APPLYING THE THEORY OF PLANNED BEHAVIOR TO PARTICIPATION

IN SUSTAINABLE TOURISM CERTIFICATION PROGRAMS

by

Jeremy Ryan Schultz

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STATEMENT OF DISSERTATION APPROVAL

The dissertation of   **Jeremy Ryan Schultz**

has been approved by the following supervisory committee members:

Kelly Bricker	, Chair	8/26/13	Date Approved
Daniel Dustin	, Member	8/26/13	Date Approved
Matthew Brownlee	, Member	8/26/13	Date Approved
Edward Barbanell	, Member	8/30/13	Date Approved
Leo McAvoy	, Member	9/20/13	Date Approved

and by   **Kelly Bricker**   , Chair of

the Department of   **Parks, Recreation, and Tourism**

and by David B. Kieda, Dean of The Graduate School.

ABSTRACT

Sustainability has become an omnipresent concept within our culture and society. The importance of sustainability continues to grow as resources are depleted and cultures are irreparably damaged. The science of sustainability has taken on many forms such as renewable energy sources, transportation systems, political platforms, and sustainable tourism.

Within the tourism industry, sustainability is now being manifested through certification programs. These programs allow tourism operators to reduce environmental impacts and incorporate sociocultural considerations into business practices, all the while maintaining, if not improving, the financial status of their businesses.

This study examined why Bed and Breakfast (B&B) operators in the United States chose to participate or not in sustainable tourism certification programs. Ajzen's theory of planned behavior was employed to investigate the attitudes, social influence, perceived behavioral control, and belief structures of the B&B operators to further understanding of the behavioral intention of B&B operators and their participation in sustainable tourism certification programs.

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CHAPTER I

INTRODUCTION

In 1987 the Brundtland Commission published *Our Common Future* (commonly

referred to as the Brundtland Report), bringing the paradigm of sustainable development to

the forefront of numerous conversations within various contexts, particularly the tourism

industry. As defined by the World Commission on Environment and Development

(WCED), sustainable development is "a process of change in which the exploitation of

resources, the direction of investments, the orientation of technological development, and

institutional change are all in harmony and enhance both current and future potential to

meet human needs and aspirations" (WCED, 1987, p. 39). This definition is more

commonly recognized through its simplified version as "development which meets the

needs of the present without compromising the ability of future generations to meet their

own needs" (WCED, 1987, p. 43).

In 1992, the United Nations Conference on Environment and Development (also

referred to as the "Earth Summit") furthered the discussions on sustainable development.

During the summit, a review of the Brundtland report was conducted to "ensure that the

foundations of sustainable development were put into place" (Hardy, Beeton, & Pearson,

2002, p. 480). Subsequently, the Earth Summit initiated a call to the travel and tourism

industry to become more sustainable—resulting in *Agenda 21 for the Travel and Tourism*

Industry, produced in 1995 by the World Travel and Tourism Council, the United Nations World Tourism Organization (UNWTO), and the Earth Council (Hardy et al., 2002). At the Earth Summit in 2012, this commitment was reaffirmed as sustainable tourism was again recognized to be a significant contributor to all three pillars of sustainability. With international arrivals scheduled to reach 1.6 billion by 2020 (UNWTO, 2013c), a number four times higher than at the time of the Brundtland Commission report, utilization of the sustainable development paradigm by tourism operators becomes vital in protecting the resources that drive the tourism industry.

Tourism is one of the world's largest economic sectors; some even argue the largest depending on how it is measured (Berno & Bricker, 2001; McCool & Moisey, 2008). Applying the paradigm of sustainable development to tourism has created many definitions of "sustainable tourism." There have been numerous attempts to frame the concept of sustainable tourism (McCool & Moisey, 2008) due to its definitional ambiguity (Hardy et al., 2002). One attempt at defining sustainable tourism is on a case-to-case basis (Hunter, 1997; Manning, 1999). Hunter (1997) reasons that "sustainable tourism should not be regarded as a rigid framework, but rather as an adaptive paradigm which legitimizes a variety of approaches according to specific circumstances" (p. 851). Still others have preferred a broad definitional approach to sustainable tourism, highlighting sustainable development of tourism needs (Hardy et al., 2002). Clarke (1997) writes of four positions on sustainable tourism, with the latest emphasizing convergence. Here, Clark stresses that the journey to sustainable tourism is more important than providing a specific definition. Regardless of the approach, there is a global movement to create a common language concerning sustainable tourism development.

More recently, the application of the sustainable development paradigm within tourism has been manifested in the development of certification programs. Sustainable tourism certifications (STCs) assist tourism businesses in developing effective strategies for addressing the environmental and sociocultural impacts of the industry, all the while offering economic viability for businesses and surrounding communities (Conroy, 2002). Today, over 140 certification programs for sustainable tourism exist worldwide. Currently, the majority of the United States offers some type of certification program that addresses environmental impacts (Bricker & Schultz, 2010). In addition to state adopted programs, international organizations (e.g., Sustainable Travel International, Green Globe, and Green Key) are increasingly acting as certifying bodies for tourism providers (Honey, 2002). As tourism operators are given more opportunities to obtain STCs for their businesses, understanding what drives their decision to adopt or disregard certification is an important question for tourism researchers to answer.

Due to their small size, Bed and Breakfast (B&B) operators represent a unique opportunity to study the behavioral attributes of sustainable tourism decision-making at the level of the individual. This makes it possible to examine behavior through the lens of the individual as the unit of analysis instead of the company or business. Understanding why B&B operators would or would not decide to engage in STCs could benefit the tourism industry in addition to adding insight to the constantly evolving behavioral sciences.

Explaining human behavior is a daunting task (Ajzen, 1991). While social psychology theories have gained significant strength during the 20th century (Godin & Kok, 1996), it has been consistently shown that additional research is needed in order to

predict and understand human behavior (Aronson, Wilson, & Akert, 1999). A widely accepted and utilized model that attempts to add coherence to our behavioral investigations is the theory of planned behavior (Bernath & Roschewitz, 2008; Conner & Armitage, 1998). The theory of planned behavior and its framework were "designed to predict and explain human behavior in specific contexts" (Ajzen, 1991, p. 181). In this study, the theory of planned behavior was employed to examine how B&B operators' beliefs about sustainable tourism certification are related to their participation in sustainable tourism certification programs for their businesses.

Throughout the 20th Century, researchers such as Skinner popularized a behaviorist approach to explaining human behavior. From a behaviorist's perspective, human behavior is the product of one's environmental history and the reinforcement that the behavior receives (Skinner, 1938). However, behaviorists such as Skinner were sometimes criticized for not recognizing the role of cognition in behavior. Chomsky's 1959 review of Skinner's *Verbal Behavior*, for example, introduced a cognitive element to behaviorism that was considered to be the start of a cognitive revolution in psychology. Since that time, understanding human behavior has continued to be the motivation driving numerous social psychology inquiries, all looking to make a contribution to the behavioral sciences (Steiner & Fishbein, 1965). In particular, Ajzen has made significant progress in the study of human behavior (Godin & Kok, 1996). His theory of planned behavior was designed to predict and examine human behavior utilizing "cognitive self-regulation in the context of a dispositional approach" (Ajzen, 1991, p. 180). From this perspective it is possible to examine specific behaviors.

The impetus supporting development of the theory of planned behavior was not merely to predict or understand behavior through attitudes, social influence norms, and perceived behavioral control, but also to understand how much each component is driven by its respective antecedents (Ajzen, 1991). Such antecedents include the behavioral beliefs/outcome evaluations, normative beliefs/motivation to comply with referents, and control beliefs/power of control factors that an individual displays toward a behavior. These linkages are important to understand because research has shown that an individual's belief structure is indirectly linked to behavior via attitudes, norms, and perceived behavioral control (Ajzen, 2005).

In the context of this study the focus was on providing empirical verification as to how beliefs relate to an individual's decision to engage in a sustainable tourism certification program. In this study, the researcher investigated a particular sequence, starting with the behavior of obtaining a sustainable tourism certification and moving into the underlying beliefs about the behavior through the attitudes, social influence, and perceived behavioral control of the behavior to further understand why individuals obtain or disregard sustainable tourism certification programs (Ajzen & Fishbein, 1980).

<u>Significance of the research</u>

There is an increasing need to further our understanding of why individuals perform behaviors that are more sustainable (Clark & Dickson, 2003; Teng, Wu, & Liu, 2013). Clarifying the determinants of such behaviors requires an investigation of the belief structures that support the behavior. While there has been considerable attention given to the examination of belief structures and their associated behaviors, these inquires have

been commonly seen in the literature in the form of church attendance (Eister, 1952), offender rehabilitation (Chamberlain, 2011), and voter turnout (Nicholson & Miller, 1997). The sustainable tourism literature, however, has not addressed institutional behaviors such as the engagement in sustainable tourism certification programs. The certification process itself enables the participating tourism operator to simultaneously reduce their environmental impact, demonstrate sensitivity to cultural and social concerns, and preserve or even improve the financial condition of their business. Consequently, understanding how beliefs regarding sustainable tourism certification are related to participation in STC programs ideally would attend to a theoretical need as well as have pragmatic relevance.

Therefore, the purpose of this study was to examine how attitudes, social influence, and perceived behavioral control are related to participating in sustainable tourism certification programs. The belief structures that are precursor to attitudes, social influence, and perceived behavioral control were also explored.

Hypotheses

Research Question 1: How do attitudes about sustainable tourism certification relate to the adoption of sustainable tourism certification?

H1: As attitudes toward obtaining a sustainable tourism certification become more positive, the corresponding behavioral intention will also increase while controlling for the effects of social influence and perceived behavioral control.

Research Question 2: How is social influence about sustainable tourism certification related to the adoption of sustainable tourism certification?

H2: As social influence toward obtaining a sustainable tourism certification

increases, the corresponding behavioral intention will also increase while

controlling for the effects of attitudes about the behavior and perceived behavioral

control.

Research Question 3: How does perceived behavioral control about sustainable tourism

certification relate to the adoption of a sustainable tourism certification?

H3: As perceived behavioral control over adopting a sustainable tourism

certification increases, the corresponding behavioral intention will also increase

while controlling for the effects of attitudes about the behavior and social influence.

Research Question 4: How do behavioral beliefs about sustainable tourism certification

relate to attitudes about sustainable tourism certification?

H4: As behavioral beliefs about sustainable tourism certification become more

favorable, the corresponding attitudes about sustainable tourism certification will

also become more favorable while controlling for the effects of normative beliefs

and control beliefs.

Research Question 5: How do normative beliefs about sustainable tourism certification

relate to social influence toward sustainable tourism certification?

H5: As normative beliefs about sustainable tourism certification become more

positive, the corresponding social influence toward sustainable tourism certification

will also become more positive while controlling for the effects of behavioral

beliefs and control beliefs.

Research Question 6: How do control beliefs about sustainable tourism certification relate

to perceived behavioral control regarding sustainable tourism certification?

H6: As control beliefs about sustainable tourism certification become more positive, the corresponding perceived behavioral control regarding sustainable tourism certification will also become more positive while controlling for the effects of behavioral beliefs and normative beliefs.

Delimitations

This study was delimited to B&B operators in the United States who were listed online as members of the Professional Association of Innkeepers International and the American Bed and Breakfast Association in 2012.

Limitations

The following items were limitations of the study:

(1) Sampling was limited to B&B operators and may not be generalizable to larger accommodation sectors such as hotels and resorts.

(2) Participants in the study had varying levels of knowledge about sustainable tourism certification, which may have affected their ability to contribute to the study.

(3) Participants may have had differing experiences with sustainable tourism certification programs, depending on which program they elected to participate in.

(4) The questionnaires for the survey were distributed electronically, possibly eliminating potential respondents for the study who did not check their e-mail during the time of the study.

(5) Behavioral intention was measured on a scale of 1–3. Expansion of this scale to 1–7 may have provided a more thorough perspective of behavioral intention.

(6) A large number of antecedent variables were produced from the eliciting questionnaire, creating the possibility for multicolinearity among them. This effect was not examined in the analysis of the study.

<u>Definition of terms</u>

Behavioral Intention – "a person's location on a subjective probability dimension involving a relation between himself and some action. A behavioral intention, therefore, refers to a person's subjective probability that he or she will perform some behavior" (Fishbein & Ajzen, 1975, p. 288)

Attitude – "a summary evaluation of a psychological object captured in such attribute dimensions as good-bad, harmful-beneficial, pleasant-unpleasant, and likeable-dislikeable" (Ajzen, 2001, p. 28)

Social Influence – "a person's perception of social pressure to perform or not to perform the behavior under consideration" (Ajzen, 1988, p. 117)

Perceived Behavioral Control – "if the person can decide at will to perform or not perform the behavior" (Ajzen, 1991, p. 182)

Sustainable Tourism Certification – "a voluntary procedure that assesses, monitors, and gives written assurance that a business, product, process, service, or management system conforms to specific requirements. It awards a marketable logo or seal to those that meet or exceed baseline standards, that is, those that at a minimum comply with national

and regional regulations, and, typically, fulfill other declared or negotiated standards

prescribed by the program" (Honey & Rome, 2001, p. 5).

CHAPTER II

REVIEW OF LITERATURE

This review of the literature explains the background of sustainable tourism and sustainable tourism certification programs. It also provides the theoretical and conceptual framework for using the theory of planned behavior to examine sustainable tourism certification. The literature review is organized as follows:

- Discussion of sustainable tourism

- Review of sustainable tourism certification programs

- Explanation of the concepts within the theory of planned behavior including beliefs, attitudes, social influence, perceived behavioral control, and behavioral intention

- Application of the theory of planned behavior to the population studied (i.e., B&B operators)

The literature review explains and justifies using the theory of planned behavior to gain a better understanding of why B&B operators would or would not participate in a sustainable tourism certification program for their businesses.

Sustainable tourism

Tourism is one of the most significant industries influencing our planet (Higgins-Desbiolles, 2006). In 2012, international tourism arrivals reached 1.035 billion, up four percent from the prior year (UNWTO, 2013a). The United Nations World Tourism Organization expects this number to exceed 1.6 billion by 2020. The post-World War II boom of travelers has developed tourism into one of the world's largest industries (Weaver, 2006). This increasing number of humans roaming the planet poses great potential for producing devastating effects on the Earth's natural environments (United Nations Environment Programme, 2001). Impacts from travel such as infrastructure development, resource consumption, pollution, and waste generation are putting increasing pressure on natural environments (Williams & Ponsford, 2009). This has led to a vision for conservation within tourism that includes sustainable development and management of resources (Hardy et al., 2002).

Equally important to environmental impacts, sociocultural impacts from tourism are often overlooked (Archer & Cooper, 2013). The beauty that is revealed when comparing different cultures (e.g., cuisine, language, art, or music) often simultaneously creates tourism systems that unintentionally disregard cultural integrity and heritage through homogenization and acculturation. Lack of such ethical consideration and professional response demonstrates a need for introducing systematic strategies into tourism development, management, and evaluation. Similar to a conservation approach, a community vision for sustainable tourism is also needed to ensure positive influences on host communities through considerate and responsible tourism practices (Hardy et al., 2002).

It is clear that tourism numbers will continue to grow. New technologies allow humans to reach distant corners of the planet at increasing speeds with economic drivers supporting the travel. On a finite planet, it is vital that sustainability principles be incorporated into tourism practices before we lose the environmental and cultural resources that support the experiences and the locations associated with the places we seek out.

Origins of sustainable tourism

In 1987, the publication of *Our Common Future* by the World Commission on Environment and Development (WCED) fueled international conversations around sustainability that expanded the world's focus beyond desire for unfettered growth and development. This resulted in a visionary paradigm referred to as sustainable development. The discussions from *Our Common Future* were instrumental in bringing the idea of "sustainable development further into the political arena" (Hardy et al., 2002, p. 480). Within the tourism industry, the concept of sustainable development became a call to governments, businesses, and professional organizations to consider their planning and management of the environmental, cultural, and economic aspects of decision-making.

The sustainable development agenda was extended further into tourism capacities in 1992 when leaders from within the tourism industry teamed with experts from around the world at the *Earth Summit* to promote the evolving model. Sustainable development applied to the tourism sector refers to well thought-out decision-making processes through consideration and respect for all pillars of sustainability (i.e., environmental, sociocultural, and economic). This convergence of tourism and sustainable development has led to a framework commonly referred to as sustainable tourism. Sustainable tourism was again

recognized in the Earth Summit of 2012 as one of the more influential industries when promoting sustainable development.

In 1995 the World Travel and Tourism Council, the World Tourism Organization, and the Earth Council developed *Agenda 21 for the Travel and Tourism Industry* to highlight "priority areas for action and objectives for moving the tourism industry closer towards achieving sustainable development" (Hardy et al., 2002, p. 482). This continued the momentum for incorporating sustainable development into tourism and was considered to be a substantial commitment to sustainability by the tourism industry.

One supporter of sustainable development in tourism is the United Nations World Tourism Organization (UNWTO). The UNWTO has adopted sustainable development principles for all of its tourism development and planning strategies (Berno & Bricker, 2001) and continues to incorporate sustainability values into its current projects. The UNWTO defines sustainable tourism as "tourism that takes full account of its current and future economic, social, and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities" (UNWTO, 2013b, p. 1).

The concept of sustainable tourism should not be taken as a particular variety of tourism, but rather, "as an overriding approach to tourism development and management applicable to all the segments of the tourism industry" (Weaver, 2006, p. vii). From this conceptual perspective the UNWTO (2013b) specifically outlines what sustainable tourism should include:

1. Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity.

2. Respect the sociocultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to intercultural understanding and tolerance.

3. Ensure viable, long-term economic operations, providing socioeconomic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.

Since the paradigm of sustainability was applied to the tourism industry, research on sustainable tourism is continuing to help us understand its intricacies. As a social, economic, environmental, and planning phenomenon, sustainable tourism requires monitoring, informed participation from all stakeholders, and a high quality of product from providers (UNWTO, 2013b).

Sustainable tourism certification programs

Implementing sustainability initiatives for practitioners has been a constant challenge (Bagheri & Hjorth, 2007), especially for tourism providers and operators (Honey, 2002). Misconceptions over price, green-washing, and political ideology are all examples of possible barriers to tourism providers acting sustainably. However, businesses remain receptive to the possibility of implementing sustainability practices, but they are in need of more agreement on what the core principles of sustainability are (Esquer-Peralta, Velazquez, & Munguia, 2008). This can be seen in particular within sustainability indicators and policies (Macnaghten & Jacobs, 1997).

Definitional variations as to what sustainable tourism should encompass become troublesome in the "subsequent operationalisation" of such initiatives (Hardy et al., 2002, p. 475). In response to these constraints, the popularity of sustainable tourism certifications has been on the rise (Mycoo, 2006). Such programs aim to ensure quality and avoid being labeled as "reactionary rhetoric" (Hardy et al., 2002, p. 490). Formally stated, "certification is a formal process under which a nominally independent body certifies to other interested parties, such as tourist, marketing agencies, and regulators that a tourism provider complies with a specified standard" (Buckley, 2002, p. 197). Sustainable tourism certification programs possess the capability to "reduce tourism's negative environmental and social impacts, ensure that the tourism industry is held accountable to stakeholders, and provide marketing benefits to those firms that meet the certification standards" (Font, Sanabria, & Skinner, 2003, p. 213).

However, implementing sustainability certifications for tourism providers has proven to be a difficult task due to the vagueness, false labeling, regulation, legitimacy, and the distinctiveness of individual businesses (Wood & Halpenny, 2001). Such issues are often combated when certification programs are independently audited and maintain open and published standards and evaluation processes (Buckley, 2002). Another key contributor to overcoming these barriers and constraints is developing a cooperative relationship between government and the private sector (Rivera, 2002). Rivera (2002) and Buckley (2002) pointed out that it is reasonable to expect low levels of certification participation in countries that do not offer government oversight and cooperation.

Within the United States, there are currently no federally adopted sustainable tourism policies or guidelines (Edgell, DelMastro, Swanson, & Smith, 2008). This has

encouraged some individual states to develop their own programs by creating resourceful partnerships. Examples in the sustainable tourism certification arena at the state level include *Florida Green Lodging, Maine Green Lodging, Virginia Green,* and *Travel Green Wisconsin*. Other states have commonly looked to private nongovernmental organizations (NGOs), such as *Green Globe* or *Sustainable Travel International*, for assistance in offering tourists sustainable travel options that are not necessarily endorsed by their respective state government.

The development of these separate certification entities has led to a possible brand and image overload for tourism consumers when looking at sustainable tourism certifications. The abundance of smaller programs has highlighted the need for an overarching accreditation system that would act as a governing body for sustainable tourism certification programs. This type of system is a "higher tier process by which a body independent of any of the certification agencies certifies that the certification schemes themselves meet an appropriate standard" (Buckley, 2002, p. 197). Put simply, accreditation systems are a way of certifying the certifier (Font et al., 2003).

An example of one country guiding itself in sustainable tourism practices itself is Costa Rica. When Costa Rica launched its own *Certification for Sustainable Tourism*, it was accompanied with the *National Accreditation Commission* to regulate the standards of the program with a high level of success (Rivera, 2002). However, this approach still overlooks discrepancies for tourists who leave their own country during their travels and are faced with different certification brands and marketing once outside the country. On an international scale, the Global Sustainable Tourism Council (GSTC) was launched as one

possible solution to the accreditation problem that addresses such concerns on a global scale (GSTC, 2013).

The GSTC was launched in 2010 to "offer a common understanding of sustainable tourism and the adoption of universal sustainable tourism principles and criteria. The GSTC brings together tourism businesses presently operating to various degrees of sustainability performance, governments, UN bodies, research and academic institutions, social and environmental NGOs, certification programs, and others from distinct regions of the world" (GSTC, 2013, p. 1). By reviewing over 4,500 sustainable tourism standards from around the world, the GSTC developed 37 baseline criteria that focused on four main areas: sustainable management systems, social and economic benefits to local communities, respect for local cultures and heritage, and environmental benefits and impacts (GSTC, 2013). These criteria have become a foundation of sustainable tourism principles and are commonly utilized in developing sustainable tourism certification programs (GSTC, 2010).

Of the four sections that make up the GSTC, sustainable management systems (SMS) cover the largest number of criteria. With "increasing acceptance in a variety of fields, including academy, politics, and non-governmental organizations" (Esquer-Peralta, Velazquez, & Munguia, 2008, p. 1027), SMSs have been proven effective in the sustainable tourism context (GSTC, 2010). In a broader context, the underlying concepts of SMSs are also commonly used by the general public in many areas other than tourism (Esquer-Peralta et al., 2008). This generalized applicability has the potential to build lasting relationships between tourism businesses and their associated business partners. According to Smith (2001) businesses should remember that "there is indeed a

management system for the organization as a whole" (p. 12) that accounts for all parties involved.

In particular, Esquer-Peralta et al. (2008) examined the perceptions of experts regarding the utilization of SMSs as holistic systems of sustainability management incorporating the environmental, social, and economic elements. From their study, several core elements were discovered, all of which were considered in the development of the GSTC.

From a consumer perspective, sustainability definitions are an increasing point of interest (McDonald & Oates, 2006). However, the actual consumer response to "green" marketing initiatives, such as sustainable tourism certification programs, has not lived up to expectations (Lee, Hsu, Han, & Kim, 2010). Many consumers still feel there is nothing they can do to make a difference in the big scheme of things (McDonald & Oates, 2006). Considering the lack of government programs, consumers have become unlikely to rely on many of the labels they are presented (Buckley, 2002). Such concerns need to be accounted for when certification program developers are planning and evaluating their strategies. The consumption that is also commonly associated with tourism has often been seen as the focal point of sustainable tourism research (Honey, 2002). The idea of "sustainable consumption" is a central concept stemming from *Agenda 21* (Hobson, 2003) and is the recipient of constant critique.

When viewing sustainable tourism as an adaptive paradigm (Hunter, 1997), it creates a flexibility for sustainable tourism certification programs to offer programs that are fitting for a multitude of types of tourism businesses. Hunter (1997) argued that sustainable tourism needs to remain open to and "capable of addressing widely different

situations, and articulating different goals" (p. 864). Sharing this opinion, Wood and Halpenny (2001) called for criteria to apply specifically to local applications. In a case study on ecotourism certification in Belize, Medina (2005) found that without accommodating for the divergent perspectives that surrounded certifications, local communities would not receive the benefits that stand as the rationale for certification program development.

In a similar manner to Hunter's adaptive paradigm, Bagheri and Hjorth (2007) recommended a process-based approach to sustainability. Their sustainability paradigm supports Voss and Kemp (2005) in believing that sustainability "cannot be translated into a blueprint or a defined end state from which criteria could be derived and unambiguous decisions be taken to get there" (p. 11). Such a perspective allows sustainability to be a "moving target" (Bagheri & Hjorth, 2007, p. 84). As Holling (2004) elaborated, sustainability needs to maintain the capacity to possess adaptive traits in order to be successful. Maintaining a perspective that takes into consideration this adaptive nature is vital to understanding sustainability beliefs for tourism researchers.

Esquer-Peralta et al. (2008) outlined the need for furthering our understanding of implementing sustainability into practice: "there is not full agreement on both, the meaning of these concepts of sustainable development or sustainability, and on what they should include" (p. 1029). They elaborated on how this lack of consensus has direct impacts on the perceptions of the users, such as possible participants and managers of sustainable tourism certification programs.

Despite frequent successes, rapidly changing political alliances (Buckley, 2002), lack of consensus on definitions (Hardy et al., 2002), and varying degrees of personal and

business investment have convoluted the future of sustainable tourism certification programs. Initiatives such as the GSTC and state level certification programs represent confidence for certification programs, but more research is needed to understand why individuals participate in certification programs.

<p style="text-align:center"><u>Sustainability, tourism, and behavior</u></p>

Associating tourism with long-term goals that take into consideration the host communities, tourists, and the trade itself, is a constructive approach to creating an agreed upon balance of human and natural resources, a paradox commonly associated with sustainable tourism (Williams & Ponsford, 2009). Long-term planning, such as an STC, is also capable of reducing the decision-making friction that has been the result of complex interactions found within the tourism industry (Bramwell & Lane, 1993; Lane, 2001). Such an approach also requires the inclusion of economic, sociocultural, and environment considerations, all of which are commonly associated with the paradigm of sustainability.

Laszlo (2003) argued that in order for a business to operate sustainably, the business must adhere to the belief that "…we are part of a larger system—a business ecology—and extend the willingness to examine the larger socio-economic system and how we impact it at the individual, community, and organizational levels, and eventually at the planetary level" (p. 46). However, perceptions of sustainability constantly fluctuate due to the various "interests, needs, and values of different societies" (Esquer-Peralta et al., 2008, p. 1028). By examining the relationship between beliefs and adopting a sustainable tourism certification, insight may be gained into the complex decision-making process that prevails within many tourism operations.

As of late, sustainability is receiving increased attention by a wide variety of disciplines and applications. The concept of sustainability drew its origin as a concept within the forestry industry, originating in Europe in the early 20th century (Wiersum, 1995). As an area of societal concern, it could be said that sustainability was then reinvented as an ecological perspective in the 1970s (Pearson, 2003). The Brundtland Report of 1987 (WCED, 1987) furthered the emergence of sustainability, drawing government attention and widening the scope to include a blend of sociocultural, environmental, and economic foundations. Taken a step further, some would even call for a political or institutional component to be added to this definition. Prugh and Assadourian (2003) argued that sustainability is about "collective values and related choices and is therefore a political issue" (p. 11). However one looks at it, it is undeniable how sustainability has grown as a paradigm and simultaneously taken deep relevance across international forums. Since its introduction as a forestry method, sustainability can now be approached in numerous, and equally genuine, manners (Prugh & Assadourian, 2003).

The majority of thriving sustainability initiatives includes a merger of the principles that support its foundation, not a mechanistic application of each of its parts. Examples of sustainability that can be seen from this lens include everything from the systems theory work of physicist Fritjof Capra (1975, 1982, 1996) to the applied ecology of Aldo Leopold (1949). Capra (1996) decisively claimed that "from a systematic point of view, the only viable solutions are those that are sustainable" (p. 4). It is with such network thinking that sustainability behaviors are best analyzed.

However, sustainability is all too often associated with only environmental issues while lacking a social and economic context (Wood & Halpenny, 2001). In particular,

ecological and sociological conceptions of sustainability have been shown to differ drastically (Lopez-Hoffman, Monroe, Narvaez, Martinez-Ramos, & Ackerly, 2006). This is not surprising considering the paramount importance of many environmental issues. The goal of sustainability is not to detract from this importance, but to compliment the problems with sociocultural and economic solutions.

To avoid an atomistic perspective of sustainability, holistic perspectives should also be utilized when looking at an individual's perceptions. Holistic approaches support the "complementary notions of environmental security, intra-generational and inter-generational equity, economic betterment, and social and environmental justice" (Dyer & Selby, 2004, p. 1). It should be noted, however, that systems are continually changing. As illustrated by Bagheri and Hjorth (2007), "sustainability cannot be considered as a defined end state of systems, but is an evolving ideal of development effort with no end known in advance" (p. 93). Incorporating flexibility into the progression of research on sustainability behaviors allows researchers to converge on common goals across disciplines.

Kagawa (2007) indicated a considerable gap in the literature when it comes to sustainability perceptions and behaviors specifically. As sustainability research moves forward, human perceptions of the sustainability paradigm will require further examination.

Theory of planned behavior

Further investigation is needed to examine why individuals decide to engage or not to engage in sustainable tourism certification programs for their business. To do so,

theoretical supposition of the problem needs to be applied. For this study, the theory of planned behavior was utilized.

The theory of planned behavior is based on the premise that three underlying constructs lead to an individual's intention to perform a behavior, eventually leading to the behavior itself (Ajzen, 1985). The three constructs include general attitudes, subjective norms (also referred to as social influence), and perceived behavioral control (Ajzen, 1991). Put together, these constructs are extremely useful for researching behavioral intention and its resulting behavior (Ajzen, 1991, 2002; Armitage & Conner, 2001; Conner & Armitage, 1998). In particular, the theory of planned behavior aims to detail the specifics regarding an individual's decision to perform a certain behavior (Conner & Armitage, 1998; Armitage & Conner, 2001).

Behavioral intention

Research designed to examine behavioral intention has often utilized either the theory of reasoned action or the theory of planned behavior (Ajzen, 2001; Lee et al., 2010; Petrick, Morias, & Norman, 2001; Taylor & Todd, 1995; Wall, Devine-Wright, & Mill, 2007). Fishbein and Ajzen (1975) originally defined behavioral intention as "…a person's location on a subjective probability dimension involving a relation between himself and some action. A behavioral intention therefore, refers to a person's subjective probability that he will perform some behavior" (p. 288). This intention can be viewed as a direct predecessor to one's actual behavior and can be viewed as an accurate determinant of that particular behavior (Ajzen, 2001). As Wall et al. (2007) noted, behavioral intention should be considered as the "immediate psychological antecedent" (p. 733) to one's actual

behavior. Furthermore, it can also be said that "intentions represent a person's motivation in the sense of her or his conscious plan or decision to exert effort to enact the behavior (Conner & Armitage, 1998, p. 1430). Such motivations can be studied within the theory of planned behavior model. The motivational factors can also be a sign of how willing or how much effort individuals are prepared to exert in order to perform a certain behavior (Armitage & Conner, 2001). Tourism research has commonly looked at such motivations in a variety of contexts (Fisher & Price, 1991).

Research has found that "intentions represent a person's motivation in the sense of her or his conscious plan or decision to exert effort to enact the behavior" (Conner & Armitage, 1998, p. 1430). Such motivations can be studied throughout the theory of planned behavior model (see Appendix A for a visual representation of the model). The motivational factors can also be a sign of how willing or how much effort individuals are prepared to exert in order to perform a certain behavior (Armitage & Conner, 2001).

Attitudes

As a continual focus of social and behavioral research, attitudes play an intricate role in the theory of planned behavior (Ajzen, 2001). Defined, attitudes can be considered "…a summary evaluation of a psychological object captured in such attribute dimensions as good-bad, harmful-beneficial, pleasant-unpleasant, and likeable-dislikeable" (Ajzen, 2001, p. 28). It has been argued that attitudes are the leading determinant of an individual's behavior (Ajzen & Fishbein, 2000). Within the theory of planned behavior, attitudes are considered to be derived from an expectancy-value framework (Ajzen, 2001). Under this expectancy-value model, attitudes occur when "…evaluative meaning arises

spontaneously and inevitably as we form beliefs about the object. Each belief associates

the object with a certain attribute, and a person's overall attitude toward an object is

determined by the subjective values of the object's attributes" (Ajzen, 2001, p. 30).

Another way of saying this is that behaviors may be determined by an individual's belief

that the behavior will produce a certain outcome(s) (Daigle, Hrubes, & Ajzen, 2002;

Fishbein, 1963; Fishbein & Ajzen, 1975).

Social influence/social norms

      Within the theory of planned behavior, behavior is affected by subjective norms as

well, also referred to as perceived social pressure or social influence (Ajzen, 2002). This

social influence has the ability to persuade or dissuade an individual from performing the

behavior (Ajzen, 1991; Ajzen & Driver, 1992). Referent individuals or groups that may

have the ability to influence social norms include family members, friends, teachers,

coworkers, and others (Ajzen, 1991; Ajzen & Fishbein, 1980). Specifically within travel

research, social norms have been shown to contribute to the decision making process

within group leisure behavior (March & Woodside, 2005).

Perceived behavioral control

      Perceived behavioral control is the third component of the theory of planned

behavior. This aspect of the model refers to the amount of volitional control that an

individual possesses in the behavioral process, that is, "if the person can decide at will to

perform or not perform the behavior" (Ajzen, 1991, p. 182). When researching behaviors,

it has been shown that behavioral determinants are comprised of both volitional and

motivational elements (Brandstatter & Gollwitzer, 1994). Conner and Armitage (1998)

summarized perceived behavioral control as simply how easy or hard it is for someone to

perform a behavior. Ajzen (2002) specified his addition of perceived behavioral control to

the theory of planned behavior to "attempt to deal with situations in which people may lack

complete volitional control over the behavior of interest" (p. 666). Different from actual

behavioral control, perceived behavioral control is viewed as a similar idea to that of

perceived self-efficacy (Bandura, 1977). However, a person's perceived ability to perform

a behavior versus their perceived control to execute that same behavior can noticeably be

viewed as different constructs. For these reasons, perceived behavioral control always

needs to be considered when researching behavioral intentions.

<u>Combining attitudes, social influence, and</u>

<u>perceived behavioral control</u>

Attitudes alone are a poor predictor of behaviors and behavioral intention (Ajzen &

Fishbein, 1980). Research has also suggested that the concepts of subjective norms and

perceived behavioral control within the theory of planned behavior are important in truly

understanding an individual's behavioral intentions (Laudenslager, Holt, & Lofgren, 2004)

that eventually lead to performed behaviors. When making these considerations, support is

once again shown for using the theoretical framework found within the theory of planned

behavior for behavioral research (Armitage & Conner, 2001).

<u>Beliefs</u>

According to the theory of planned behavior, an individual's belief structure acts as a foundation for general attitudes, social influence, and perceived behavioral control (Ajzen, 1991; Doll & Ajzen, 1992). Each level of the model possesses its own set of beliefs, meaning that behavioral beliefs influence general attitudes toward the behavior, normative beliefs influence subjective norms toward the behavior, and control beliefs influence perceived behavioral control toward the behavior. Put simply, behavior is a function of an individual's salient belief structure according to the theory of planned behavior (Doll & Ajzen, 1992). This foundation of beliefs always needs to be accounted for as the precursor to attitudes, social influence, and perceived behavioral control in the theory of planned behavior.

<u>Time, action, context, and target</u>

Defining the behavior in question is often overlooked by researchers (Ajzen & Fishbein, 1980). To correctly identify the criterion to define a behavior, Ajzen and Fishbein (1980) outlined the appropriate progression—first determine if it is a behavior or an outcome and then define the behavioral elements of time, action, context, and target (TACT) for the behavior. In accordance with Ajzen and Fishbein (1980), acquiring a sustainable tourism certification should be classified as a behavior, not an outcome. Outcomes from becoming certified can be easily outlined (e.g. reduction of environmental impacts, cost savings, support of local community members). Therefore, becoming certified is not the final outcome. Rather, it is the behavior that leads to the final outcome(s).

As noted by Ajzen and Fishbein (1980), the TACT for a behavior should also be clarified. The behavioral nature of obtaining a sustainable tourism certification is very specific. This leads to a fairly specific TACT. Adopting a sustainable tourism certification should be classified as a single action instead of a category. To illustrate this point, a category that the certification could fall into would be "greening your business." The category of greening your business may entail multiple behaviors with certification being only one of the possibilities. When dealing with a single action, the target also needs to be defined for which the behavior is directed (Ajzen & Fishbein, 1980). The adoption of a STC for this study represents a general target. The examination of certification programs represents a general perspective of the target rather than from a single instance within the target category (i.e., all certification programs will be included, not one specific provider). Relative to the category are the context and the time of the behavior. Considering the behavior in question, the context of the certification program is specific to B&B operations, while the time of the behavior can have happened at any point in time, not simply for one afternoon or during one particular year. Clearly defining the TACT of adopting a STC "ensures that the behavioral measurement will correspond to the criterion of interest" (Ajzen & Fishbein, 1980, p. 34). Also, when formulating hypotheses linking beliefs to behavior, it is necessary to make sure the beliefs correspond to their respective independent variable (i.e., attitudes, social norms, and perceived behavioral control) within the framework of TACT (Ajzen & Fishbein, 1980).

Summary of the theory of planned behavior

In sum, there are three variables in the theory of planned behavior that have the capability to individually contribute to behavior. First, an individual's attitude toward the behavior shows how much their performance of the behavior is positively or negatively rated (Ajzen, 1991). This link between attitudinal beliefs and behavioral intention can help to predict the behavioral outcomes. Second, subjective norms (also referred to as social influence) describe the perceived amount of social pressure that encourages or discourages participation in a certain behavior (Ajzen, 1991). The subjective norms create the linkage between the normative beliefs to the behavioral intention within the model. Finally, perceived behavioral control also serves to help determine behavioral intention in the theory of planned behavior model (Ajzen, 1991). This concept describes how easy or hard it will be for an individual to perform a behavior while integrating control beliefs about the behavior (Ajzen, 1991).

The theory of planned behavior says that "people act in accordance with their intentions and perceptions of control over the behavior, while intentions in turn are influenced by attitudes toward the behavior, subjective norms, and perceptions of behavioral control" (Ajzen, 2001, p. 43). From this perspective, it is very important to remember that the goal of the theory of planned behavior is to aid in the explanation of human behavior, not just the prediction of it (Ajzen, 2001). Continual support has been displayed, such as in the meta-analytic review by Armitage and Conner (2001), for the theory of planned behavior and its efficacy in predicting intentions and behavior.

Extension of the theory of planned behavior

to sustainable tourism

The theory of planned behavior has direct application when considering sustainable behaviors (Harland, Staats, & Wilke, 1999). "There is considerable literature that supports the application of the theory of planned behavior in order to gain an understanding of people's intentions to participate in an array of environmentally protective behaviors" (Laudenslager et al., p. 1164). Confirming their own previous claim, Laudenslager et al. (2004) used the theory of planned behavior to successfully predict sustainable behaviors such as recycling, energy conservation, and carpooling. Considering recycling in particular, studies (Boldero, 1995; Cheung, Chan, & Wong, 1999; Taylor & Todd, 1995) have shown the theory of planned behavior to be a significant indicator in the accurate prediction of sustainable behavior.

There has also been evidence shown by the hospitality management sector of tourism that they are moving into a more sustainable school of thought (for a UNWTO project that exemplifies this see Hotel Energy Solutions, 2012). For example, measuring customer satisfaction within the accommodation sector is becoming more dependent on the sustainability competitiveness of the business (Lee et al., 2010). As such, "green management has consequently become an important part of both strategic and operational planning. It has now become standard, rather than being just a temporary side interest, as it was in the 1970s" (Lee et. al., 2010, p. 902). These types of considerations are of utmost importance when sustainable tourism certification programs are developing and analyzing their programs.

The theory of planned behavior has been proven to be a successful theoretical underpinning within the field of tourism (March & Woodside, 2005; Quintal, Lee, & Soutar, 2010). Many of these inquiries have been conducted to explore barriers to sustainable tourism development (Dodds & Holmes, 2010). However, B&B operators have been largely overlooked by researchers when considering the subject of sustainability practices (Berry & Ladkin, 1997). The theory of planned behavior allows researchers to address this gap in the literature because it has been found to be a successful model for studying individual (rather than organizational) human behavior and behavioral intention (Ajzen, 2005).

Previous research has identified several barriers to implementing sustainable tourism certification in the accommodation sector of tourism. Berry and Ladkin (1997) described how businesses such as B&Bs need more information as to what sustainability actually is and how it can help the business. Tzschentke, Kirk, and Lynch (2008) found a lack of tourist interest or demand for sustainable tourism products. There also exists a belief by the industry that sustainability initiatives always portray a low return on investment (Dodds & Holmes, 2010). Specifically related to B&Bs, Vernon, Essex, Pinder, and Curry (2003) found a lack of funds and resources to adopt sustainability initiatives was a perceived barrier.

<u>Population – bed and breakfast operators</u>

B&Bs in the United States account for more than $3 billion of the $120 billion lodging industry (First Research, 2010). While B&Bs account for a small portion of tourism's accommodation sector, they have the capability to significantly contribute to the

negative and positive impacts of the industry (Dodds & Holmes, 2010). Put into a larger

perspective, "B&Bs as a whole can have significant impacts on the environmental,

economic, and socio-cultural sustainability of their host communities, similar to some large

hotel chains" (Dodds & Holmes, 2010, p. 2; Zane, 1997). To combat some of the negative

impacts, numerous B&Bs have sought sustainable tourism certification programs for

assistance and for credibility.

As of 2010, 23 states in the United States already offered or were in the process of

developing sustainable tourism certification programs (Bricker & Schultz, 2010). With

many sustainable tourism certification programs still in their infancy, research plays a vital

role in the successful addition of new programs as well as the effective maturity of those

that already exist. Understanding the sustainability perceptions of B&B operators may

also prove useful in developing sustainable tourism certification programs for the

remaining states without such offerings for their B&B sector. Such research also elevates

relevance to an international scale when considering initiatives like the Global Sustainable

Tourism Council.

The vast majority of B&Bs are considered "owner/operator" management

structures whereby the owners play an active role in the day-to-day operations of their

respective B&B (Emerick & Emerick, 1994; First Research, 2010; Hoovers Inc., 2011).

With the owners operating their B&Bs, decision making responsibilities for each can be

narrowed down to the individual instead of to a management team or corporate structure

model. For research purposes, this allows for the unit of analysis to be the individual

person, which allows for focus on the decision makers. Using this lens of inquiry becomes

especially relevant when choosing the theoretical framework to study human behavior and behavioral intention in particular.

There has been a considerable amount of attention given to sustainable initiatives in large corporate accommodations (Dodds & Holmes, 2010). However, there is a need for more research regarding smaller accommodations such as B&Bs. Dodds and Holmes (2010) were very specific in their call for potential research, stating "few studies have considered the activities of B&B's with regard to sustainable tourism practices even though these small businesses account for a large part of the lodging industry" (p. 2). Therefore, further research of B&B operators is needed to help understand their behaviors or their behavioral intentions toward obtaining sustainable tourism certifications.

The profile of a typical B&B guest is also notable when looking at sustainability initiatives, such as a sustainable tourism certification, by the B&B industry. The typical B&B guest has been segmented as "affluent, well educated, somewhat free-spending, and has a high degree of control over his or her personal time" (Zane, 1997, p. 69). Such characteristics allow B&B travelers to be more selective to upholding greater sustainability standards in where they spend their money; this is also significant because travelers have been shown to make trip decisions in predictable patterns (Travel Industry Association of America, 2005). With green consumerism having gained prominence in the 1990s, there has been a solid 2 decades of momentum leading to more sustainable purchasing, especially in the travel market (Lee et al., 2010). The profile of B&B guests is important because it has the potential to influence a B&B operator's decision to engage in a sustainable tourism certification program.

Summary

Having reviewed various perspectives, a definitional convergence can now be seen for sustainable tourism that illustrates how sustainability may have a role in numerous avenues of tourism development (Hardy et al., 2002). The union of sustainability and tourism began with the idea that sustainable tourism was only relevant to small tourism ventures and was not feasible at a mass tourism level (Hardy et al., 2008). Having progressed to an understanding that tourism now has the capability of becoming more sustainable, the certifying bodies of sustainable tourism look to continually improve their certification programs that apply to the wide array of certified participants. To do so, an understanding of an individual's beliefs about such programs holds bearing on the development and growth of sustainable tourism certification programs. To proceed in such a manner should be considered an adaptive approach to managing sustainable tourism certification programs and is beneficial to the continued development of such programs.

Tourism potentially lacks the "theoretical aspects and the unifying paradigms that characterize more established disciplines" (Hardy et al., 2002, p. 484). Only by utilizing economic models (Oppermann, 1993) or historical analysis (Jafari, 1990) has tourism begun to move toward theoretical significance (Hardy et al., 2002). As Jafari (1990) pointed out, people's perceptions of sustainable tourism have been continually changing for the better. Understanding such perceptions within the context of sustainability requires continual grounding in initiatives such as sustainable tourism certification programs. From this standpoint, it is necessary to incorporate practical dimensions (i.e., sustainable tourism certification programs) as well as conceptual dimensions (i.e., attitudes, social influence, perceived behavioral control; Esquer-Peralta et al., 2008) when looking to further our

current understandings as to why individuals would intend to participate in sustainable

tourism certification programs. As a result, more academic investigation is needed to

progress our understanding of how beliefs support attitudes, social influence, and

perceived behavioral control as they relate to behavior within the context of engaging in

sustainable tourism certifications.

CHAPTER III

METHODS

The purpose of this study was to examine how attitudes, social influence, and

perceived behavioral control are related to B&B operators participating or not participating

in a sustainable tourism certification for their businesses. The study also explored the

beliefs that are antecedent to the attitudes, social influence, and perceived behavioral

control. These relationships have been examined using the theory of planned behavior

(Ajzen, 1991). In essence, this study investigated the relationship between B&B operators

participating in, or not, sustainable tourism certification programs and their attitudes about

the behavior, the social influences surrounding the behavior, and how much control they

have in executing the behavior, while exploring their beliefs about sustainable tourism

certifications.

Engaging in a sustainable tourism program could be considered a one-time

behavior as opposed to behaviors that are capable of being frequently repeated (e.g., eating

a restaurant, choosing a hotel to stay at, buying clothes, etc.). Hence, this study examined

behavioral intention as well as the actual behavior. Due to the nature of this variable (i.e.,

behavioral intention applies more to B&Bs who are not certified because they have not

engaged in a sustainable tourism certification program), participants for this study

consisted of B&B operators from certified and noncertified establishments.

There are three concepts in the theory of planned behavior that have the capability to contribute to determining behavior and/or intention. First, an individual's attitude toward the behavior shows how much their performance of the behavior is positively or negatively rated (Ajzen, 1991). Second, social influence (also referred to as subjective norms) describes the perceived amount of social pressure that encourages or discourages participation in a certain behavior (Ajzen, 1991). Finally, perceived behavioral control also serves to help determine behavioral intention in the theory of planned behavior model (Ajzen, 1991). This concept describes how easy or difficult it will be for an individual to perform a behavior while considering the control factors (e.g., price, time commitment, or availability) and their perceived power about the behavior (Ajzen, 1991).

<div align="center">Participants</div>

Target population

The research participants for this study included B&B operators within the United States who are members of the American Bed and Breakfast Association or the Professional Association of Innkeepers International. It is important to take into consideration the management structure of B&Bs when considering their operators as participants for research. As part of the growing tourism industry, B&B operators represent a unique opportunity to researchers studying behavior due to their creative personalities and entrepreneurial mentalities. B&B operators also allow for researchers to investigate individuals instead of organizations or groups, suitable for research using the theory of planned behavior.

<u>Unit of analysis</u>

Researchers need to be aware of the unique challenges involved in surveying businesses (for a detailed discussion on this topic, see Dillman, 2009, p. 402–439). One such concern for this study would be the unit of analysis. The vast majority of B&Bs are considered "owner/operator" management structures, this referring to the owners playing an active role in the day-to-day operations of their respective B&B (Emerick & Emerick, 1994; First Research, 2010; Hoovers, 2011). Due to their minimal business size, operational decisions are made by an individual instead of an extensive management organizational system. With the owners also operating each B&B, the decision making responsibilities for each B&B can be narrowed to the individual instead of the organization as a whole. For the purpose of this research, this allowed for the unit of analysis to be the individual person, not the entire business. This unit of analysis can then be extended to the study's population. Understanding why B&B operators would adopt a sustainable tourism certification pragmatically contributes to the progressive tourism industry in addition to adding theoretical insight into the continuing institution of behavioral science.

<u>Sampling</u>

Purposive sampling was employed for this research. B&B operators were chosen intentionally for this research due to their ability to offer the best information for the research questions being asked and the population being examined (Patton, 2005). This type of sampling has also been referred to as judgmental sampling due to the way it selects participants who are typical of possessing a specified trait or characteristic (McDermott & Sarvela, 1999).

The Professional Association of Innkeepers International (PAII) and the American Bed and Breakfast Association (ABBA) were used as the population for this research. The researcher collected email addresses from 1,780 B&Bs listed on the websites from each association for building the sample. It was determined that 42 of the email addresses were not functional, lowering the population to 1,738. Another 82 individuals opted-out of the survey. To obtain a confidence level of 95% with a confidence interval of plus or minus 5% for data analysis, a sample of 312 responses was needed for the study.

<div align="center">Research design</div>

A nonexperimental, explanatory survey design was used to examine the relationships that beliefs, attitudes, social influence, perceived behavioral control, and intentions have with participation in a sustainable tourism certification program. The research questions for this study seek to understand how beliefs are related to attitudes, social influence, and perceived behavioral control regarding the adoption of STCs. This explanatory nature of the inquiry requires the use of a nonexperimental, explanatory survey design in order to contribute to an understanding of the relationships among the variables (Vaske, 2008).

Included in this nonexperimental research was the use of a descriptive survey. Survey research designs are extremely widespread in the behavioral and health sciences (Cottrell & McKenzie, 2005; Kerlinger, 1979; Vaske, 2008). Surveys are commonly used when the research involves "the attitudes, opinions, beliefs, values, behaviors, or characteristics of the group being studied" (Cottrell & McKenzie, 2005, p. 187).

A nonexperimental approach to this research was chosen because there is no manipulation of the variables in the design (Kerlinger, 1979; Patton, 2005). This type of *ex post facto* inquiry is necessary because the independent variables entered the situation having already "exercised their effects" and could be said to be "ready-made" (Kerlinger, 1979, p. 117). As Kerlinger (1979) and Patton (2005) elaborated, nonexperimental research is required when researchers are interested in human nature items such as attitudes, one of the independent variables for this study.

Nonexperimental methods were also selected for this study due to the descriptive and observatory nature of the research questions. Such research aims to examine and describe variables, as opposed to experimental research that is designed to explain the effects of given treatments on variables (Patton, 2005). As Kerlinger (1979) noted in his seminal work on behavioral research, "observation is another important road to knowledge" (p. 1). Through observation and description, this research design progresses the understanding of its respective inquiry by examining relationships that may exist between the independent variables (i.e., attitudes, social influence, and perceived behavioral control) and the dependent variable (behavioral; Vaske, 2008).

Nonexperimental approaches such as descriptive surveys can also assist researchers in understanding behavioral trends and in comprehending the reported behaviors of a particular population (Vaske, 2008). As Vaske (2008) illustrated, descriptive surveys are appropriate when you want to know the characteristics of a certain behavior, or in the case of the proposed study, adopting a STC.

Instrumentation

<u>Surveys</u>

Surveys have long been a popular mode of data collection for governments, educational institutions, businesses, and organizations (Kerlinger, 1979). They are capable of collecting valuable data from various populations, large and small (Kerlinger, 1979). Survey designs have the capability to provide quantitative or numeric expressions for variables such as attitudes and opinions (Creswell, 2003).

Survey research has proven itself in having a large influence on the behavioral sciences (Kerlinger, 1979). When studying behavior, it is necessary to understand the belief structures that contribute to the behavior. Due to their personalized nature, surveys allow researchers to access these belief structures that contribute to a furthered understanding in the behavioral sciences. In particular, a survey based on the theory of planned behavior possesses the ability to gain insight into an individual's belief structure as it may lead to a possible behavior (Ajzen, 1985).

The survey for this study was developed in accordance with Ajzen and Fishbein's (1980) sample questionnaire for use with the theory of planned behavior (updated in Ajzen, 2006). Since the initiation of the theory of planned behavior, numerous researchers have employed this conceptual framework for understanding behavior (for examples, see Blanchard et al., 2009; Cheung et al., 1999; Courneya, 1995; O'Boyle, Henly, & Larson, 2001).

A cross-sectional survey was used for this research. This type of survey was employed because the data was collected at one point in time in contrast to a longitudinal study that investigates a population over a period of time (Cottrell & McKenzie, 2005).

Surveys are also successful in showing the differences between groups (Cottrell & McKenzie, 2005). A survey was an effective way to explore how groups with different beliefs differ in their decision to adopt a sustainable tourism certification. Aday (1996) referred to this type of cross-sectional design as group-comparison. To understand the belief structures of the B&B operators, an eliciting questionnaire (see Appendix B) was used to explore the beliefs of the participants regarding STCs. Such exploratory methods are useful when researchers hope to gain an understanding of topics related to the population being studied (Vaske, 2008).

It is necessary for researchers to link their theoretical concepts to measurable constructs by what is referred to as operationalizing the variables (Vaske, 2008). In order to measure attitudes, the participants were asked specific questions about the favorability/unfavorability of their attitudes toward obtaining a sustainable tourism certification. For example,

> *How do you feel about engaging in a sustainable tourism certification for your business?*

In the same manner, social influence was determined by questionnaire items that inquired about the social influence involved in obtaining a sustainable tourism certification. For example,

> *How do the important people around you feel about your engagement in a sustainable tourism certification for your business?*

Perceived behavioral control refers to the amount of control an individual believes they possess in order to possibly execute a behavior. To determine perceived behavioral control for this study, participants answered questions regarding barriers and/or assistance relevant to obtaining a sustainable tourism certification. For example,

How easy or difficult was it for you to engage in a sustainable tourism certification for your business?

As tourism operators are given the opportunity to obtain a sustainable tourism certification for their business, understanding what drives their intention becomes pertinent to tourism researchers. As Wall et al. (2007) noted, behavioral intention should be considered as the "immediate psychological antecedent" to one's actual behavior (p. 733). Behavioral intention was operationalized as the likelihood of obtaining a sustainable tourism certification. For example,

Do you intend to obtain a sustainable tourism certification for your business?

Eliciting questionnaire

According to Ajzen (1985, 2006), before developing a theory of planned behavior questionnaire, it is first necessary to understand the modal salient beliefs and referents for the behavior. These beliefs were collected via an eliciting questionnaire that was completed by a representative sample of the population ($n = 30$). The purpose of this eliciting questionnaire was to categorize the beliefs of the participants about sustainable tourism certifications. The eliciting questionnaire was comprised solely of open-ended questions (see Appendix B). Distribution of the eliciting questionnaire was done via the online software Survey Monkey. The eliciting questionnaire was distributed to 273 B&Bs. Of the 273 B&Bs, 10 email addresses were not functioning, bringing the final pool down to 263 total possible respondents. Four individuals opted out of the survey. Thirty individuals completed the eliciting questionnaire for a response rate of 11.5%.

Once completed, the researcher then performed a content analysis to determine what beliefs and referents occurred and themed them into categories, in accordance with

Ajzen (2006). The results of the content analysis were then reviewed by a panel of three experts, as well as a panel of four university colleagues to ensure generally accepted modal salient beliefs and referents. Once the beliefs and referents were categorized, they were incorporated into the pilot questionnaire, acting as antecedents to the independent variables (attitudes, social influence, and perceived behavioral control) found within the theory of planned behavior. Incorporating antecedent variables into already existing frameworks is beneficial when looking at behaviors, particularly when investigating how human beliefs may or may not play a role (Boldero, 1995).

Pilot questionnaire

The beliefs and referents established in the eliciting questionnaire were then used to develop the pilot questionnaire in accordance with Ajzen's model (2006; see Appendix C).

The pilot questionnaire was also reviewed by a panel of university experts for readability and flow to ensure optimum respondent participation.

The pilot questionnaire was distributed to 100 B&B operators and completed by 28 individuals for a response rate of 28%. The internet survey tool, Survey Monkey, was used for online distribution. A reliability analysis was performed on the data from the pilot questionnaire to determine which items were to be edited for inclusion in the final survey questionnaire.

Development of the final survey questionnaire for the study incorporated information from the eliciting questionnaire, the pilot questionnaire, and Ajzen's (2006) model. The final draft was reviewed by a panel of three university experts. An introductory email (see Appendix D) accompanied the final survey questionnaire. The

letter explained the purpose of the study, their rights as a participant in the study, and the researcher's contact information.

Procedures

Data collection rationale

Internet surveys have been proven very successful in obtaining quality data from various samples (Cobanoglu, Warde, & Moreo, 2001). Numerous benefits have been established that support the use of internet surveys for data collection. For instance, surveys have the capability of producing large samples, therefore expanding the representativeness of the data (Vaske, 2008). Using a survey for data collection also allows for rapid turnaround of data (Creswell, 2003). If time is at a premium for conducting a study, internet surveys also allow researchers to move through the data collection process with efficiency and swiftness.

In this case, because funding for this research project was limited, the option to conduct an internet survey was a realistic solution to saving money without sacrificing the integrity of the study. The cost of internet surveys was minimal in comparison to other types of survey methods such as mail surveys (Vaske, 2008).

Data collection

Data collection was done using the online survey tool, Survey Monkey. However, numerous considerations were taken into account when using an internet survey for research such as Survey Monkey (for an extensive outlined list of these considerations, see Vaske, 2008, p. 167–168). It is notable to recognize that internet surveys are different

from email surveys. For this internet survey, the questionnaire was designed within an internet software program (Survey Monkey). A link to the questionnaire's website address was created by the software program.   This link was then emailed to each possible respondent requesting their participation in the online questionnaire. This approach allowed the respondents to maintain their anonymity and confidentiality, both of which were major concerns for this email survey process (as opposed to internet surveys; Cottrell & McKenzie, 2005).

Email addresses for data collection were obtained from the American Bed and Breakfast Association (ABBA) and from the Professional Association of Innkeepers International (PAII). The email addresses were available on each of the associations' websites. These email addresses were then entered into Survey Monkey for the distribution of the survey.

Distribution of the survey incorporated the implementation procedures outlined by Dillman, Smyth, and Christian (2009) for use with internet surveys. This overall technique for survey methods is known as the "Tailored Design Method" (TDM) (Dillman et al., 2009, p. 15). The TDM has been proven to provide high response rates and quality data (Dillman et al., 2009). The implementation portion of the TDM called for five points of contact for the distribution of a mail survey (Dillman et al., 2009, p. 243):

- Brief prenotice letter – sent out a few days prior to the questionnaire to explain the upcoming study
- The questionnaire – including a cover letter explaining the study in more detail and outlining why their response is important

- Thank you email postcard – sent out 1 week after the questionnaire to all participants who have completed the survey

- A replacement questionnaire – sent out 2–4 weeks after the initial questionnaire to individuals who have not completed the survey

- Final contact – sent out 2–4 weeks after the previous mailing

Incorporating Dillman's TDM for survey implementation can dramatically increase the effectiveness for data collection procedures (Bernard, 2000). However, as the TDM was specifically designed for mail surveys, Dillman admits that the "optimal timing sequence for web surveys has not, we believe, been determined yet" (Dillman et al., 2009, p. 279). To compensate for the natural quicker tempo of an internet survey versus a mail survey (Dillman et al., 2009), the survey implementation for this study consisted of:

- Initial email invitation – offered an explanation for the study and provided a link to participate in the research (March 14, 2013)

- First reminder – occurred 1 week after initial email encouraging participants to respond (March 20, 2013)

- Second reminder – occurred 2 weeks after initial email (March 27, 2013)

- Final notice – occurred 3 weeks after initial email (April 5, 2013)

In order to complete the study, approval from the University of Utah Institutional Review Board (IRB) was necessary. IRB approval was obtained prior to data collection for this study. Accessibility to B&B operators as a sample posed no apparent difficulties, and there were no apparent threats to participants for the study.

Treatment of the data

At the conclusion of the data collection for this study, analysis of the data occurred to test the hypotheses of the study. Quantitative methods utilized for this study included descriptive statistics, correlation, multiple regression, and logistic regression.

To start, data was entered into the Statistical Package for the Social Sciences (SPSS), version 20.0. Survey Monkey allows for data to be exported in the SPSS format, eliminating the possibility for human error in the process. Cleaning of the data was performed to offer "verification of structural stability, identification of invalid entries, and editing and imputation" (Iarossi, 2006, p. 196–197). The data was cleaned using a descriptive frequency analysis for every question found on the final questionnaire.

Descriptive statistics were then used to provide an overview of the sample in addition to offering a preliminary understanding of the data's distributional and frequency properties. Descriptive statistics are useful to give an encompassing summary of the data that is easy to comprehend (Cottrell & McKenzie, 2005; Patton, 2005). Descriptive statistics were also used to summarize the demographic questions included in the final questionnaire.

When deciding which statistical tests to use on data, Cottrell and McKenzie (2005) recommended that two factors be considered: "the level of measurement and the type of research question or hypothesis being addressed" (p. 249). Due to the interval and categorical level of measurement for the variables and the need to examine each independent variable while controlling for the other independent variables, multiple regression, logistic regression, and Pearson's product-moment correlation coefficient (r) were used for the data analysis. Bernard (2000) agreed that "correlation is best understood

in the context of regression" (p. 606). These statistical tests also offered the capability to analyze the relationships of interest within the theory of planned behavior model.

Pearson's *r* allows researchers to observe the relationship between sets of scores at the interval level of measurement (Patton, 2005). For example, Pearson's *r* was useful to test if attitudes have a positive or negative relationship with behavioral intention (Patton, 2005). Field (2009) also recommends the use of Pearson's *r* as a measure of effect size because it is constrained to lie between 0 (no effect) and 1 (perfect effect). For this, the effect size refers to the strength of the relationship between two variables.

Multiple regression is useful to explain the value of a dependent variable in relation to multiple independent variables (Field, 2009). This interrelationship represents the "combined correlation of a set of independent variables with the dependent variable, taking into account the fact that each of the independent variables might be correlated with each of the other independent variables" (Bernard, 2000, p. 620). This approach can also be interpreted as the relationship(s) between an independent variable and its antecedent variables. By using multiple regression to analyze the relationships that attitudes, social norms, and perceived behavioral control have with behavioral intention as well as with their antecedent variables, it was possible to control for the correlations within the variables in examining how they are separately, as well as cumulatively, related to each other.

Logistic regression was also used for data analysis due to the categorical nature of the dependent variables. Similar to multiple regression, logistic regression offers the ability to calculate which category someone will belong in based upon the responses they provide. In other words, logistic regression allowed for statistical support in understanding

why someone would or would not engage in a sustainable tourism certification program based on their attitudes, social influence, and perceived behavioral control. In the data analysis, the behavior itself, engagement in a sustainable tourism certification program, was categorized as either "yes" or "no." The behavioral intention was categorized into "yes," "no," or "unsure." In asking the study's participants about their engagement in a sustainable tourism certification and their behavioral intention that preceded it, their responses were interpreted by means of which group they were part of as determined by their responses.

Attitudes

Research Question 1: How do attitudes about sustainable tourism certification relate to the adoption of sustainable tourism certification?

H1: As attitudes toward obtaining a sustainable tourism certification become more positive, the corresponding behavioral intention will also increase while controlling for the effects of social influence and perceived behavioral control.

Dependent variable: behavioral intention (analyzed as a continuous variable through multiple regression and as a categorical variable through logistic regression)

Independent variable: attitudes

Analysis: descriptive, logistic regression, multiple regression, correlation

Social influence

Research Question 2: How is social influence about sustainable tourism certifications related to the adoption of sustainable tourism certifications?

H2: As social influence toward obtaining a sustainable tourism certification increases, the corresponding behavioral intention will also increase while controlling for the effects of attitudes about the behavior and perceived behavioral control.

Dependent variable: behavioral intention (analyzed as a continuous variable through multiple regression and as a categorical variable through logistic regression)

Independent variable: social influence

Analysis: descriptive, logistic regression, multiple regression, correlation

Perceived behavioral control

Research Question 3: How does perceived behavioral control about sustainable tourism certification relate to the adoption of a sustainable tourism certification?

H3: As perceived behavioral control over adopting a sustainable tourism certification increases, the corresponding behavioral intention will also increase while controlling for the effects of attitudes about the behavior and social influence.

Dependent variable: behavioral intention (analyzed as a continuous variable through multiple regression and as a categorical variable through logistic regression)

Independent variable: perceived behavioral control

Analysis: descriptive, logistic regression, multiple regression, correlation

Behavioral beliefs/outcome evaluations

Research Question 4: How do behavioral beliefs/outcome evaluations about sustainable tourism certification relate to attitudes about sustainable tourism certifications?

H4: As behavioral beliefs/outcome evaluations about sustainable tourism certifications become more favorable, corresponding attitudes about sustainable tourism certifications will also become more favorable while controlling for the effects of normative beliefs/motivation to comply and control beliefs/power of control factors.

Independent variable: attitudes

Antecedent variable: behavioral beliefs/outcome evaluations

Analysis: descriptive, multiple regression, correlation

Normative beliefs/motivation to comply

Research Question 5: How do normative beliefs/motivation to comply about sustainable tourism certification relate to social influence toward sustainable tourism certification?

H5: As normative beliefs/motivation to comply about sustainable tourism certifications become more positive, the corresponding social influence toward sustainable tourism certification will also become more positive while controlling for the effects of behavioral beliefs/outcome evaluations and control beliefs/power of control factors.

Independent variable: social influence

Antecedent variable: normative beliefs/motivation to comply

Analysis: descriptive, multiple regression, correlation

Control beliefs/power of control factors

Research Question 6: How do control beliefs/power of control factors about sustainable tourism certification relate to perceived behavioral control regarding sustainable tourism certification?

H6: As control beliefs/power of control factors about sustainable tourism certification become more positive, the corresponding perceived behavioral control regarding sustainable tourism certification will also become more positive while controlling for the effects of behavioral beliefs/outcome evaluations and normative beliefs/motivation to comply.

Independent variable: perceived behavioral control

Antecedent variable: control beliefs/power of control factors

Analysis: descriptive, multiple regression, correlation

CHAPTER IV

RESULTS

This chapter presents the results of this study through descriptive and inferential

statistics. First, a description of the sample and its participants is provided. Second, a

summary of the B&B characteristics is delivered. Finally, the results of the study are

presented within the format of the study's research questions.

Participant Profile

A purposive sample was used by the researcher for this study. The study

participants included B&B operators within the United States who are members of either

the American Bed and Breakfast Association or the Professional Association of Innkeepers

International. A total of 1,780 email addresses were collected from the associations'

websites.   Forty-two of the email addresses were inoperative bringing the total population

size to 1,738. There were 82 individuals who opted-out of the survey. Of the population,

425 individuals responded to the questionnaire resulting in a response rate of 24.5% and a

confidence interval of 4.13.

The vast majority, 82.4%, of the 425 respondents were not currently participating

in a sustainable tourism certification program at the time of this study. Of the 75

respondents engaged in a sustainable tourism certification program, most had been

certified 1 year or longer (Table 1).

<u>Gender and ethnicity</u>

The majority of the respondents were women, consisting of females (61.5%) and

males (38.5%). The vast majority of the sample (95.6%) reported being White/Caucasian,

with very little diversity overall (i.e., 1.3% were Black/African American, 1.3% were

Hispanic/Latino, .9% were American Indian, .6% were Asian, and .3% were multiracial).

A summary of the sociodemographics is shown in Table 2.

<u>B&B rooms, awards, rates</u>

To further understand the sample population, characteristics of the B&B operation

were explored. These items included number of rooms, awards, peak rates, and geographic

location.

Each respondent was asked how many rooms their business had available. The

respondent sample size for this question was 326. The B&Bs sampled were generally

small with less than 25 rooms. The majority of respondents (80.7%), indicated they had 1–

10 rooms, 17.2% had 11–25 rooms available, 1.8% had 26–50 rooms available, and only

0.3% had more than 50 rooms available. With respect to awards received, the majority of

the respondents, 62.5%, indicated that their business had previously won an award, while

37.5% of the respondents had not (Table 3).

Respondents were also asked to provide the peak nightly rates for their business.

Of the 322 respondents who completed this question, 42.5% had rates averaging over $200

per night, 32.0% averaged $151–$200 per night, 20.8% averaged between $101–$150 per

night, and 4.7% averaged $51–$100 per night (Table 3).

B&B location

Participants were asked where their business was located. The zip codes were

translated to their state of origin. The B&Bs in this study were located in 45 different

states with the highest frequency coming from Pennsylvania (Table 4).

Results for research questions

Attitudes

Research Question 1: How do attitudes about sustainable tourism certification

relate to the adoption of sustainable tourism certification?

H1: As attitudes toward obtaining a sustainable tourism certification become more

positive, the corresponding behavioral intention will also increase while controlling

for the effects of social influence and perceived behavioral control.

Dependent variable: behavioral intention (analyzed as a continuous variable

through multiple regression and as a categorical variable through logistic

regression)

Independent variable: attitude

Analysis: logistic regression, multiple regression, correlation

The independent variables in this study were examined using Likert-type scales of

1–7. Respondents were also offered the selections of "Don't Know" and "N/A" for each

variable in case they did not feel the question applied to them or if they did not possess a

sufficient understanding to answer the question. For attitude, there were 70 individuals who answered "Don't Know" and 89 individuals who selected "N/A" or had a missing response. More than two-thirds (67.7%) of the respondents for this question had favorable attitudes about sustainable tourism certification programs. Table 5 summarizes the responses for attitudes.

A Pearson's correlational analysis was performed on the variables in this study. Statistically significant correlations were found between all three independent variables and behavioral intention. However, attitudes displayed a stronger correlation to behavioral intention than social influence and perceived behavioral control (Table 6).

This research also used a multiple regression analysis on behavioral intention as it relates to the independent variables. The questionnaire included a 3-point scale for behavioral intention. Because of this, the researcher elected to do a multiple regression analysis due to the nature of behavioral intention as a continuous variable. This choice was supported through curve estimation in SPSS that showed a statistically significant F-value that was higher for a linear equation of analysis (i.e., multiple regression) than for the other possible models of regression. In running the multiple regression analysis, it was determined that about 50% of the variability in behavioral intention could be explained by attitudes, social influence, and perceived behavioral control. Overall, the model was also statistically significant. Of the independent variables, it was determined that attitudes were statistically significant (Table 7).

Because behavioral intention was categorical (i.e., yes, no, maybe), a multinomial logistic regression was performed. The results of the multinomial logistic regression supported the results of the multiple regression analysis. The model was also statistically

significant, but attitudes were once again the only statistically significant independent variable. The results suggest that attitudes are the only statistically significant predictor of behavioral intention for engaging in a sustainable tourism certification program.

Within the logistic model, the odds ratio refers to the proportionate change in odds. For this model, the odds ratio tells us that as attitudes increase by 1 unit, the change in odds of answering no (rather than yes) decreases by 0.159. In short, the respondents were less likely to answer "no" (instead of "yes") if they had a favorable attitude about certifications. The model also showed that respondents were less likely to be unsure about certifications (rather than answering "yes") if they had favorable attitudes. The multinomial logistic regression also indicated that the model explained between 50% (Cox and Snell equation) and 56% (Nagelkerke equation) of the variability in behavioral intention (Table 8).

The results of the logistic regression indicated that the overall model was a good fit for explaining the variance in behavioral intention.   Unlike other indicators of fit, the Pearson and Deviance measures for Goodness-of-Fit for logistic regression should be nonsignificant to support a good fit for the analysis (Field, 2009). Table 9 summarizes these measures.

Social influence

Research Question 2: How is social influence about sustainable tourism certifications related to the adoption of sustainable tourism certifications?

H2: As social influence toward obtaining a sustainable tourism certification increases, the corresponding behavioral intention will also increase while

controlling for the effects of attitudes about the behavior and perceived behavioral control.

Dependent variable: behavioral intention (analyzed as a continuous variable through multiple regression and as a categorical variable through logistic regression)

Independent variable: social influence

Analysis: logistic regression, multiple regression, correlation

Relative to items on social influence, 258 individuals responded (Table 10). There were 71 individuals who responded with "Don't Know" and 96 individuals who indicated "N/A" or had missing responses. Table 10 outlines the responses for social influence.

The results indicated that the majority of respondents (83.7%) believed that the important individuals and groups around them supported their decision to participate or not participate in a sustainable tourism certification. However, social influence displayed no statistical significance in the multiple regression or the logistic regression models. The Pearson's correlation for social influence with behavioral intention was statistically significant, but was weak in strength (0.227).

Perceived behavioral control

Research Question 3: How does perceived behavioral control about sustainable tourism certification relate to the adoption of a sustainable tourism certification?

H3: As perceived behavioral control over adopting a sustainable tourism certification increases, the corresponding behavioral intention will also increase while controlling for the effects of attitudes about the behavior and social influence.

Dependent variable: behavioral intention (analyzed as a continuous variable

through multiple regression and as a categorical variable through logistic

regression)

Independent variable: perceived behavioral control

Analysis: logistic regression, multiple regression, correlation

For the perceived behavioral control item on the questionnaire, 218 participants

responded. In addition to the 218 valid responses, there were 89 missing or "N/A"

responses and 118 "Don't Know" responses for the question. Table 11 outlines the

responses for perceived behavioral control from the 218 valid responses.

When examining the perceived behavioral control for engaging in a sustainable

tourism certification program, 50% of the respondents indicated it was "easy" to engage in

sustainable tourism certification programs, about 12% of the respondents were "neutral,"

and 38% of the respondents believed it was "difficult." The research found no statistical

significance for perceived behavioral control in either of the regression models. The

correlation analysis revealed a moderate level of relation between behavioral intention and

perceived behavioral control that was also statistically significant.

Behavioral beliefs/outcome evaluations

Research Question 4: How do behavioral beliefs/outcome evaluations about

sustainable tourism certification relate to attitudes about sustainable tourism certifications?

H4: As behavioral beliefs/outcome evaluations about sustainable tourism

certifications become more favorable, corresponding attitudes about sustainable

tourism certifications will also become more favorable while controlling for the

effects of normative beliefs/motivation to comply and control beliefs/power of control factors.

Independent variable: attitude

Antecedent variable: behavioral beliefs/outcome evaluations

Analysis: descriptive, multiple regression, correlation

Several concepts were used from the eliciting questionnaire to create the final questionnaire items for the antecedent variables in this study. The summation of these responses was then used for the correlation and regression portions of analysis. For attitudes, these items included third-party verification, increased customer demand, additional expenses, time shortage, resource shortage, new marketing/promotional tools, reduction of environmental impact, and financial savings. For behavioral beliefs (b_i), respondents were asked how much they anticipated each item to result from engaging in a sustainable tourism certification program. Table 12 outlines the responses for behavioral beliefs.

Respondents were also asked about their outcome evaluations (e_i) for attitude about sustainable tourism certification programs. Table 13 summarizes these outcome evaluations.

A multiple regression analysis was performed on attitudes with the behavioral belief and outcome evaluation antecedent variables (Table 14). Despite the overall model being statistically significant, only two of the antecedent variables (third party verification and reduction of environmental impacts) proved to be statistically significant. The model of antecedent variables explained for only 29% of the variance in general attitude (Table 14).

To understand the relationship between attitude and behavioral beliefs, a Pearson's correlational analysis was performed. This analysis showed that all of the correlations between attitude and its antecedent variables were statistically significant, but only at moderate levels (Table 15).

Correlations were examined between general attitude and outcome evaluations. All items, with the exception of "financial savings" were statistically significant. However, similar to behavioral beliefs variables, the correlations were only moderate in strength (Table 16).

Normative beliefs/motivation to comply

Research Question 5: How do normative beliefs/motivation to comply about sustainable tourism certification relate to social influence toward sustainable tourism certification?

H5: As normative beliefs/motivation to comply about sustainable tourism certifications become more positive, the corresponding social influence toward sustainable tourism certification will also become more positive while controlling for the effects of behavioral beliefs/outcome evaluations and control beliefs/power of control factors.

Independent variable: social influence

Antecedent variable: normative beliefs/motivation to comply

Analysis: descriptive, multiple regression, correlation

The final questionnaire also included items about *social influence* that were derived from the eliciting questionnaire. This set of antecedent variables included business

associates, employees, customers, community members, family, professional organizations, local businesses, government officials, environmental groups, and competitors. Respondents were asked who supported or did not support them regarding their decision to engage in a sustainable tourism certification program. Table 17 summarizes these normative beliefs (b_j) of the respondents.

Another component of social influence, motivation to comply (m_j), was also included in the final questionnaire. Respondents were asked how much certain individuals/groups influenced their decision to engage in a sustainable tourism certification program. Items for this antecedent variable were also developed from the eliciting questionnaire and are outlined in Table 18.

The multiple regression analysis of normative beliefs and motivation to comply (b_jm_j) on social influence demonstrated significance overall; however, "family" was the only significant item. Additionally, the model showed that the antecedent variables only accounted for 13% of the variability in social influence (Table 19).

A correlational analysis was performed between social influence and normative beliefs (b_j). With the exception of competitors, all of the correlations proved to be statistically significant. However, the correlations all displayed weak levels of relation (Table 20).

When correlational analysis was performed between social influence and the motivation to comply (m_j) antecedent variables, only employees, family, and professional organizations proved to be statistically significant correlations. These correlations were also weak in strength (Table 21).

Control beliefs/power of control factors

Research Question 6: How do control beliefs/power of control factors about sustainable tourism certification relate to perceived behavioral control regarding sustainable tourism certification?

H6: As control beliefs/power of control factors about sustainable tourism certification become more positive, the corresponding perceived behavioral control regarding sustainable tourism certification will also become more positive while controlling for the effects of behavioral beliefs/outcome evaluations and normative beliefs/motivation to comply.

Independent variable: perceived behavioral control

Antecedent variable: control beliefs/power of control factors

Analysis: descriptive, multiple regression, correlation

Antecedent variables were also determined for perceived behavioral control (Table 22). Items developed from the eliciting questionnaire included price, time commitment, resources needed, promotional benefits, information provided, availability of a certification program, state of the economy, and support of professional organizations. Respondents were asked about their control beliefs (c_k), or how important the items were in their decision to engage in a sustainable tourism certification program.

The final set of antecedent variables was for the power of the control factors under consideration for perceived behavioral control (Table 23). Respondents were asked what kind of influence each of the items had. Table 23 summarizes the power of control factors (p_k).

When control beliefs and power of control factors (c_kp_k) were regressed on perceived behavioral control, the overall model proved to be statistically significant. However, none of the individual items offered any statistical significance. The model accounted for 23% of the total variability in perceived behavioral control (Table 24).

A correlational analysis between control beliefs (c_k) and perceived behavioral control offered only two statistically significant items, time commitment and resources needed. Both items were low in strength though (Table 25).

However, when a correlational analysis was performed between perceived behavioral control and power of control factors (p_k), all of the items showed to have statistically significant correlations. Similar to the control beliefs though, the correlations were of weak strength (Table 26).

Table 1: Sample Characteristics

Characteristic	Frequency	Percentage
Sustainable Tourism Certification (*n* = 425)		
Yes	75	17.6
No	350	82.4
Intention to be Certified (*n* = 345)		
Yes	90	26.1
Unsure	158	45.8
No	97	28.1
Duration of Certification (*n* = 75)		
Less than 1 year	3	4.0
1–2 years	27	36.0
3–5 years	16	21.3
More than 5 years	18	24.0
No response	11	14.7

Table 2: Gender and Ethnicity

Characteristic	Frequency	Percentage
Gender (*n* = 325)		
Female	200	61.5
Male	125	38.5
Ethnicity (*n* = 318)		
White/Caucasian	304	95.6
Black/African American	4	1.3
Hispanic/Latino	4	1.3
American Indian	3	0.9
Asian	2	0.6
Multiracial	1	0.3

Table 3: B&B Characteristics

Characteristic	Frequency	Percentage
# of Rooms (*n* = 326)		
1–10	263	80.7
11–25	56	17.2
26–50	6	1.8
More than 50	1	0.3
Award Winning Property (*n* = 312)		
Yes	195	62.5
No	117	37.5
Peak Nightly Rates (*n* = 322)		
$51–$100	15	4.7
$101–$150	67	20.8
$151–$200	103	32.0
More than $200	137	42.5

Table 4: B&B Locations by State

State	Frequency
Pennsylvania	27
Virginia	21
New York	17
Maine	16
Vermont	12
Washington	12
Missouri	10
Ohio	10
North Carolina	9
Arkansas	8
Maryland	8
New Mexico	8
Tennessee	8
Florida	7
New Hampshire	7
New Jersey	7
Oregon	7
Wisconsin	7
Indiana	6
Michigan	6
Colorado	5
Georgia	5
Illinois	5
Kentucky	5
Louisiana	5
Nebraska	5
Oklahoma	5
Connecticut	4
Iowa	4
Montana	4
South Carolina	3
Alaska	2
Arizona	2
Minnesota	2
Rhode Island	2
West Virginia	2
Alabama	1
Hawaii	1
Kansas	1
Nevada	1
South Dakota	1
Utah	1
No response	103
Total	*425*

Table 5: Summary of Likert-Type Scales for Attitude by Percentage

Variable	Extremely Bad (1)	(2)	(3)	(4)	(5)	(6)	Extremely Good (7)
Attitude ($n = 266$)	5.6	9.4	4.9	12.4	15.8	22.6	29.3

Table 6: Pearson's Correlation Analysis

	Behavioral Intention	Attitude	Social Influence	Perceived Behavioral Control
Behavioral Intention	1.000	0.676**	0.227**	0.482**
General Attitude		1.000	0.365**	0.546**
Social Influence			1.000	0.153*
Perceived Behavioral Control				1.000

  *Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

Table 7: Summary of Multiple Regression Analysis on Behavioral Intention

Variable	B	Std. error	β	t-value	t-sig.
Attitude	0.280	0.029	0.660	9.692	0.000
Social Influence	-0.014	0.032	-0.024	-0.425	0.671
Perceived Behavioral Control	0.038	0.026	0.093	1.468	0.144

$R^2 = .499$; $R^2_{Adj} = .491$; $F = 60.703$; $df = 3/186$; $p < .000$; DV: Behavioral Intention

Table 8: Multinomial Logistic Regression Analysis for Behavioral Intention

	B (SE)	95% Confidence Interval for Odds Ratio		
		Lower	Odds Ratio	Upper
Yes vs. No				
Attitude	-1.838 (.304)*	.088	.159	.288
Social Influence	.265 (.244)	.809	1.304	2.102
Perceived Behavioral Control	-.249 (.174)	.554	.780	1.097
Yes vs. Unsure				
Attitude	-.644 (.215) **	.345	.525	.800
Social Influence	.126 (.185)	.789	1.135	1.631
Perceived Behavioral Control	-.168 (.117)	.672	.845	1.063

R^2 = .50 (Cox and Snell), .56 (Nagelkerke); Model x_2 (6)=128.37*; * $p< .001$; ** $p< .005$

Table 9: Goodness-of-Fit Summary of Logistic Regression Model

Variable	Chi-Square	df	sig.
Pearson	163.369	156	.327
Deviance	135.117	156	.885

Table 10: Summary of Likert-Type Scales for Social Influence by Percentage

Variable	Disagree with Decision (1)	(2)	(3)	(4)	(5)	(6)	Support Decision (7)
Social Influence (*n* = 258)	1.6	1.2	3.1	10.5	10.9	17.4	55.4

T*able 11*: Summary of Likert-Type Scales for Perceived Behavioral Control by Percentage

Variable	Very Difficult (1)	(2)	(3)	(4)	(5)	(6)	Very Easy (7)
Perceived Behavioral Control (*n* = 218)	11.9	9.6	16.5	11.9	18.3	15.6	16.1

Table 12: Summary of Likert-Type Scales for Behavioral Beliefs (b_i) by Percentage

Variable	Not at All (1)	(2)	(3)	(4)	(5)	(6)	Very Much (7)
Third Party Verification (*n* = 222)	7.7	6.8	5.0	18.5	19.8	18.9	23.4
Increased Customer Demand (*n* = 252)	9.5	9.1	10.7	21.0	26.2	12.7	10.7
Additional Expenses (*n* = 259)	1.2	2.7	8.9	13.9	22.4	27.0	23.9
Time Shortage (*n* = 260)	1.5	3.1	8.8	15.4	20.0	26.9	24.2
Resource Shortage (*n* = 256)	2.0	3.5	8.2	18.0	19.5	26.6	22.3
New Marketing Tools (*n* = 258)	5.4	3.1	5.4	13.6	21.3	27.1	24.0
Reduced Environmental Impact (*n* = 254)	7.5	2.8	4.3	9.1	14.6	24.0	37.8
Financial Savings (*n* = 241)	18.3	12.4	12.9	15.8	14.9	12.0	13.7

Table 13: Summary of Likert-Type Scales for Outcome Evaluations (e_i) by Percentage

Variable	Extremely Bad (1)	(2)	(3)	(4)	(5)	(6)	Extremely Good (7)
Third Party Verification ($n = 256$)	13.3	11.3	8.6	16.0	18.4	17.2	15.2
Increased Customer Demand ($n = 251$)	1.2	2.8	6.0	15.9	18.7	21.9	33.5
Additional Expenses ($n = 257$)	32.3	15.6	20.2	16.3	8.9	4.7	1.9
Time Shortage ($n = 274$)	28.8	15.3	20.4	15.0	12.0	6.2	2.2
Resource Shortage ($n = 272$)	26.5	17.3	21.3	16.5	10.3	5.9	2.2
New Marketing Tools ($n = 268$)	3.0	2.2	5.6	14.2	21.3	26.5	27.2
Reduced Environmental Impact ($n = 265$)	1.1	1.1	1.5	12.5	10.6	23.0	50.2
Financial Savings ($n = 224$)	1.8	6.3	6.3	15.6	8.5	15.6	46.0

Table 14: Summary of Multiple Regression Analysis of Antecedent Variables ($b_i e_i$) on Attitude

Variable	B	Std. error	β	t-value	t-sig.
Third Party Verification	0.32	0.010	0.307	3.293	0.001
Increased Customer Demand	0.012	0.013	0.102	0.898	0.371
Additional Expenses	0.022	0.017	0.150	1.313	0.192
Time Requirement	0.016	0.024	0.093	0.658	0.512
Resource Requirement	-0.034	0.026	-0.186	-1.276	0.205
Marketing Tools	-0.011	0.014	-0.088	-0.791	0.431
Reduced Environmental Impact	0.048	0.011	0.450	4.326	0.000
Financial Savings	-0.006	0.011	-0.056	-0.560	0.577

$R^2 = .345$; $R^2_{Adj} = .294$; F = 6.725; df = 8/110; $p < .000$; DV: Attitude

Table 15: Correlation Analysis of Attitudes with Behavioral Beliefs (b_i)

Factor	General Attitude
Third Party Verification	0.224**
Increased Customer Demand	0.568**
Additional Expense	0.240**
Requirement of More Time	0.305**
Requirement of More Resources	0.307**
Development of Marketing/Promotion	0.335**
Reduction of Environmental Impact	0.569**
Financial Savings	0.417**

**Correlation is significant at the 0.01 level (2-tailed)

Table 16: Correlation Analysis of Attitudes with Outcome Evaluations (e_i)

Factor	General Attitude
Third Party Verification	0.659**
Increased Customer Demand	0.228**
Additional Expense	-0.497**
Requirement of More Time	-0.479**
Requirement of More Resources	-0.533**
Development of Marketing/Promotion	0.348**
Reduction of Environmental Impact	0.507**
Financial Savings	0.046

**Correlation is significant at the 0.01 level (2-tailed)

Table 17: Summary of Likert-Type Scales for Normative Beliefs (b_j) by Percentage

Variable	Should Not (1)	(2)	(3)	(4)	(5)	(6)	Should (7)
Business Associates (*n* = 165)	10.9	4.8	7.9	20.6	15.8	14.5	25.5
Employees (*n* = 138)	13.0	7.2	9.4	25.4	15.9	9.4	19.6
Customers (*n* = 200)	7.0	2.0	5.0	19.0	22.0	24.0	21.0
Community Members (*n* = 173)	9.2	4.6	6.9	28.3	16.2	16.8	17.9
Family (*n* = 191)	15.2	8.4	4.2	16.8	16.8	17.3	21.5
Professional Organizations (*n* = 182)	7.1	4.4	3.8	18.1	20.9	18.1	27.5
Local Businesses (*n* = 161)	8.1	6.8	7.5	28.6	17.4	14.9	16.8
Government Officials (*n* = 167)	13.8	8.4	9.0	21.0	16.2	15.0	16.8
Environmental Groups (*n* = 204)	6.9	1.0	3.4	8.8	6.9	19.1	53.9
Competitors (*n* = 154)	16.2	8.4	9.7	30.5	13.6	7.8	13.6

Table 18: Summary of Likert-Type Scales for Motivation to Comply (m_j) by Percentage

Variable	Should Not (1)	(2)	(3)	(4)	(5)	(6)	Should (7)
Business Associates (*n* = 286)	27.6	6.6	7.0	16.1	13.3	14.3	15.0
Employees (*n* = 245)	39.6	9.8	8.6	14.3	6.5	12.2	9.0
Customers (*n* = 293)	10.6	4.1	6.1	9.2	13.3	23.2	33.4
Community Members (*n* = 289)	25.6	11.8	10.0	17.0	16.3	10.0	9.3
Family (*n* = 289)	29.8	9.7	6.2	14.5	11.4	12.8	15.6
Professional Organizations (*n* = 295)	22.0	9.8	6.8	16.9	13.6	17.6	13.2
Local Businesses (*n* = 287)	26.8	11.1	7.3	20.2	15.0	12.2	7.3
Government Officials (*n* = 283)	33.9	11.0	9.5	15.5	13.4	8.1	8.5
Environmental Groups (*n* = 296)	27.7	8.8	8.4	14.2	12.2	11.5	17.2
Competitors (*n* = 282)	23.8	10.6	9.6	19.9	10.6	14.5	11.0

Table 19: Summary of Multiple Regression Analysis of Antecedent Variables ($b_j m_j$) on Social Influence

Variable	B	Std. error	β	t-value	t-sig.
Business Associates	0.014	0.016	0.140	0.870	0.387
Employees	0.001	0.017	0.013	0.085	0.933
Customers	-0.008	0.020	-0.076	-0.394	0.695
Community Members	0.018	0.020	0.168	0.931	0.355
Family	0.033	0.013	0.336	2.462	0.016
Professional Organizations	0.027	0.020	0.254	1.365	0.177
Local Businesses	-0.005	0.031	-0.037	-0.149	0.882
Government Officials	-0.025	0.021	-0.228	-1.227	0.224
Environmental Groups	0.005	0.015	0.000	0.002	0.999
Competitors	-0.002	0.020	-0.021	-0.122	0.903

$R^2 = .239$; $R^2_{Adj} = .130$; $F = 2.193$; $df = 10/80$; $p < .028$; DV: Social Influence

Table 20: Correlation Analysis of Social Influence with Normative Beliefs (b_j)

Factor	Social Influence
Business Associates	0.278**
Employees	0.309**
Customers	0.256**
Community Members	0.320**
Family	0.311**
Professional Organizations	0.337**
Local Businesses	0.324**
Government Officials	0.163*
Environmental Groups	0.172*
Competitors	0.128

  *Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

Table 21: Correlation Analysis of Social Influence with Motivation to Comply (m_j)

Factor	Social Influence
Business Associates	0.096
Employees	0.159*
Customers	0.115
Community Members	0.116
Family	0.167**
Professional Organizations	0.177**
Local Businesses	0.109
Government Officials	0.038
Environmental Groups	0.119
Competitors	0.043

  *Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

Table 22: Summary of Likert-type scales for control beliefs (c_k) by percentage

Variable	Extremely Unimportant (1)	(2)	(3)	(4)	(5)	(6)	Extremely Important (7)
Price (*n* = 311)	1.6	0.0	3.9	3.5	6.8	17.7	66.6
Time Commitment (*n* = 312)	1.9	0.3	2.2	5.8	10.6	25.3	53.8
Resources Needed (*n* = 306)	1.6	0.7	2.6	3.9	11.8	26.8	52.6
Promotional Benefits (*n* = 300)	1.4	1.2	3.3	7.3	9.2	17.4	30.8
Information Provided (*n* = 292)	2.4	1.0	4.8	9.9	17.8	26.0	38.0
Availability of Program (*n* = 296)	2.7	1.0	4.1	11.1	11.1	22.6	47.3
State of the Economy (*n* = 295)	6.1	6.1	7.8	14.6	15.3	18.6	31.5
Support from Professional Organizations (*n* = 300)	6.7	7.0	6.7	17.7	16.7	19.7	25.7

Table 23: Summary of Likert-type scales for power of control factors (p_k) by percentage

Variable	Extremely Difficult (1)	(2)	(3)	(4)	(5)	(6)	Extremely Easy (7)
Price (*n* = 233)	24.9	15.0	15.9	17.6	6.4	6.4	13.7
Time Commitment (*n* = 249)	24.1	20.5	20.5	18.9	6.4	4.4	5.2
Resources Needed (*n* = 244)	22.1	18.4	20.1	19.7	7.8	7.8	4.1
Promotional Benefits (*n* = 239)	5.9	6.7	6.3	25.1	22.2	23.4	10.5
Information Provided (*n* = 232)	7.8	6.9	8.6	28.4	17.2	19.0	12.1
Availability of Program (*n* = 241)	11.6	8.3	10.8	19.9	11.2	22.4	15.8
State of the Economy (*n* = 231)	16.0	16.9	18.6	31.2	10.8	4.3	2.2
Support from Professional Organizations (*n* = 213)	6.6	7.5	8.5	31.5	17.8	15.0	13.1

Table 24: Summary of Multiple Regression Analysis of Antecedent Variables ($c_k p_k$) on Perceived Behavioral Control

Variable	B	Std. error	β	t-value	t-sig.
Price	0.012	0.019	0.074	0.625	0.533
Time Commitment	-0.009	0.034	-0.051	-0.269	0.788
Resources Needed	0.062	0.041	0.325	1.505	0.135
Marketing Benefits	0.000	0.024	0.002	0.015	0.988
Information Provided	0.041	0.029	0.252	1.414	0.160
Availability of Certification	0.017	0.021	0.124	0.825	0.411
State of the Economy	0.000	0.023	0.002	0.016	0.987
Support from Professional Organizations	-0.025	0.018	-0.169	-1.385	0.169

R^2 = .285; R^2_{Adj} = .232; F = 5.340; df = 8/115; $p < .000$; DV: Perceived Behavioral Control

Table 25: Correlation Analysis of Perceived Behavioral Control with Control Beliefs (c_k)

Factor	Social Influence
Price	-0.123
Time Commitment	-0.261**
Resources Needed	-0.164**
Promotional/Marketing Benefits	0.050
Information/Education Provided	0.035
Availability of Certification Program	0.093
State of the Economy	-0.005
Support from Professional Organizations	0.049

**Correlation is significant at the 0.01 level (2-tailed)

Table 26: Correlation Analysis of Perceived Behavioral Control with Power of Control Factors (p_k)

Factor	Social Influence
Price	0.217**
Time Commitment	0.339**
Resources Needed	0.306**
Promotional/Marketing Benefits	0.305**
Information/Education Provided	0.319**
Availability of Certification Program	0.227**
State of the Economy	0.313**
Support from Professional Organizations	0.280**

**Correlation is significant at the 0.01 level (2-tailed)

CHAPTER V

CONCLUSIONS AND DISCUSSION

The purpose of this study was to examine how attitudes, social influence, and perceived behavioral control regarding sustainable tourism certification programs are related to B&B operators adopting a sustainable tourism certification program for their business. The study also explored the beliefs that are antecedent to the attitudes, social influence, and perceived behavioral control. These relationships were examined utilizing the theory of planned behavior (Ajzen, 1991). In essence, this study investigated the relationship between B&B operators adopting sustainable tourism certifications and their attitudes about the behavior, the social influences surrounding the behavior, and how much control they have in executing the behavior, all the while exploring their beliefs about sustainable tourism certifications. Attitudes were the only statistically significant independent variable for understanding why B&B operators engage in sustainable tourism certification programs. Neither social influence nor perceived behavioral control showed any statistical significance in understanding the relationships outlined by the research questions. This chapter includes a summary of the findings and discussion, conclusions, implications for practical application, and recommendations for future research.

Summary of the findings

Attitudes concerning sustainable tourism certification

Research Question 1: How do attitudes about sustainable tourism certification
relate to the adoption of sustainable tourism certification?

B&B owners' attitudes toward adopting a sustainable tourism certification were
overall positive (mean of 5.08 on a scale of 1–7). However, the majority of the
respondents indicated that they were "unsure" if they would engage in a sustainable
tourism certification program. Despite positive attitudes, the vast majority (82.4%) of the
respondents were not participating in a sustainable tourism certification program at the
time of the study. When comparing the attitudes of participants who were certified ($m =$
6.25) against participants who were not certified ($m = 4.72$), the attitudes of the certified
participants were considerably more favorable toward sustainable tourism certification
programs. This supports the hypothesis that more favorable attitudes are likely in B&B
owners who are engaged in sustainable tourism certification programs. Of all the
independent variables, attitudes displayed the highest correlation ($r = .676$) to behavioral
intention and were statistically significant in both the multiple regression and the logistic
regression models.

Social influence

Research Question 2: How is social influence about sustainable tourism
certifications related to the adoption of sustainable tourism certifications?

In general, the participants in this study felt that the important people around them
supported their decision to engage or not engage in a sustainable tourism certification

program ($m = 6.02$ on a scale of 1–7). However, the correlation between social influence

and behavioral intention was small ($r = .227$), despite being statistically significant. Social

influence also displayed no statistical significance in either the multiple regression or the

logistic regression models. When comparing the participants who were certified against

the participants who were not certified, their mean scores for social influence were very

similar (6.25 versus 5.96 respectively), indicating little difference between the groups. The

hypothesis that positive social influence equates to increased behavioral intention is

supported when examining B&B operators who have participated in sustainable tourism

certification programs, but it is not supported for operators who have not engaged in a

program.

Perceived behavioral control

Research Question 3: How does perceived behavioral control about sustainable

tourism certification relate to the adoption of a sustainable tourism certification?

Participants in this study were generally neutral ($m = 4.26$ on a scale of 1–7) in

their feelings of perceived behavioral control toward engaging in a sustainable tourism

certification program. 118 participants indicated they did not know how easy or difficult it

was to engage in a sustainable tourism certification program. The participants who were

already engaged in sustainable tourism certification programs felt that engaging in the

programs was slightly easy ($m = 5.25$) versus a slightly difficult average ($m = 3.86$) from

participants who were not certified. This supports the hypothesis that higher perceived

behavioral control leads to higher behavioral intention. Also, perceived behavioral control

displayed a moderate correlation ($r = .482$) to behavioral intention and was statistically

significant. However, the variable showed no statistical significance in either the multiple regression model or the logistic regression model.

Behavioral beliefs/outcome evaluations

Research Question 4: How do behavioral beliefs/outcome evaluations about sustainable tourism certification relate to attitudes about sustainable tourism certifications?

The behavioral beliefs and outcome evaluations derived from the eliciting questionnaire for this study included the items of third party verification, increased customer demand, additional expenses, time shortage, resource shortage, new marketing tools, reduced environmental impact, and financial savings. These beliefs and evaluations of the participants in this study were moderately correlated ($r = .443, p < .01$) to attitudes. The majority of the respondents indicated they anticipated all of the items to be part of engaging with a sustainable tourism certification program, with the exception of financial savings. When asked about their evaluation of the behavior, the majority of the respondents specified that third party verification, increased customer demand, new marketing tools, reduced environmental impact, and financial savings were all favorable things. Unsurprisingly, additional expenses, time shortage, and resource shortage were all seen as negative aspects of sustainable tourism certification programs. When all of the items were regressed onto attitudes, only third party verification and reduced environmental impacts showed statistical significance. The multiple regression model also showed that behavioral beliefs and outcome evaluations accounted for 29% of the variance in attitudes. All of the behavioral beliefs were moderately correlated to attitude with increased customer demand and reduction of environmental impact displaying the highest

correlations. These behavioral beliefs also were statistically significant in their correlations to attitude. With the exception of financial savings, all of the outcome evaluations were also moderately correlated to attitudes at statistically significant levels.

Normative beliefs/motivation to comply

Research Question 5: How do normative beliefs/motivation to comply about sustainable tourism certification relate to social influence toward sustainable tourism certification?

The antecedent variables of normative beliefs and motivation to comply consisted of business associates, employees, customers, community members, family, professional organization, local businesses, government officials, environmental groups, and competitors. Overall, the respondents felt that all of the referent groups would support engaging in sustainable tourism certifications programs more than they would not support it. However, there were mixed opinions on the extent of the support from each referent group. When these antecedent variables were regressed onto social influence, the overall model was statistically significant ($p < .05$), but family was the only individual significant item. The regression model only accounted for 13% of the variability in social influence. An analysis was also performed to examine the correlations between social influence and its antecedent variables. All of the normative beliefs except for competitors proved to have statistically significant correlations though at weak levels. As for motivation to comply, only employees, family, and professional organizations had statistically significant correlations to social influence, again, only at weak levels.

Control beliefs/power of control factors

Research Question 6: How do control beliefs/power of control factors about sustainable tourism certification relate to perceived behavioral control regarding sustainable tourism certification?

The eliciting questionnaire for this study produced eight antecedent variables for perceived behavioral control; these included price, time commitment, resources needed, promotional benefits, information provided, availability of program, state of the economy, and support from professional organizations. For control beliefs, at least half of the respondents indicated that each item was an important consideration regarding sustainable tourism certification programs. As for the perceived power of each of these control factors, the majority of the respondents indicated that price, time commitment, resources needed, and the state of the economy made it difficult to engage in a sustainable tourism certification program. On the contrary, promotional benefits, information, availability of the program, and support from professional organizations showed to make it easier to engage in a sustainable tourism certification program for the majority of the respondents. The regression model for control beliefs and power of control factors showed to account for 23% of the variability in perceived behavioral control. However, none of the individual items showed any statistical significance. When correlating control beliefs to perceived behavioral control, time commitment and the resources needed for certification both displayed statistically significant correlations but at low levels. Conversely, all of the items for power of control factors proved to have statistically significant correlations to perceived behavioral control. These correlations all displayed low-to-moderate strength.

In summary, the findings of this study support an attitude-based explanation for understanding why B&B operators might engage in sustainable tourism certification programs. Of the three independent variables, attitudes towards sustainable tourism certifications showed the highest correlation to actually engaging in a sustainable tourism certification program. Attitudes also displayed the only statistical significance in both regression models. However, there appears to be dissonance in these findings. Theoretically and logically, favorable attitudes should increase the likelihood of the associated behavior being investigated. Despite having favorable attitudes towards the idea of sustainable tourism certification, B&B operators in this study displayed low participation levels in sustainable tourism certification programs.

Discussion of the findings

A resurgence that began with the Brundtland Report has pushed the paradigm of sustainability into organizational policy (Pearson, 2003). Initiatives such as sustainable tourism certification programs, though contested by some, have been gaining in popularity throughout the 21st century (Mycoo, 2006). In this study, it was found that despite low participation in certification programs, attitudes toward the programs were still favorable overall. These findings support the notion that sustainability is becoming more accepted; however, they do not support the hypothesis that positive attitudes equal higher behavioral intention. The B&B operators in this study displayed "unsure" intentions more often than high intentions or low intentions. There may be several reasons for this finding. First, in this study, both certified and noncertified individuals were included. For those certified, there is likely increased understanding of certification programs and what they require.

However, for those not certified, there may be a lack of understanding about certification programs. However, attitudes can still be formed without complete comprehension of the behavior in question (Ajzen, 1988). That said, more research is needed on why positive attitudes do not always produce higher frequencies in related behaviors. In this study, attitudes have shown to be statistically significant, but may not be as persuasive when it comes to B&B operators engaging in sustainable tourism certification programs.

This study also supports previous research (e.g., Wood and Halpenny, 2001) in that implementing sustainability certifications is difficult for many reasons. The results indicated that B&B operators highly anticipated additional expenses, time shortages, and resources shortages to be part of engaging in sustainable tourism certification programs. They also evaluated these items to be very negative aspects of the process. Overcoming such barriers and stereotypes is imperative to the future success of sustainable tourism certification programs (Hardy et al., 2002).

Overall, behavioral beliefs about sustainable tourism certification programs accounted for almost 30% of the variance in attitudes about the programs. One of the significant beliefs within this set of items was third party verification. About 50% of the respondents felt that verification would be a good thing and over 60% of the respondents anticipated it to be part of getting certified. As Wood and Halpenny (2001) illustrated, legitimacy and false labeling are often troublesome for travelers trying to make sustainable lodging decisions. Third party verification systems may be one of the stronger points of concentration for more consistency within the future development of sustainable tourism certification programs.

Misconceptions about sustainability can have lasting and detrimental impacts on sustainability behavior (Filho, 2000). Sustainability is commonly associated with only environmental concepts (Teng et al., 2013). More than three-quarters of the respondents in this study indicated that they anticipated reduced environmental impacts to result from participating in a sustainable tourism certification program and over 80% of them believed that to be a good thing. However, sustainable tourism certification programs have been built on the foundation of sociocultural, economic, and environmental considerations (Font et al., 2002). Extending beliefs structures to all four pillars of sustainability (i.e., planning, socialcultural, environmental, and economic) will continue to be important for the extension of sustainable tourism certifications to individuals and businesses that already believe they are being environmentally sustainable. The researcher does recognize that resistance is possible from individuals who already display environmentally sustainable practices, but do not associate sustainability with sociocultural meanings.

The beliefs structures that precede both social influence and perceived behavioral control were both statistically significant in their regression models, but they only accounted for 13% and 23% of the variance in their respective categories. Also, none of the items within either model was individually significant. Ajzen (1991) argued that all three sets of beliefs (i.e., attitudinal, normative, and control) have influence upon attitudes, social influence, and perceived behavioral control. However, in the case of this study's B&B operators, little can be said about the normative and control beliefs due to lack of statistical support.

The positive attitudes displayed by participants in this study are an important point of discussion. This research has shown that positive attitudes towards sustainability does

not always signify enough power to motivate B&B operators to engage in sustainable tourism certification programs. However, positive attitudes towards certification overall may represent a hopeful indicator for the future of certification programs, highlighting their value and importance with the tourism industry.

<u>Practical application of findings</u>

Tourism embraces an applied form of ecological, anthropological, and business principles. Pragmatic applications such as sustainable tourism certification programs have had varying levels of success in the field. The purpose of this study has direct relevance to practical application for certification programs.

Despite having favorable attitudes toward sustainable tourism certification programs, the B&B operators in this study were not, for the most part, engaging in such programs. This finding is important for developers and managers of sustainable tourism certification programs. In particular, third party verification and reduced environmental impact came through as significant beliefs that fueled positive attitudes regarding sustainable tourism certification programs. It may be beneficial for managers to market to these specific beliefs and provide education regarding environmental impacts and audit systems. Also, despite being statistically nonsignificant, respondents indicated that they anticipated additional expenses, time shortages, and resources shortages, all of these having negative outcome evaluations. Addressing these issues within sustainable tourism certification programs may alleviate possible stigmas that reduce participation in such programs.

This study also showed that family played an important role in the decision making process for B&B operators. Logically, this makes sense, considering that most B&Bs are independently or family owned. However, reaching out to other possible social referents such as professional organizations may increase social influence and encouragement to participate in sustainable tourism certification programs.

 Lack of knowledge and understanding also appeared as an important factor for consideration. Many of the participants in this study simply were unaware of sustainable tourism certification programs or perhaps in contrast, felt they did not understand them enough to offer any response on the matter at all. This is directly applicable to marketing strategies and educational initiatives for sustainable tourism certification programs. By examining certification programs, their value and relevance can be highlighted in future outreach.

<p style="text-align:center;"><u>Recommendations for future research</u></p>

Sustainability is one of the most commonly used concepts within the science field as a whole (Filho, 2000). As social scientists investigate sustainability from numerous approaches, varying explanations and hypotheses have been offered to guide our understanding of sustainable behaviors. In this study, participation in sustainable tourism certification programs was examined.

This study has indicated that favorable attitudes toward a behavior do not always produce higher frequencies of associated behavioral intention. The theoretical framework used in this study would suggest that social influences and perceived behavioral control affect such attitudes and may cause low behavioral frequencies. However, these constructs

have not shown any statistical significance for the posed research questions of the study. In turn, this has created more scrutiny of the attitudinal component of why individuals engage in sustainable tourism certification programs. Further investigation of attitudes about sustainable tourism certification programs is suggested. In particular, this study was limited to only B&B operators. Expanding this to include other sectors of the hospitality industry such as hotels or restaurants may produce additional findings of pragmatic and academic relevance.

Furthermore, this study examined individual B&B operators. Expanding this unit of analysis to organizational management structures within the tourism industry could also be beneficial in understanding the perspectives surrounding sustainable tourism certification programs. As B&Bs only represent a small portion of the hospitality industry, including larger businesses into future research may also prove to be valuable.

A 2013 study found that political ideology took precedence over energy-efficient attitudes and choices (Gromet, Kunreuther, & Larrick, 2013). In that study, promotion of the environment negatively affected sustainable purchasing because of political polarization. Such findings support an expansion upon the beliefs component of this study. In particular, further investigation should place more magnification upon the distribution (i.e., sample size) and resulting data of the eliciting questionnaire portion of the study. Identifying a more comprehensive and in depth list of belief items that drive the attitudes, social influence, and perceived behavioral control regarding sustainable tourism certification programs may provide more significant results. However, in doing so, the multiple types of relationships between the variables will need to be analyzed while considering the issues surrounding multicolinearity.

This research examined businesses that were both certified and those that were not. It may also be valuable for further investigations to choose only businesses that are or are not certified. In doing so, a deeper understanding might be possible from a more focused group of respondents versus a more generalized population.

Conclusions

A multitude of variables such as geographic locale, vocation, financial stability, cultural traditions, and belief structures, all have the potential to influence the concept of sustainability. This study has examined sustainability within the tourism industry in the United States as it relates to sustainable tourism certification programs. The challenges associated with sustainability in tourism have no easy answer or definable set of solutions. Nonetheless, initiatives such as sustainable tourism certification programs are capable of enhancing tourism experiences through environmental conservation, cultural awareness, and savvy business practices, as well as conserving the environmental and sociocultural resources upon which the industry depends. These pillars (i.e., environmental, economic, and cultural) of sustainability are inseparable. Too often, sustainable tourism is recognized as simply an environmental initiative, disregarding social injustices and fiscal inconsistencies. We have cultural and financial problems that affect the environmental health, not just environmental problems. As we look to the future of tourism, we need to be mindful and deliberate in our actions as tourism professionals, as well as when we travel as tourists.

Sustainability is inherently integrated throughout society, academia, industry, culture, the environment, and the human race. As researchers investigate sustainability, the

tourism industry is one example of where theory and practice have joined together for a common, sustainable goal.

As the World Commission on Environment and Development mentioned, sustainable development is "a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations" (WCED, 1987, p. 39).   Change, however, requires chaos, cooperation, attention, community, agitation, and noncomplacency. To facilitate change that focuses on sustainability in tourism, institutional efforts such as sustainable tourism certification programs become increasingly important, especially in light of continued growth within the tourism industry. Such certification programs have been shown to greatly reduce environmental impacts, generate financial gains, and promote sociocultural mindfulness. In the end, creating, understanding, and expanding the conversations about what sustainable tourism means is essential before we lose the resources that are the foundation of tourist experiences.

APPENDIX A
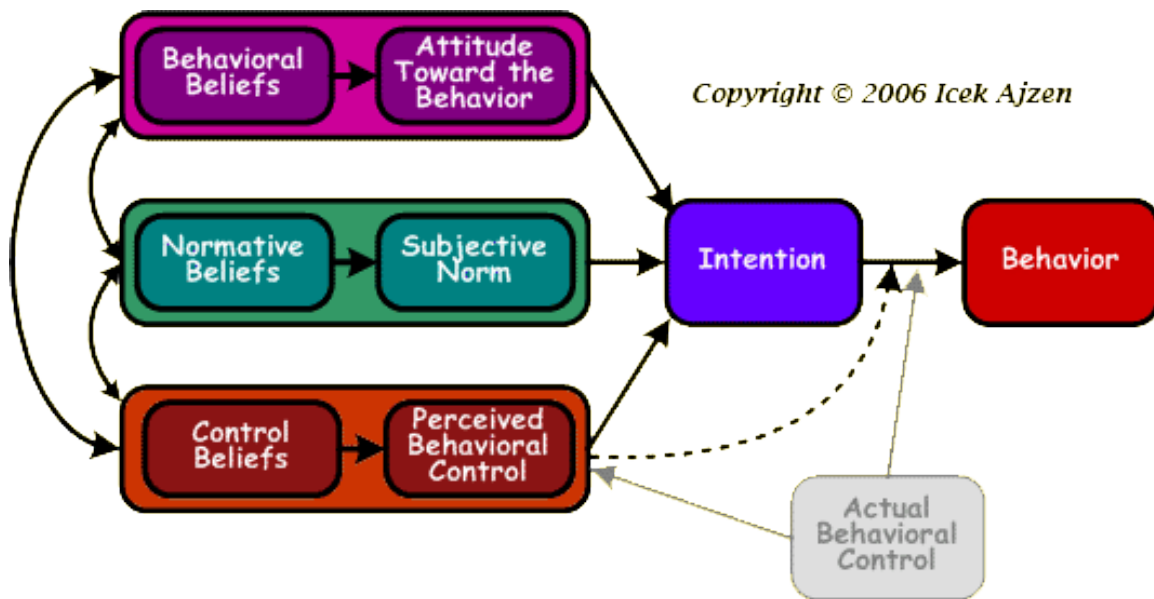

THEORY OF PLANNED BEHAVIOR MODEL

Figure A.1 Theory of Planned Behavior Model

APPENDIX B

ELICITING QUESTIONNAIRE

Sustainable Tourism Certification Questionnaire

Background and Purpose of the Study:

Instructions:
Please take a few moments to tell us what your thoughts are about engaging in a sustainable tourism certification for your business. There are no right or wrong responses; we are merely interested in your personal opinions and beliefs on this subject. Your responses will be kept confidential at all times. Your personal information will never be associated with the data we receive from your questionnaire. Responses will be grouped and individuals will remain anonymous.

Definition of Sustainable Tourism Certification:
  "Sustainable tourism certification is a voluntary procedure that assesses, monitors, and gives written assurance that a business, product, process, service, or management system conforms to specific requirements. It awards a marketable logo or seal to those that meet or exceed baseline standards, i.e., those that at a minimum comply with national and regional regulations, and, typically, fulfill other declared or negotiated standards prescribed by the program"[1].

Questions:

1. Please describe what you believe are the *advantages* of engaging in a sustainable tourism certification for your business?

2. Please indicate what you believe are the *disadvantages* of engaging in a sustainable tourism certification for your business?

3. Please describe any other thoughts or feelings (they may be negative, positive, or indifferent) you have about engaging a sustainable tourism certification for your business?

4. Are there any **individuals** who would *approve* of you engaging in a sustainable tourism certification for your business? If so, please describe who theses **individuals** are (i.e., relationship to your business) and why you think they would approve.

5. Are there any **groups** who would *approve* of you engaging in a sustainable tourism certification for your business? Please indicate what **groups** you are referring to, and why they would approve.

---

[1] This definition of certification can be found in *Protecting Paradise: Certification Programs for Sustainable Tourism and Ecotourism* (Honey & Rome, 2001, p. 5)

6. Are there any **individuals** who would *disapprove* of you engaging in a sustainable tourism certification for your business? Please describe who these **individuals** are, and why they would disapprove.

7. Are there any **groups** who would *disapprove* of you engaging in a sustainable tourism certification for your business? Please indicate what **groups** you are referring to, and why they would disapprove.

8. Are there any other individuals or groups who come to mind who may affect your decision, when thinking about engaging in a sustainable tourism certification for your business? Please describe how have they affected your decision about engaging in a sustainable tourism certification?

9. Please describe what factors or circumstances would enable (i.e. you do not have an existing certification) or have enabled (i.e. you already have an existing certification) you to engage in a sustainable tourism certification for your business?

10. Please describe what factors or circumstances would make (i.e. you do not have a certification) or have made it (i.e. you already have an existing certification) difficult for you to engage in a sustainable tourism certification for your business?

11. Has anything made it impossible for you to engage in a sustainable tourism certification for your business? If so, please describe.

12. Are there any other issues that come to mind who may affect your decision, when thinking about the difficulty of engaging in a sustainable tourism certification for your business? Please describe how these factors or circumstances have affected your ability to engage in a sustainable tourism certification.

Your input in for this study is greatly appreciated! Thank you for your time and thoughtfulness.

For questions regarding this questionnaire, please contact:

Jeremy Schultz
Department of Parks, Recreation, and Tourism
University of Utah
Email: j.schultz@utah.edu   Telephone: 801.493.9699

APPENDIX C

INTRODUCTORY EMAIL

Hello,

My name is Jeremy Schultz and I am conducting a study for my doctoral dissertation at the University of Utah. I have selected you to participate in my project because of your involvement in tourism. The purpose of my study is to examine the relationship between your beliefs about sustainable tourism certification and your business. I am doing this study because sustainable tourism certifications have become a common strategy for tourism providers to address environmental and socio-cultural concerns all the while offering economic viability for their business and surrounding communities. I am interested in understanding this trend and plan to share the results with the industry.

What is next? Utilizing a secure, easy to complete, web-based survey tool, I would greatly appreciate your participation in answering questions on this topic. I've created a link to the questionnaire included below. Your privacy will be protected throughout the process. Your completed questionnaire will only be identified through an anonymous numbering system. The results of this study will only be presented in a generalized manner as to further protect the privacy of all participants.

It should only take about 10 minutes to complete the questionnaire. Participation in this study is voluntary. You can choose not to finish the questionnaire or omit any question you prefer not to answer without penalty or negatively impacting the study. By completing this questionnaire online, you are giving your consent to participate.

If you have any questions complaints regarding this research please contact:
> Jeremy Schultz, PhD Candidate,
> Department of Parks, Recreation, and Tourism at the University of Utah
> Email: j.schultz@utah.edu
> Telephone: 801.493.9699

You may also contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with me as the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Your participation in this study is greatly appreciated.

Sincerely,

Jeremy Schultz
Ph.D. Candidate

APPENDIX D

FINAL QUESTIONNAIRE

1. Does your business currently have a sustainable tourism certification?
   a. Yes
   b. No

For respondents who are certified:
1. How long have you had your sustainable tourism certification?
2. In general, how do you feel about engaging in a sustainable tourism certification program?
3. How do the important people around you feel about your engagement in a sustainable tourism certification program for your business?
4. How easy or difficult was it for you to engage in a sustainable tourism certification program?
5. Engaging in a sustainable tourism certification program may produce varying outcomes. For your business, please evaluate the following possible outcomes from engaging in a sustainable tourism certification program.
6. Often times, people believe that others around them think they should or should not do something. Please indicate to what extent the following individual/groups motivated you to reach your decision about engaging in a sustainable tourism certification program.
7. Many factors can influence a decision regarding engagement in a sustainable tourism certification program. Sometimes you can control these factors, however sometimes you cannot. Please indicate how important the following factors were when you were deciding to engage in a sustainable tourism certification program.
8. When engaging in a sustainable tourism certification program, people often have expectations about what they may experience during the process. How much did you anticipate the following possible outcomes/processes from engaging in a sustainable tourism certification program?
9. We often look to the individual and groups around us when making important decisions regarding our business. For the following items, please indicate who believed that you should or should not participate in a sustainable tourism certification program.
10. Many factors can make it easy or difficult to engage in a sustainable tourism certification program. Please indicate what kind of influence (easy or difficult) the following items had on your ability to engage in a sustainable tourism certification program.

For respondents who are not certified:

1. Do you intend to obtain a sustainable tourism certification for your business?
2. In general, how do you feel about the possibility of engaging in a sustainable tourism certification program?
3. How would the important people around you feel about your engagement in a sustainable tourism certification program for your business?
4. How easy or difficult do you believe it would be for you to engage in a sustainable tourism certification program?

5. Engaging in a sustainable tourism certification program may produce varying outcomes. For your business, please evaluate the following possible outcomes from engaging in a sustainable tourism certification program.
6. Often times, people believe that others around them think they should or should not do something. Please indicate to what extent the following individual/groups might influence you to reach your decision about engaging in a sustainable tourism certification program.
7. Many factors can influence a decision regarding engagement in a sustainable tourism certification program. Sometimes you can control these factors, however sometimes you cannot. Please indicate how important the following factors might be when deciding to engage in a sustainable tourism certification program.
8. When engaging in a sustainable tourism certification program, people often have expectations about what they may experience during the process. How much would you anticipate the following possible outcomes/processes from engaging in a sustainable tourism certification program?
9. We often look to the individual and groups around us when making important decisions regarding our business. For the following items, please indicate who believes you should or should not participate in a sustainable tourism certification program.
10. Many factors can make it easy or difficult to engage in a sustainable tourism certification program. Please indicate what kind of influence (easy or difficult) the following items may have on your ability to engage in a sustainable tourism certification program.

Demographics:
1. What is the zip code where your business is located?
2. Please indicate your gender.
3. Please identify your ethnicity.
4. How many rooms does your business have available?
5. What is the peak nightly rate for your business?
6. Has your business won any awards?
7. Please feel free to add any additional thoughts or comments you may have.

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