed, future designations may be delayed or denied in fear of a growing federal financial burden, as has already been evidenced. Therefore, by providing a case example of how this can be done, this research

contributed to the long-term sustainability and further proliferation of the heritage conservation concept in the US and beyond.

Importantly, this work has provided a methodological basis for a proposed heritage tourism planning framework (HTPF) that may be used to establish a baseline of tourism activity within a given study area and monitor it over time. Woven into existing NHA feasibility study guidelines, the HTPF is the first scientifically valid planning approach to target the designation criteria #8, which calls for an assessment of how well NHA related activities are consistent with the area's continued economic activity (NPS, 2003). Borrowing from the VERP planning framework, the HTPF combines interdisciplinary, community-based planning with the market research approaches presented earlier in this study. The result is a novel system that can be used to provide an objective analysis of the tourism market for initial feasibility assessment and the creation of quality standards to serve as benchmarks for later monitoring of tourism management efficacy and fluctuations of the market over time.

Because NHAs require local management and continual stakeholder participation, the HTPF proposed (Fig. 4.1) incorporates existing community participatory planning strategies with the methodologies presented in this research to fuse the supply and demand sides of heritage tourism. Based on those strategies and the elemental approach taken by VERP, the HTPF provides a flow of planning elements that consider the unique needs of NHA management as evidenced in this work.

First, the HTPF should be initially nested within the Draft NHA Feasibility Study Guidelines, but it can also be used as a monitoring planning tool (NPS, 2003). Figure 4.1 shows how they fit together out of that initial standard study process. Element 1, like in VERP, is a

step that is likely taken earlier in the NHA feasibility study. However, in HTPF it should be sure to include tourism researchers, such as at local universities, capable of performing market studies, to area of study.

Next, with a consortium of NHA managers and local stakeholders, an assessment of heritage tourism opportunities is accomplished in Element 2 (NPS, 2010). In this step, considering which heritage resources are appropriate for tourism activities among the list of options is important. The subsequent community participatory planning process in Element 3 provides a vision and initial plan, made by the host NHA community, to evaluate the range of potential heritage tourism activities. Results of this step, as performed in this research, should be used to inform market research in areas such as which destination attributes or attractions are desirable for the NHA resident population.

In turn, Element 4, based on chapter 2 in this study, is what provides a basis for understanding the heritage tourism market. This step can answer basic questions posed by planners related to market size, share, demographics, behaviors, and preferences to estimate the feasibility of individual heritage tourism initiatives and activities or the NHA designation as a whole. For example, if the tourism population in this stage was discovered to have had very little interest in heritage destination attributes, restricting heritage tourism as a smaller slice of the overall market instead of a destination-wide NHA branding could be recommended here.

Subsequently, Element 5 is based on chapter 3 in this study, which used the innovative importance-performance disconfirmation method to prescribe a prioritization of management actions. For use in initial feasibility assessment, this step is crucial in estimating the needs required to deliver satisfactory experiences for the destination attributes most important to

visitors. It can also help managers understand which of these are heritage-specific or general tourism service attributes that may also need attention for other visitor population segments. From this step, heritage tourism could be determined to not be a manageable route given the costs or other limiting abilities to provide what the heritage tourism market demands.

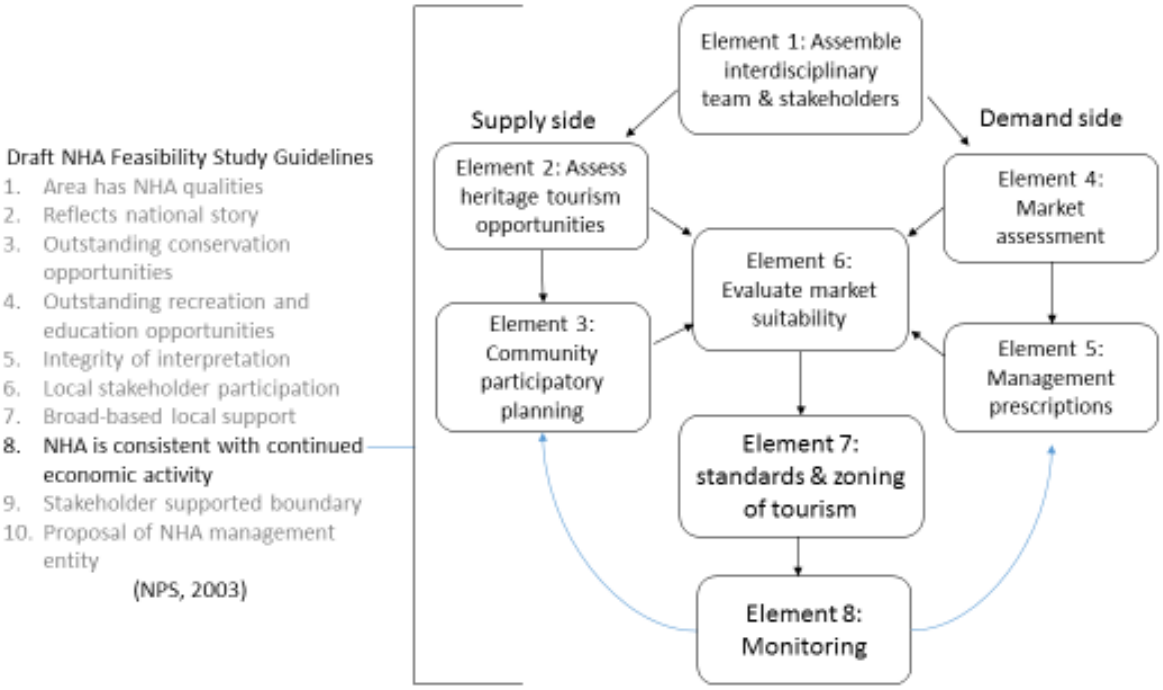


Figure 4.1. Proposed Heritage Tourism Planning Framework.

Next, Element 6 uses the combined information gathered to conduct a final evaluation of market suitability. This should be used at first for the feasibility assessment, but later it can be used to readjust the role of heritage tourism development in response to changes over time. Crucially, this approach allows for the synthesis of the supply and demand sides of heritage tourism so that ongoing community participation is encouraged and supported with scientifically valid market information. Based on this combined set of evaluations, the following

Element 7 is where standards of resource conditions can be made and the zoning of tourism provision can be prescribed. This step is where an executable plan is created to set forth a heritage tourism development agenda. Standards are established here to threshold of acceptable quality that triggers management actions. Zones can be created based on community-defined themes in areas that line up tourists' interests. Examples include outdoor recreation in natural heritage areas like coral reef experiences through snorkeling and scuba diving, and the provision of interpretive tours in historic urban districts.

Finally, Element 8 of the HTPF directs repeated iterations of Elements 3, 5, 6 & 7 to monitor and maintain the vitality of the NHAs' continued economic activity. This step is crucial to identify and ameliorate problematic issues and to incorporate new stakeholders and changes in tourism market demand.

Recommendations

Much more work is needed to deepen our understanding of how heritage tourism may be distinguished as a niche tourism market. Future research should replicate the segmentation approach and comparative market analysis in other regions. Eventually, a larger pattern of heritage tourism as a global travel phenomenon may emerge. This study was geared toward feasibility assessments, but the same approach could be employed for the repackaging of areas prior to tourism life-cycle stages of stagnation and decline (McElroy, 2006). Indeed, studies that adopt the HTPF approach in mature tourism destinations may uncover previously hidden opportunities for market diversification through community participatory planning, coupled with integrated heritage market research.

Because of the nature of heritage tourism to be delivered with authenticity from the host population, special care should be placed on resisting the commodification of heritage resources to the extent that they lose integrity. Thus, placing urgency on the development of standards for both the condition of natural and cultural heritage resources, and for the quality of heritage area recreation, education, and tourism provision are recommended.

Additionally, studies on the impacts of heritage tourism are sorely lacking in research literature. As the HTPF approach is applied, attention should be placed on the physical and social carrying capacity of heritage resources. Much of this knowledge may be borrowed from eco-tourism impact literature in regards to impacts on environmental settings and ecological habitats. However, a more anthropocentric approach is needed to consider how changes to natural and cultural resources affect the integrity of the story that embodies the constructual elements of heritage. Further study into the carrying capacity of heritage resources can help make more informed quality standards in the HTPF process.

The management prioritization portion presented in this study could be strengthened by the addition of input from NHA managers who are familiar with unique issues of the heritage market. Although outside the bounds of this study, NHA managers can provide valuable insights that may temper visitor ratings. For example, Marion et al. (1993) conducted a study on backcountry recreation managers that provided a basis for quality indicator standards in the Limits of Acceptable Change planning framework for wilderness area management (Roggenbuck et al., 1993; Roggenbuck, 2004). Clearly, for reliable quality standards to be established, input is needed from a variety of sources, including public stakeholders, NHA managers, and the tourism market, as presented in this work. Because this type of research is

virtually absent in the current heritage tourism literature, additional research is needed to develop this branch of heritage tourism management.

Results of this study from Chapter 3 indicated that for heritage tourism management to be successful, a mix of traditional tourism service management should be adopted along with the usual focus on curatorial aspects of heritage interpretation. Therefore, NHAs managers and participating local stakeholders and businesses should receive conventional tourism service training to compliment heritage components. Local government tourism authorities should provide programs to assist in this need for the overall improvement of visitor experience.

Finally, because this study found that heritage tourists were the most loyal among the market segments studied, it suggests that heritage tourism is a less substitutable form of tourism. Therefore, destinations concerned with competition, such as the USVI from the opening of Cuba to US tourism, should bolster their heritage tourism markets with an emphasis on unique aspects specific to the destination. This study also found that heritage tourists exhibited strong pull motivation characteristics, further reinforcing the notion that the segment is more specific about their destination's characteristics than other types of tourists. Experiential education activities that provide insights in a place's culture and natural history should be emphasized in marketing messages to attract heritage tourists. Further research should be conducted to test how heritage tourism advertising methods may vary in effectiveness. Because heritage tourists place a high priority on the authenticity of their experience, such studies could compare traditional advertising (page ads, billboards), with more "authentic" storytelling available in modern social media and documentary or reality-type programming.

Study Limitations

A primary limitation of this study is that the population included a single region's tourism population in the Caribbean of primarily U.S. visitors, so results should be carefully applied to other regions or about heritage tourism in general. For example, visitors to a subtropical beach-laden vacation spot may have a macro motivation at work unlike other types of destinations. However, the market segment comparisons in this study revealed that preferences of each tourism type were consistent with tourist preferences typical of other types, the comparative nature of this study is suspected to have helped temper the macro effects of this study location.

Second, because the proposed NHA in the study area included both natural and cultural components of heritage in its community-based plan (NPS, 2010), this study is limited to the interpretation of heritage areas with both of those components. Much of the heritage tourism literature focuses on the cultural heritage component, and some NHAs are focused primarily on historic industrial sites and thus do not have strong natural heritage components. However, given the reliance on natural services for even industrial themed NHAs, all NHAs may be argued to have natural resource components.

Third, this study was limited to market-side perspectives. Complimentary community-based planning research was conducted in the study area (NPS, 2010), but full integration with the market side was not possible due to study limitations. Therefore, conducting the full HTPF process was outside the scope of this work. For heritage tourism to be sustainable over the long term, studies should be done that guide the HTPF process from beginning to end for optimal planning results. However, under the limits of efficiency, this work has provided an

accurate, reliable, and quantitative basis for future heritage tourism planning efforts. Furthermore, it has presented a path forward for more integrative heritage tourism studies in the future.

Conclusion

This work has contributed substantially to the field of heritage tourism research and to the practice of heritage area planning. Firstly, it has provided an initial comparative basis for the understanding of the sensitivities of the heritage tourism niche market. Secondly, it has demonstrated the use of innovative comparative market research methodologies for assessing the likelihood of success for heritage tourism development and for prioritizing management actions. Indeed, the study approaches taken in this work can, and should, be replicated in other proposed or established NHAs and heritage sites around the world for more comprehensive heritage tourism planning. Thirdly, the results of this study were synthesized within the larger context of NHA planning guidelines in the HTPF. This proposed framework offers new guidance for NHA planners and policy makers who seek to address the complete set of criteria required for NHA designation. Without this research, tourism planners and managers would still have to rely on previously untested assumptions of the heritage tourism market. Given the crucial role that heritage tourism plays as an economic force to support the conservation of natural and cultural resources through NHA status, this work offers an essential contribution to the field of heritage tourism planning and management.

References

McElroy, J. L. (2006). Small island tourist economies across the life cycle. Asia Pacific Viewpoint, 47(1), 61-77. doi:10.1111/j.1467-8373.2006.00303.

Marion, J. L., Roggenbuck, J. W., & Manning, R. E. (1993). Problems and practices in backcountry recreation management: a survey of National Park Service managers.

National Park Service (2003). National Heritage Area Feasibility Study Guidelines: Draft. National Park Service.

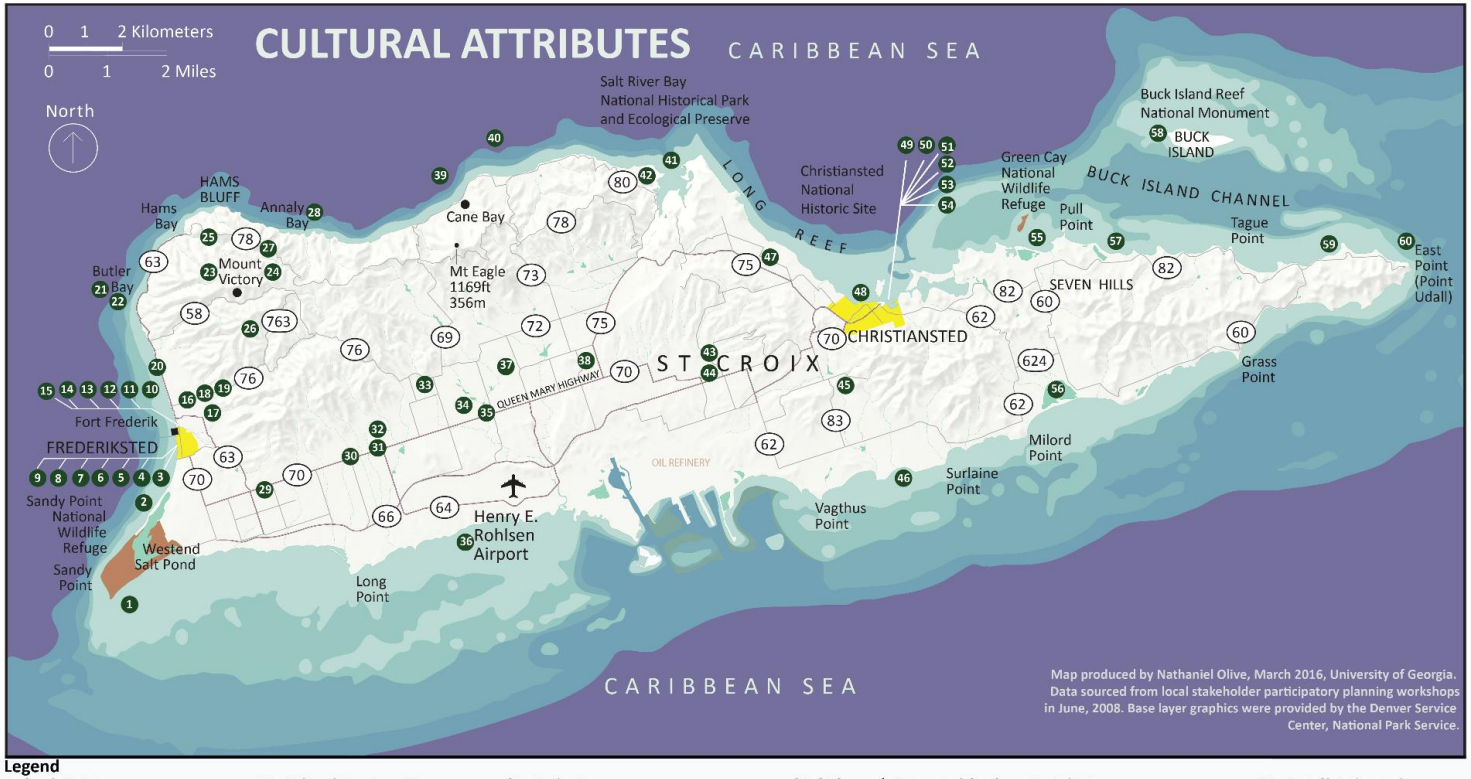
National Park Service. (2010). St Croix National Heritage Area Feasibility Study (pp. 1-202): United States Department of the Interior: National Park Service.

Roggenbuck, J. W., Williams, D. R., & Watson, A. E. (1993). Defining acceptable conditions in wilderness. Environmental Management, 17(2), 187-197.

Roggenbuck, J. W. (2004). Managing for primitive recreation in wilderness. International Journal of Wilderness, 10(3), 21-24.

Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism Management, 26*, 45-56.

APPENDIX A: Maps of Local Stakeholder-Defined Heritage Study Area Attributes.



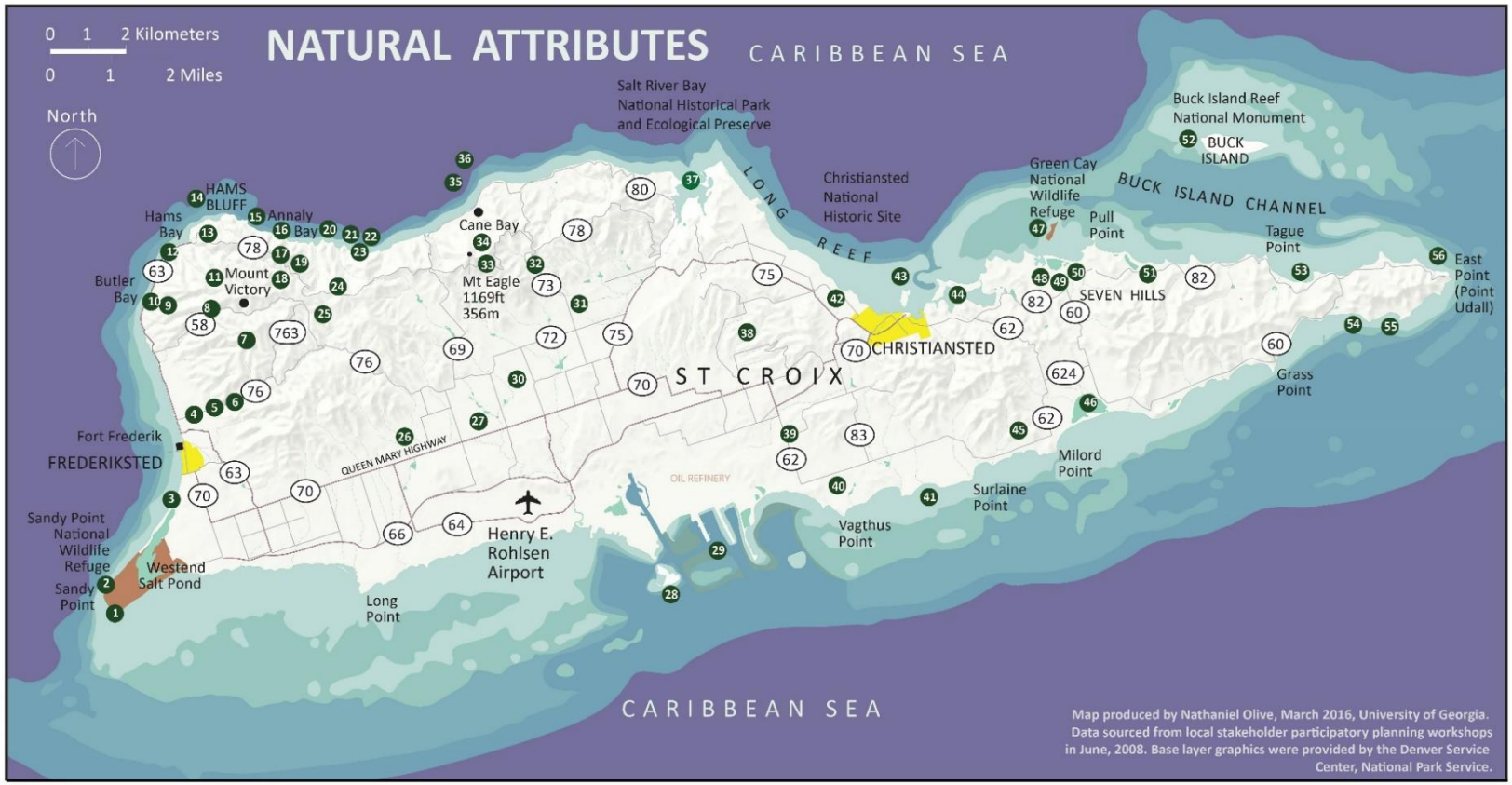
Legend

1. Sandy Point
2. Dorsch Beach
3. Adults Parade
4. Children's Parade
5. Frederiksted
6. Frederiksted Fish Market
7. Christmas Festival
8. Caribbean Museum of the Arts
9. Fort Frederiksted
10. St Gerard's Hall - Quadrille Dancing
11. Cultural Creations Store
12. Frederiksted Farmer's Market
13. The 'Village'
14. Buddhoe Park
15. Frederiksted Ball Park
16. Plantation Nightclub "Prosperity"
17. Little La Grange
18. Old Rum Factory La Grange
19. Lawaetz Museum
20. Rainbow Beach
21. Butler Bay
22. Buddhoe Walk-Butler Bay/Frederiksted
23. Estate Mt Victory
24. VI Sustainable Farm Institute/R2R Farm
25. Caledonia Gut
26. Rainforest
27. Maroon Ridge
28. Annaly Bay
29. Whim Museum
30. Centerline Road
31. St George's Botannical Garden
32. Mango Melee Festival
33. Estate Grove
34. Estate Lower Love
35. Agriculture Fair
36. Mannings Bay
37. Estate Bethlehem
38. Estate La Reine
39. Cane Bay
40. La Vallee
41. Salt River
42. Salt River Camping
43. Island Center
44. Sunny Isle
45. Castle Coakley
46. Half Penny Bay
47. Caribbean Community Theatre
48. Christiansted
49. Contentment Hill
50. Christiansted Farmer's Market
51. Fort Christiansted
52. Caribbean Dance Company
53. Jump Up
54. Gallows Bay
55. Southgate Camping
56. Great Pond
57. Coakley Bay
58. Buck Island
59. Cramer Park
60. Point Udall

General Features

Jewelry Shops- Sonia, Brian
Farmer's Market
Sunday Market Squares
Theatres
Cemeteries
Stomps
Easter Camping
Estates and Greathouses
First Hospitals
3 Kings Parade
Emancipation Day
Funerals
Farms
Churches
Fish Market
Carnivals
Slave Quarters
Food Fairs
Horse Races
Parades

Fig. 1. Cultural Heritage Attributes of St. Croix, United States Virgin Islands.



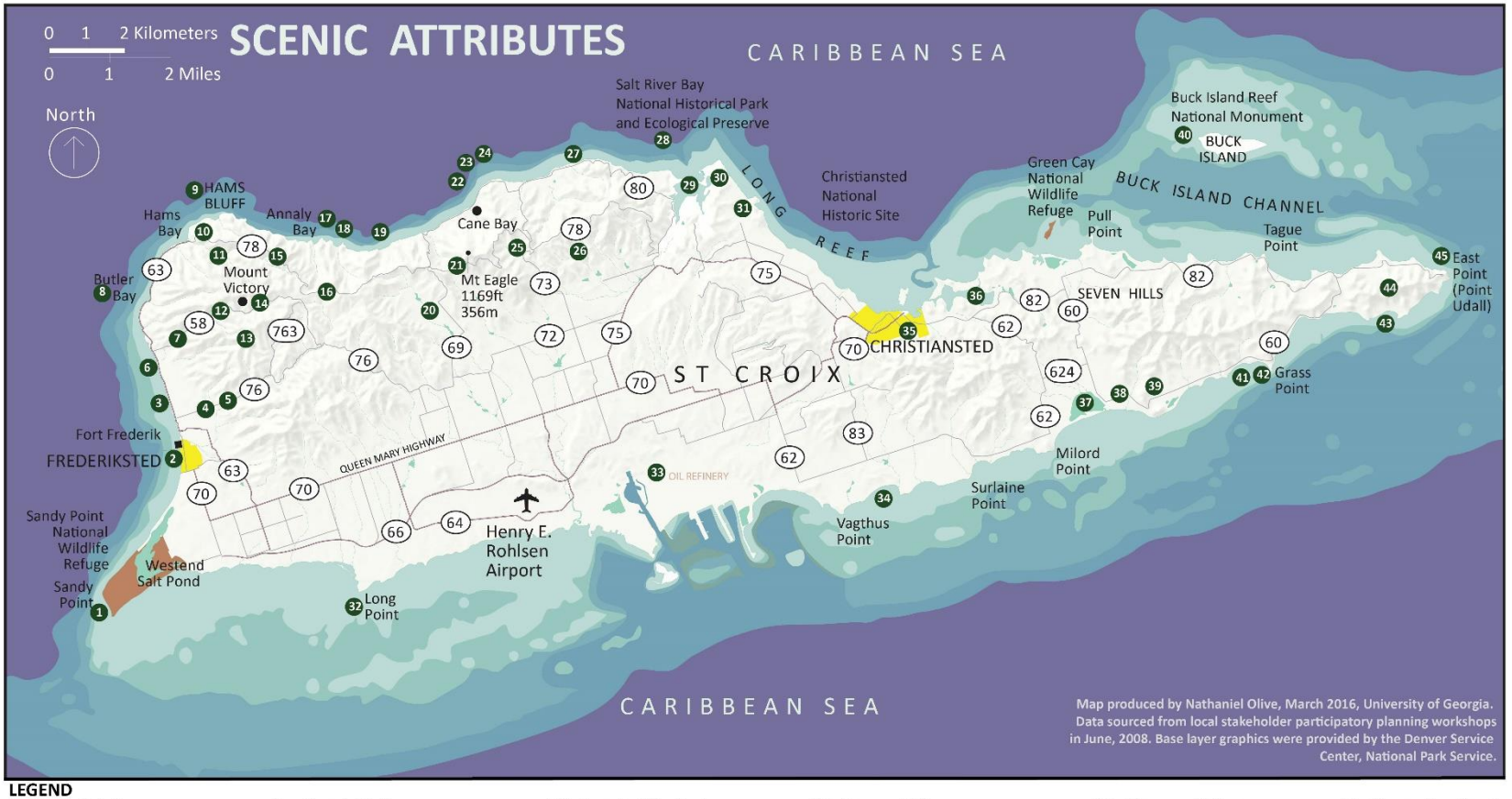
Legend

1. Turtles at Sandy Point
2. Sandy Point
3. Dorsch Beach
4. Mahogany Road
5. Saman Tree at LLG
6. National Heritage Trail
7. Rainforest
8. Creque Dam
9. Butler Bay Waterfall
10. Butler Bay
11. Mt Victory Camp
12. Monk's Bath
13. Caledonia Gut
14. Ham's Bluff
15. Annaly Bay
16. Annaly Tide Pools
17. Maroon Ridge in Maroonberg
18. Ridge to Reef Farm
19. Estate Annaly
20. Camping at Annaly
21. Davis Bay
22. Wills Bay
23. Crabs at Davis Bay
24. Scenic Drive
25. Estate Oxford
26. St George
27. Lower Love
28. Ruth Cay
29. Krause Lagoon
30. Bethlehem
31. Windsor Farm
32. Blue Mountain
33. Mt Eagle
34. Mt Eagle Springs
35. Cane Bay
36. The Wall
37. Salt River
38. Teak Forest
39. Wetlands belonging to UVI
40. Estate Diamond Keturah
41. Half Penny Beach
42. Little Princess
43. Castle Nugent
44. Protestant Cay
45. Altona Lagoon
46. Great Pond
47. Green Cay
48. Southgate
49. Southgate Salt Pond
50. Southgate Farm
51. Coakley Pond
52. Buck Island
53. Cramer Park
54. Jacks Bay
55. Issac's Bay
56. Point Udal

General Features

Salt Ponds | Baobab around island | Farms | Silk Cotton Tree | Coral Reefs | Beaches | Lagoons

Fig. 2. Natural Heritage Attributes of St. Croix, United States Virgin Islands.



LEGEND

1. Sandy Point
2. Frederiksted Harbor
3. West Coast Road
4. Mahogany Road
5. National Heritage Trail
6. Sunset Beach
7. Creque Dam Road
8. Butler Bay
9. Ham's Bluff
10. Lighthouse
11. Caledonia Gut
12. Creque Dam Resevoir
13. Rainforest
14. Estate Mt Victory
15. Maroon Ridge
16. Scenic Drive
17. Annaly Tide Pools
18. Annaly Bay
19. Davis Bay
20. Fountain Valley
21. Mt Eagle Hike
22. Cane Bay
23. The Wall
24. Kayaking North Shore
25. Canaan Ridge
26. Blue Mountain
27. Northshore
28. Salt River
29. Salt River Hydro Lab
30. Bioluminescense
31. Judith's Fancy Burial Ground
32. Long Point
33. Hovensa Refinery
34. Half Penny Bay
35. Mt Recovery
36. Altoona
37. Great Pond
38. South Shore
39. East End Marine Park
40. Buck Island
41. Grassy Key Beach
42. Grassy Point
43. Little Issac's Bay
44. Goat Hill
45. Point Udal

GENERAL FEATURES

Diving | Wind Mills | Sugar Mills | Shipwrecks | Milky Way (Winter Months)

Fig. 3. Scenic Heritage Attributes of St. Croix, United States Virgin Islands.

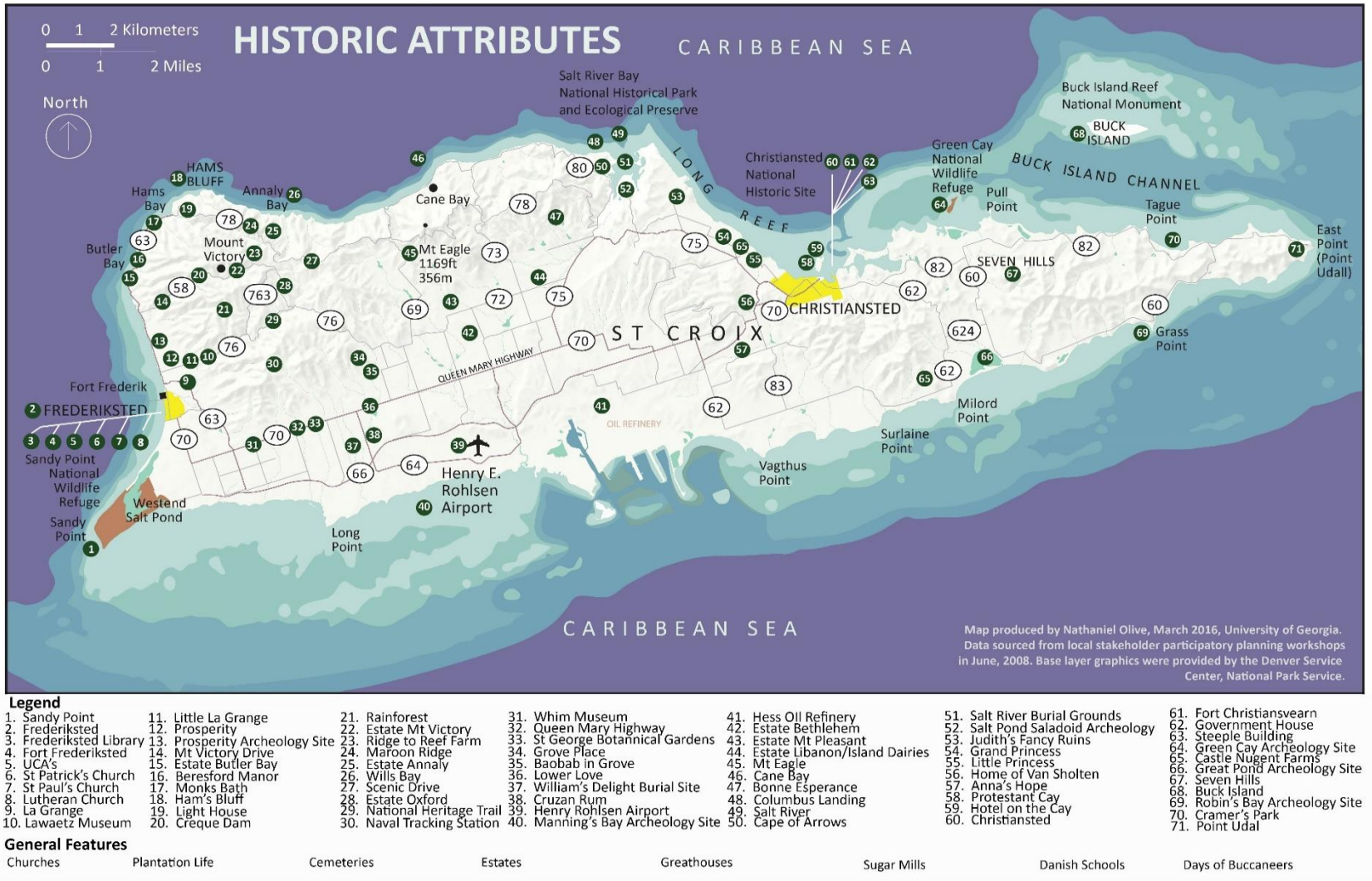


Fig. 4. Scenic Heritage Attributes of St. Croix, United States Virgin Islands.

APPENDIX B: Survey Instrument.

OFFICIAL USE ONLY SURVEYOR ID # _____		
PORT	DATE	DISPOSITION
Survey ID: 1-1-1000		

Heritage Tourism Survey

ALL RESPONSES ARE ANONYMOUS & CONFIDENTIAL

Hello! We would like to find out more about your experiences as a visitor in the United States Virgin Islands (USVI). Please answer as honestly as possible. Only put one answer for each question. *Thank You for your time and cooperation!*

Section A: Please tell us about you as a traveler.

1. In the ***past 3 years***, tell us about your travel (e.g., staying in a hotel, rental, timeshare, cruise or day trips)? Include this trip to the USVI in your response.	1-2 trips	3-4 trips	5-9 trips	10+ trips
a. Total number of trips	O	O	O	O
	0 nights	**1-2 nights**	**3-7 nights**	**8-14 nights**	**15+ nights**
b. Average number of nights stayed	O	O	O	O	O

2. Thinking of where you have stayed during vacations in the ***past 3 years***, please indicate the number of such stays in:	0 stays	1-2 stays	3-4 stays	5+ stays
a. Luxury hotels (e.g. Four Seasons, Ritz Carlton…)	O	O	O	O
b. Expensive hotels (e.g. Hilton, Marriott, Sheraton…)	O	O	O	O
c. Moderately-priced hotels/motels (e.g. Holiday Inn, Comfort Inn…)	O	O	O	O
d. Budget chain hotels/motels (e.g. Days Inn, Econolodge…)	O	O	O	O
e. Bed & Breakfast, homestay, farmstay, or small family inn	O	O	O	O
f. Campground	O	O	O	O
g. Owned condominium/vacation home/cabin	O	O	O	O
h. Rented condominium/vacation home/cabin	O	O	O	O
i. Cruise	O	O	O	O

3. How much more money would you be willing to pay, if any, to book a travel company or service (such as hotel, restaurant, tour guide service, transportation, etc.) that you know preserves and protects the natural environment and/or cultural heritage of your destination?	I would not pay more	1-9%	10-19%	20% or More
a. Natural Environment	O	O	O	O
b. Cultural Heritage	O	O	O	O

4. When planning vacations, how often do you seek out information about what travel companies do to preserve and protect the natural environment or cultural heritage of destinations?	Never	Occasionally	Regularly	Always
a. Natural Environment	O	O	O	O
b. Cultural Heritage	O	O	O	O

Section B: Please take a few moments to answer the following questions about your most recent travel experience to the USVI.

	St. John	St. Croix	St. Thomas	Water Island	Other
5a. Where was the primary destination of your trip?	O	O	O	O	O

5b. How many nights are you staying in the USVI?_____

6. Thinking of the reasons you chose to visit here, please indicate how important the following motivations were when you made your travel plans.	Not Important	Somewhat Important	Very Important	Extremely Important
a. To get away from my normal environment	O	O	O	O
b. To overcome a bad mood	O	O	O	O
c. To relax mentally	O	O	O	O
d. To get away from a stressful situation	O	O	O	O
e. To spend time away from others	O	O	O	O
f. To experience a different culture than my own	O	O	O	O
g. To tell others about my experiences	O	O	O	O
h. To feel good about myself	O	O	O	O
i. To explore a specific place	O	O	O	O
j. To discover new things about myself	O	O	O	O

Turn over

6.	Not Important	Somewhat Important	Very Important	Extremely Important
k. To be a more healthy person				
l. To be with people of similar interests				
m. To bring family/friends closer				
n. No passport required for US citizens				

7. Thinking back over this trip, tell us...	How important are the following aspect listed below?				and	How you would rate the quality or availability of the aspects listed below?		
	Not Important	Somewhat Important	Very Important	Extremely Important	Poor	Average	Good	Excellent
a. Opportunities to learn about local culture								
b. Opportunities to visit coral reefs								
c. Opportunities to eat local cuisine								
d. Easy access to beaches								
e. Availability of local brochures and maps								
f. Opportunities to learn about local architectural history								
g. Opportunities to explore a natural setting								
h. Opportunities for duty free shopping								
i. Opportunities to learn about natural history								
j. Opportunities to visit clubs and nightlife								
k. Access to the Internet								
l. Opportunities to view wildlife								
m. Opportunities to view scenic areas								
n. Opportunities to golf								
o. Opportunities to visit a casino								
p. Opportunities to visit historical buildings								
q. Availability of roadside scenic stops								
r. Availability of snorkeling or SCUBA								
s. To have an authentic experience								
t. Cleanliness of accommodations								
u. Friendliness of taxi drivers								
v. Friendliness of local customer service workers								
w. Knowing that your money spent stays in the local community								

8. Since you arrived in the USVI, approximately how much money did you spend on items such as hotel, food, on-island transportation, souvenirs, entertainment, shopping, and other trip-related expenditures? $ _____ $USD

	Very Unlikely	Unlikely	Likely	Very Likely
9. How likely are you to return to this destination for another vacation?				
b. How likely are you to recommend this destination to someone else?				

Please tell us about yourself. The following questions are important to help us to better understand our visitors in the USVI. All responses are anonymous & confidential.

10. Are you? Male Female

11. Age 18-24 25-39 40-54 55-69 70+

12. Country of Residence

State/Province	Zip Code

13. What is the highest level of education you have completed?

- Less than high school
- High School Diploma/ GED
- Some College
- Associate Degree
- Bachelors Degree
- Graduate Degree

14a. Did you travel here to learn about your own personal heritage? No Yes

14b. If yes, please identify which cultural group

Danish African Puerto Rican French Dominican Rep

Vieques Other(specify)_____

15. What is your approx. household income?

- Under $40,000
- $40,000-$59,999
- $60,000-$84,999
- $85,000-$99,999
- $100,000-$249,999
- $250,000 or more