Green Fun in the Sun: A Case Study of the Environmental Behaviors of Stakeholders within Sandestin Golf and Beach Resort

by

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Abstract

      Global environmental changes have major impacts on a range of hospitality and tourism destinations where the primary features are natural resources such as mountains, beaches, water and wildlife that create the destination appeal. (Holden, 2005; Dolnicar & Leisch, 2008). As a component of the hospitality and tourism industry, multi-resort properties offer guests more than lodging, encompassing the leisure and travel experience for pleasure of the guests, as well as also offering meeting, convention and event planning destinations. This range of offerings also increases the environmental impact of the multi-resort complex. The participation of multiple stakeholder groups within the property, specifically managers, employees, and homeowners, creates a special need to understand the environmental behaviors within the multi-resort complex.

      In this study, Azjen's (1991) Theory of Planned Behavior was adopted to understand the environmentally sensitive behaviors of the stakeholders within a multi-resort complex. The results indicate a reasonable fit between the data and the proposed model through both confirmatory factor analysis and the structural equation model. The findings indicate both an interest in behaviors that are more environmentally sensitive and a need for more opportunities to participate in these behaviors. It is concluded that a better understanding of the environmental behavior of stakeholders assists in creating positive environmental change for the multi-resort complex, as well as the environment.

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List of Abbreviations

CFA   Confirmatory Factor Analysis

ESB   Environmentally Sensitive Behaviors

TpB   Theory of Planned Behavior

TRA   Theory of Reasoned Action

BB   Behavioral Beliefs

NB   Normative Beliefs

CB   Control Beliefs

ATT   Attitudes

SN   Subjective Norms

PBC   Perceived Behavioral Control

INT   Intentions

BVR   Behavior

Chapter I

Introduction

Positive and negative environmental change occurs each day as humans use nature's resources. Water and energy resources consumed in daily life rely on finite resources on and within the earth. These resources are rapidly depleted each year as we continually consume water and energy, creating waste by-products of both. While 70% of the earth's surface is water, only three percent is fresh-water and of that 0.3% is accessible for consumption in the form of rivers, streams and lakes (USGS, 2010). Energy resources, in the form of coal, oil, and natural gas, are fossil fuels and non-renewable forms of energy being consumed over 100,000 times faster than they form (McLamb, 2008). As fossil fuels continue to deplete, renewable and cleaner sources of energy – solar, wind, and water, the very source of life for this planet – are challenged to take over as primary energy sources (McLamb, 2008). McLamb further notes that enough energy from the Sun reaches the Earth's surface each minute to supply the world's energy needs for one year.

Global environmental changes have major impacts on a range of hospitality and tourism destinations where the primary features are natural resources such as mountains, beaches, water and wildlife that create the destination appeal. (Holden, 2005; Dolnicar & Leisch, 2008). The continued development of the hospitality and tourism industry

generates considerable socioeconomic benefits to the communities but not in the absence

of sound practice without creating irreversible damage to the environment in the process

(Romeril, 1989). The hospitality and tourism industry must therefore address its

environmental impact as it is the essential element of what is best described as the

pleasure travel framework (Pigram, 1980).

Unlike other industries, the hospitality and tourism industries cover a broad

spectrum of segments. As the "largest and fastest growing industry in the world"

(Walker, 2009, p. 7) the hospitality and tourism industry impacts lives on a daily basis.

The U.S. Travel Association (2009) reports travel and tourism as America's largest

industry with resident and international traveler spending at $1.9 million a day. This

spending includes lodging, meals, transportation, and entertainment. The hospitality and

tourism industry is not immune to the environmental concerns that have been developing

since the 1960s. All segments of the industry have been encouraged to examine energy

use, waste management and other greening practices in attempts to reduce the carbon

footprint being left behind.

From an environmental standpoint, industries in the United States, as well as

around the world have embraced the greening trend more so than the lodging industry

(Downey, 2008). As people continue to travel, consumption and waste have continued to

increase. In a single restaurant, 50 tons (equivalent to 100,000 lbs.) of food waste is

created each year with scraps making up 66% of the trash in a full service restaurant

(Food Waste in Restaurants, 2009). The Tampa Government's Water Efficiency

Checklist for example, estimates that approximately half of a restaurants water use is in

the kitchen, and another 35% is accounted for in the restaurant's restrooms (Tampa

Government, 2008). Furthermore restaurants consume one-third of the retail electricity used, and hotels and motels consume 40% of their electricity in heating and cooling (EnergyStar Building Upgrade Manual, 2010). In many hotel facilities, energy costs are the second largest expense after payroll (Sweeting & Sweeting, 2003). As populations grow these numbers cannot be ignored by the hospitality and tourism industry. Because the hospitality and tourism industry encompasses such a vast array of daily life and travel, the potential impact on the environment is of increasing concern. Furthermore, the case for environmentally sensitive behavior is more compelling in a multi-resort complex where multiple hotels, restaurants, retail outlets, and entertainment venues are combined in one destination area for travelers.

As a component of the hospitality and tourism industry, multi-resort properties offer guests more than lodging. These properties encompass the leisure and travel experience for pleasure of the guests, as well as also offering meeting, convention and event planning. For multi-resort properties, guests are considered "captured clientele" (Walker, 2009, p. 102) and as such the resort must offer an array of activities to entice travelers and create repeat business. Some unique elements of the multi-resort complex are its location, the availability of leisure activities, and the seasonality of the destination.

Concern for the environment has become so important in the hospitality and tourism industry, that 83% of travelers are willing to support and even pay more for services if they are provided by businesses showing environmentally responsible practices. (Van Hoof, Vallen, McDonald, & Weiner, 2007). Travelers are increasingly expecting and even requiring hospitality and tourism services to be environmentally responsible (Van Hoof, et. al., 2007). The hospitality and tourism must respond to the

desires of the guests, who are more informed and committed to environmental concerns than before.

For a multi-resort complex to embrace positive environmental behavior, the stakeholders must be malleable to change. The environmental concern, as defined by Dunlap and Jones (2002, p. 485), is ''the degree to which people are aware of problems regarding the environment and support efforts to solve them and/or indicate a willingness to contribute personally to their solution.'' This awareness must be presented through forms of communication that will modify attitudes to result in the arousal of motives (Hovland, 1951). Researchers acknowledge that in order for communication to successfully change behavior, the information provided must alter the intentions of the individual to behave a particular way (Bright, Fishbein, Manfredo, & Bath, 1993). Further, "a person's attitude toward a behavior is a function of the strength of beliefs that performing the behavior will lead to various outcomes and the evaluation of those outcomes" (Bright, et. al., 1993, p. 264).

Until recently, research that addressed public support for environmental concern with limited knowledge of formal theories to explain public support (Routhe, Jones, & Feldman, 2005). While research continues in the area of environmental concern, many studies still lack a specific definition of attitude or a commitment to one specific attitude theory, or the use of methods connected to a specific theoretical position thereby creating research opportunities to link environmental concern and theories of behavior (Manfredo, Teal, & Bright, 2004). Understanding behavior must involve the study of organizational behavior which encompasses individuals, groups, and structure which represent the three key determinants of behavior in the organization (Robbins & Judge, 2007). Routhe, et. al.

(2005) acknowledge that many researchers have clarified environmental concern and established a bridge linking attitude-behavior theory to environmental concern, but the hospitality and tourism industry still lack research connecting environmental concern, behaviors and ultimate change. As a growing economy that depends on the whims of taste and fashion, the concept of temporary value is embedded in our culture, where the affects of the disposable society go beyond environmental waste and resource consumption to the emotional toll on people (Sullivan, n.d.). This emotional toll leads individuals to change behaviors and become more environmentally sensitive in their approach to daily activities.

Statement of the Problem

Tourism destinations use a significant amount of natural resources and large quantities of waste that can have grave consequences on nature and the environment (Lim & McAleer, 2005; Kelly, Haider, Williams, & Englund, 2007). These consequences range from depleted resources for water and natural inhabitants, to the loss of biodiversity (extinction of species) and toxic chemicals appearing in humans and animals (Etsy & Winston, 2006). Multi-resort complexes are representative of a sector of the travel industry that offer a vast amount of amenities including multiple food, lodging, land and/or sporting activities as well as daily and nightly entertainment activities on the property. They are typically heavily trafficked destinations in their own right providing other amenities including transportation that adds to the complexity of their offerings. As destinations, multi-resort complexes embrace all six of Buhalis' core components: attractions, accessibility, amenities, available packages, activities, and ancillary services

(2000). Each of these core components contributes to the environmental impact and/or footprint of the multi-resort complex. The amount of water and energy consumed, and waste produced in multi-resort properties is higher due to the broad spectrum of activities taking place within the complex. These activities within the multi-resort complex and their impact on the environment must be addressed through the organizational behavior of the multi-resort complex. The participation of stakeholders, individually and as a group, creates a special need to develop conservation practices for multi-resort complexes. Understanding the environmental behavior of stakeholders, individually and as a group, will assist in creating positive environmental change for the multi-resort complex. Multi-resort complexes must consider not only how to train operators, residents, and employees, but also how to encourage them to be proactive in activities that reduce or eliminate their daily environmental impact.

Purpose of the Study

Multi-resort complexes have the unique challenge of operating in an environment of employees, management, resident owners, and rental owners, as well as the standard guests. The purpose of this exploratory research is to assess the level of commitment to environmental behavior of the Sandestin Golf and Beach Resort stakeholders. In order to accomplish this, researchers must understand how operators, residents and employees in multi-resort complexes approach environmental behavior and their part in the process by understanding the beliefs, intentions, and behaviors of the individuals; and to develop a measurement tool in order to continually monitor and guide the progress of environmental behavior. Therefore, the primary focus to accomplishing this research

includes an understanding of operator, resident and employee behavior and how this behavior affects the conservation practices implemented into the community of the multi-resort. Another focus of this research was to develop a metric of analysis to gauge the impact of greening initiatives within the community. To address the objectives of this study, a case study method was applied to the Sandestin Golf and Beach Resort. Sandestin Golf and Beach Resort was selected because of the environmental initiatives currently underway with the Sandestin Environmental Committee to establish Sandestin as a green community.

Research Questions

This empirical study was designed to address the following research questions and hypotheses, as well as to further research in the hospitality and tourism industry's environmental changes.

(1) How is environmental behavior currently formalized in the organizational culture of Sandestin Golf and Beach Resort?

(2) What beliefs do the stakeholders in Sandestin Golf and Beach Resort have towards environmental behavior?

   (i) To what degree are the stakeholders knowledgeable about environmental activities within Sandestin?

   (ii) To what degree are the environmental activities within Sandestin important to the stakeholders?

(3) What has influenced these beliefs to date?

(4) How do stakeholders actively practice environmental behaviors?

(5) Do the environmental behaviors (behavioral beliefs, control beliefs, and

normative beliefs) of stakeholders vary between groups of employees,

managers, and residents? In order to answer this question, the following

hypothesis was developed.

> H1: There is no difference in behavioral beliefs, normative beliefs, and
>
> control beliefs among the three stakeholder groups.

(6) Do personal attitudes, subjective norms, and perceived behavioral control

affect the environmentally sensitive behavioral intentions? In order to answer

this question, the following hypotheses have been developed.

> H2: Attitude has a positive influence on environmentally sensitive
>
> intentions.
>
> H3: Subjective Norm has a positive influence on environmentally
>
> sensitive intentions.
>
> H4: Perceived Behavioral Control has a positive influence on
>
> environmentally sensitive intentions.

Definitions

a. <u>Attitude</u> – the positive or negative way in which people express their feelings and

thoughts

b. <u>Behavior</u> – the actions of people influenced by their attitudes.

c. <u>Behavioral Belief </u>-

d. <u>Carbon Footprint</u> – a measure of the impact our daily activities have on the

surrounding environment, and specifically changes to the climate; relates to the

amount of greenhouse gases produced in these daily activities through burning

fossil fuels for the purposes of electricity, heating, and transportation, etc. Carbon

footprints are a measurement of all greenhouse gases that as individuals we

produce and has units of tons (or kg) of carbon dioxide equivalents.

(http://www.carbonfootprint.com/carbonfootprint.html)

e. <u>Community</u> – the people, land and structures in a specified area.

f. <u>Conservation</u> – the act of reducing the impact of daily activities on the

environment and the community.

g. <u>Conservation Practices</u> – behaviors and actions that reduce the impact of daily

activities on the environment.

h. <u>Control Beliefs</u> – the presence or lack thereof of the resources and opportunities

to perform (Ajzen, 1991).

i. <u>Employees</u> – individuals that hold both salaried and hourly positions within the

multi-resort complex. Employees are managers and staff, and can be employed

seasonally or year-round.

j. <u>Environmental Behavior</u> – how individuals and/or groups promote and participate

conservation and green practices for the betterment of the environment and the

community.

k. <u>Green</u> – reducing, re-using, and recycling in order to decrease the environmental

impact being made.

l. <u>Green Practices</u> – the active participation in behavior and lifestyle that promote

reducing, re-using and recycling.

m. Hospitality and Tourism Industry – industry that encompasses food, lodging, transportation, entertainment, and investment property; includes business travelers, leisure travelers and local residents.

n. Behavioral Intentions – factors that motivate behavior; indications of how hard individuals are willing to try, or how much effort to exert to perform the behavior (Ajzen, 1991).

o. Multi-resort Complex – resort property that offers varying degrees of lodging (hotels, timeshares, ownership), food and beverage, and activities for both travelers, and residents.

p. Normative Beliefs – the belief that important referent others approve or disapprove of the behavior (Ajzen, 1991).

q. Organizational Behavior – how the individuals and groups act within the context of an established environment, i.e. the workplace.

r. Perceived Behavioral Control – the individual's perception of the ease/difficulty of performing a behavior (Ajzen, 1991).

s. Rental Owners – property owners that primarily use the property for rental income.

t. Resident Owners – property owners that claim the property as their primary residence for 6 months or more of the calendar year.

u. Sandestin Environmental Committee – environmental committee developed to promote environmental behavior within Sandestin. Members include Sandestin Owners Association, Baytowne Wharf Village management, Marriott, Hilton,

Intrawest, golf course management, community landscaping, and Sandestin

Investments.

v. <u>Stakeholders</u> – Managers, residents, and employees within Sandestin Golf and

Beach Resort.

w. <u>Subjective Norms</u> – perceived social pressure (Ajzen, 1991).

x. <u>Training Policy</u> – guidance and direction for the staff to perform daily functions

of their jobs within Sandestin Golf and Beach Resort.

Significance

In a thorough review of established literature pertaining to tourism and

environmentalism, sparse literature was found that specifically applied the qualitative

aspects of manager, employee, and homeowner behavior to the development of a

measurement tool to continually audit the resort property. The relative lack of literature

presents an opportunity to develop a measurement framework assessing environmentally

sensitive behavior and the motivations to engage in environmentally sensitive behavior

within resort properties. This study will add to the literature by qualitatively analyzing the

beliefs, perceptions and motivations of individuals within a complex resort setting, and

then quantitatively through the development and testing of the measurement tool.

Limitations

While every effort has been made to minimize the limitations of this research, this

project does contain several limits. The following section is intended to reveal some of

these issues in an attempt to prevent the same errors in future research. Furthermore, it is intended that these issues will be taken into consideration for future research accuracy.

The first limitation to this study is the oil spill in the Gulf Coast. Because of the nature and uncertainty of the oils impact, individual perceptions may be heightened as the threat of environmental damage is prevalent. This limitation also must take into account the lower than normal guest count and consequently availability to the researcher.

A second limitation to this survey is the seasonal nature of the resort property and the inability to gain access to some owners. While every attempt was made to reach all property owners, non-response and the lack of accurate contact information cannot be avoided.

A third limitation to this research is that due to the single subject design, generalizability beyond the scope of the study should be undertaken with caution.

Summary

For the hospitality and tourism industry, environmental behavior is a growing force that guests are increasingly expecting. To become a green community, Sandestin Golf and Beach Resort should understand the environmental behavior of their operators, residents and employees in order to make positive and measurable changes for the community. By understanding this behavior, the steps can be taken to promote a green community that makes a positive impact on the environment and the community.

Chapter II

Review of Literature

"Then God said, 'Let us make man in our image, in our likeness, and let
them rule over the fish of the sea and the birds of the air, over the livestock,
over all the earth, and over all the creatures that move along the ground.'"
(Genesis, 1:26, NIV)

The objective of this chapter is to provide a comprehensive review of the relevant literature to support both the underlying theory and the research questions proposed for this study. The first section will broadly cover the ever-changing relationship between man and nature through time. This relationship is significant to illustrate how changes in the daily survival of man have altered the landscape of the planet. Secondly, environmentalism will be defined through its historical roots and development over time through societal perspectives. This progression of environmental awareness is increasingly at the forefront of business, societal and personal decisions. Next will be a discussion of the hospitality and tourism industry developing into the relationship between environmental behavior and the hospitality and tourism industry. The hospitality and tourism industry is an industry that relies on the natural environmental elements of their surroundings for business and must therefore continuously be aware of the impact behaviors have on the natural surroundings. Finally, behavioral intentions will be introduced and defined, and the pertinent literature concerning the relationship between man, the hospitality and tourism industry, and the environment will be discussed.

Understanding the driving forces of changing environmental behaviors has been a prime research focus in hospitality and tourism literature. Increasingly, the hospitality and tourism industry is concerned with the environmental behavior of consumers, but the driving goals must be implemented within the organization and the daily activities of the employees, homeowners and managers within the community.

Tourism Environment

Academics and practitioners are aware that the absence of attractive environments would be detrimental to tourism (Buhalis & Fletcher, 1995). Since the late 1980s, literature addresses the environmental movement in tourism through a variety of terms. 'Green Tourism', first used in the "Shades of Green" conference in Leeds, reflected a rise in the interest of environmental issues related tourism activities (Swarbrooke, 1999). In the early 1990s, the term sustainable tourism gained momentum to describe possible outcomes that range from alternative tourism to urban and resort tourism (Weaver, 2006). Sustainable tourism acknowledges the importance of the host community for the environmental and human elements, while maximizing the economic benefits of tourism (Swarbrooke, 1999). The concept of sustainable tourism is simply defined by Weaver (2006) as "the minimization of negative impacts and the maximization of positive impacts" (p. 10) as part of the host community. While sustainable tourism is the most commonly used term, other terms used in include: eco-efficiency, green or greening, environmentally friendly, and eco-friendly. Throughout literature, these terms are used with assumptions that the reader understands and comprehends the intended use. Each of these terms refers to how the environment is treated with regard to the environment. Eco-

efficiency in tourism means not only reducing the amounts of energy and natural resources being consumed, but also reducing the waste and pollutants discharged in the production of tourism goods and services (Kelly, et al., 2007). Green, or greening, is a commonly used term, and yet no common consensus of the term exists (Gupta, 1998). In literature, the term green should embrace sustainability that meets the needs of society without damaging and depleting future resources, a reduction in waste and pollution, and the creation of economic activities that benefit the environment (Soos, 2011). Environmentally friendly and eco-friendly are both used to define how products, services, activities, and life-styles impact the environment (see http://www.ecolivingexperts.com/what-is-eco-friendly/). For the purposes of this research, environmentally sensitive behavior is an umbrella term being used to represent the many different terms that relate to positive human interaction with the natural environment.

Man-Nature Relationship

As man continues to populate the earth, the relationship with the environment has grown from working with nature to working against nature as man tames the environment around him (Garnier, 2008; Bourdeau, 2004). Through the years, man's understanding of the environment has created opportunities to prosper at the expense of the natural resources available to him where "nowhere else have the American people collectively left more evidence about their changing priorities" (Nash, 1990, p. 2). The relationship between man and the natural environment grew from working with the environment as a hunter-gatherer, to working the environment as industrialized nations grew. As the

relationship between man and the natural environment has progressed, man's behavior towards the environment must adapt to alternative resources to sustain the populations.

Hunters and Gatherers

More than 12,000 years ago, man worked with nature, loosely organized into small bands or tribes known as hunter-gatherers (Law, 1996). These bands consisted of 75-100 nomadic people who would exhaust food supplies in one area before moving to the next, thus the interdependent relationship with man and resources predicted the size and mobility of the band (Persell, 1987; Bar-Yosef & Meadow, 1995) Hunter and gatherer bands fed exclusively by hunting wild animals and gathering wild plants (Diamond, 1999). The mobility of hunter-gatherer bands allowed these societies to adapt to various climate zones and environmental niches for the exploitation of many resources sparingly rather than depending heavily on a few resources (Law, 1996). The land for hunter-gatherers was considered sacred and their modifications relatively slight in maintaining their existence (Nash, 1990). Hunting and gathering societies had considerable free-time in their daily lives, as the nomadic existence limited the accumulation of possessions, wealth or surplus (Persell, 1987). These bands of people chose to make a minimal impact on the environment they lived in feeling they were part of nature and therefore revered the environment that sustained them (Nash, 1990). As hunter-gatherers, man worked with nature and the natural resources available to create a strategy of subsistence rather than excess and control.

Over time resources began to deplete for the hunters and gatherers (Diamond, 1999). Man was forced to learn to work the land and consequently make the land work

for him. Hand tools and the use of fire helped man to adapt to nature and begin to change

his physical environment (Spielvogal, 2005). Hunter and gatherer bands became

sedentary establishing more permanent homes and working smaller areas intensively to

grow and hunt, leading to a change to systematic agriculture (Spielvogal, 2005). The

sedentary lifestyle had many implications for man. No longer nomadic, populations

increased and man was able to create surplus, therefore, needing storage for food

(Diamond, 1999). Animals and plants became domesticated or semi-domesticated and

man was able to produce and store food rather than search for each meal (Persell, 1987).

Agricultural Revolution

As agriculture became more common, man moved into a time period known as

the Agricultural Revolution where agricultural productivity was massive and increased

rapidly (Bellis, 2010). During the Agricultural Revolution, extensive growth in man's

reliance and use of the environment created sedentary lifestyles, enforced food

production, and created the ability to store excess food supplies (Diamond, 1999). As

agriculture spread, the availability of plants and animals spread through importing

various species of flora and fauna to adapt to new conditions (Law, 1996). Large

settlements imported domestic hoofed animals (cattle, sheep, horses, hogs and goats) for

the millions of wild hoofed animals (bison, moose, antelope, and wild varieties of sheep

and goats) that once roamed freely (Jacobs, 1978). These agrarian societies witnessed

large scale cultivation of plants and animals as well as the development of tools (Persell,

1987). The development and advancement of tools including the sickle, plow, mortar and

pestle, seed drills, and in-ground storage pits would be the forerunners setting the stage

for non-human energy sources, such as coal and steam-power (Persell, 1987; Diamond,

1999). The technological developments, population increases, and decline in large game animals furthered agricultural technology advances (Persell, 1987).

This change in lifestyle also changed man's relationship with the environment and the impact that man would continue to have on the natural resources available. Inherent to the agricultural way of life, man became dependant on the few crops grown, the changes in weather and subsequent effects on the crops, dependency on harvest times, and the need for intense physical labor (Law, 1996; Jacobs, 1978). Paarlberg and Paarlberg note the mission of agriculture is to feed the people (2000). The Agricultural Revolution saw an increase in food production where crop decisions were made without awareness of the consequences to the land (Diamond, 1999). Cash crops exhausted soils and the wasteful consumption of people ended in the soil erosion and depletion that are "a consistent theme in American agricultural history" (Jacobs, 1978, p. 27). Natural resources have been wasted by pioneers from the earliest times with an ever increasing volume and cumulative effect that have brought instances of permanent environmental damage to the landscape (Jacobs, 1978).

Industrial Revolution

The Agricultural Revolution gave way to the Industrial Revolution in the early 19th century with the increase of machines doing labor faster and more efficiently than man could. Three key elements of note of the Industrial Revolution were: the expansion of transportation, the harnessing of electricity, and improvement in the industrial process through inventors (Kelly, 2010). Olmstead and Rhode note that "laborsaving technical change is so often equated with mechanization, as if one does not exist without the other" (p.6). For a man of the 1830's 100 bushels of wheat took an estimated 250-300 hours to

produce; with the help of horse drawn machines in 1890 only 40-50 hours were required;

and by 1930 tractors further reduced this time to 15-20 hours (Greenwood and Seshadri,

2002). This era opened the door for man's increased reliance and use of natural resources,

where a lack of interest in the productivity of the land was overshadowed by increasing

interest in mechanization as a substitution for manual labor (Atack, Bateman, & Parker,

2000). As agriculture technologies advanced, industrialized societies replaced human and

animal labor with machines using new energy sources in the form of water, steam,

electricity and oil (Persell, 1987). Steam power, internal combustion engines, and a

realization of the potential for increased production led to accelerated exploration,

extraction and the refinement of non-renewable fossil fuels degrading the natural systems

where they exist (Woodgate and Redclift, 1998). During the industrial revolution,

manufactured products increased and the manufacturing processes required the use of

trillions of tons of natural resources in the form of raw materials, energy and water

(Gungor and Gupta, 1999).

Post-Industrial Revolution

From Industrial Revolution to the current post-Industrial Revolution, the

increased use of natural resources has brought about awareness that our continued excess

has depleted the natural reserves of fossil fuels (Pfeiffer, 2006; Carson, 1962). M. King

Hubbert claimed our dependency on fossil fuels would be short lived (1949), and

alternative resources would have to be found. Agricultural production has increased the

use of non-renewable fossil fuels "twenty-fold in the last four decades (Pfeiffer, 2006, p.

19). Globalization has increased world food production 84 percent in the three decades

from 1968 to 1998 (Pfeiffer, 2006). This increase correlates with the increase in the use

of non-renewable natural resources used to produce this quantity of sustenance. As the

environment has become a forerunner in industry and individual lifestyles, addressing

behaviors will be a key component of changes and positive outcomes.

As man's relationship with nature evolves, awareness of the environmental

implications has grown into a dominating force. This awareness and concern for the

damage and depletion of natural resources has been steadily growing for over fifty years

as mankind continues to squander what is available.

Environmentalism

The environmental movement is not a recent phenomenon, but an increasingly

growing concern for individuals, industry and governments (Daily, Bishop, and

Govindarajulu, 2008). With its acknowledged inception in the early 1960s,

environmental awareness can actually trace its roots to the early 17th century as seen in

Table 1 (Nash, 1990). Although they may not have realized the implications, early

decrees and laws were protecting the landscape before environmentalism became a trend.

Table 1: American Environmental Timeline

Year	Environmental Event
1626	Plymouth Colony passes ordinances regulating the cutting and sale of timber
1634	Plymouth prohibits setting forest fires
1639	Rhode Island, deer hunting prohibited for six months
1681	Pennsylvania proprietor, William Penn, decrees that for every five acres cleared, one must be kept forested
1710	Massachusetts coastal areas protect waterfowl
1718	Massachusetts prohibits deer hunting for four years

Table 1 *(cont.)*

1739	Connecticut creates an annual closed season for deer hunting
1772	New York creates closed seasons for quail and partridge
1832	George Catlin proposes national parks
1849	U.S. department of Interior established
1871	U.S. Fish Commission created
1875	American Forestry Associations organized
1876	Appalachian Mountain Club organized
1879	U.S. Geological Survey established
1890	U.S. census announces the end of the frontier as a definable line
1898	First college-level work in forestry offered at Cornell
1908	Theodore Roosevelt hosts conference of governors at the White House concerning conservation
1924	Oil Pollution Control Act
1924	The first National Conference on Outdoor Recreation
1933	FDR creates the Soil Erosion Service for emergency measures
1935	Soil Conservation Act extends federal involvement and establishes the Soil Conservation Service
1937	Federal Aid in Wildlife Restoration Act
1944	Soil Conservation Society of America
1948	Federal Water Pollution Control Law enacted to regulate waste disposal

Adapted from Nash, 1990

The International Institute for Sustainable Development notes key moments in the

Sustainable Development Timeline broken down into the five subcategories recognized

in this research. Hoffman (1997) defines four periods of time of environmental changes

that have increased awareness in environmental impacts of businesses and individuals. Rather than breakdown time periods into decades, Hoffman's work addresses the key moments of environmentalism that better suit the discussion in this research. Hoffman's first time frame is industrial environmentalism, establishing the first recognized causes of pollution and contamination in the chemical and oil industries. From there Hoffman moves to regulatory environmentalism where government agencies and numerous policy makers come together in attempts to limit and regulate environmental degradation. The third time frame, strategic environmentalism is a period of increased global awareness. This time frame notes an increase in global communities working towards worldwide goals of decreasing and limiting environmental degradation. The final period from Hoffman accounts for a shift in consumer awareness determining environmentalism as social responsibility. From 1994 to the present, is a time period of change, information and learning to become more aware of environmental impacts in daily lives. From its beginning in the 1960s to the current awareness within industry as a whole and more specifically hospitality and tourism, environmental changes have increasingly become the forefront of both business and personal lifestyles.

Industrial Environmentalism (early 1960s-1970)

In 1960, the world's population reached 3 billion people and in 1961, noting a need to protect the environment, the World Wildlife Fund was established to prevent the extinction of both plants and animals (see http://www.sustreport.org/resource/es_timeline.htm). The concept of ecologically sustainable development began in 1968 with the Intergovernmental Conference for Rational Use and Conservation of Biosphere through UNESCO in France where experts

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from around the world met to discuss the global environmental problems that included: pollution, resource loss, and wetlands destruction through development (see http://www.iisd. org/about/ timeline.asp; http://www.worldwatch.org). As the awareness of the environmental problems increased at the global level, interest in the research and development practices also grew. By 1969 the first international commission report established to consider new approaches to development with research and development as the focus (see http://www.iisd. org/about/ timeline.asp).

In the United States, the dawn of the recognized environmental movement began in 1962 with chemical industries and the concern about the use of chemical pesticides, and a year later in 1963 with the oil industry and the concern of urban smog and the reformulations of gasoline (Hoffman, 1997). The environment became a prominent feature with Rachel Carson's *Silent Spring* in the 1960s. Carson writes of "one species – man – [who has] acquired significant power to alter the nature of his world" (1962, p. 5). Through this dominance, man has assaulted the land, air, rivers, and seas with chemicals that are dangerous, lethal and, as we continue to learn, long term (Carson, 1962). The reaction to Carson's publication was a slow growing government intervention in industry (Hoffman, 1997) that began with the Environmental Defense Fund in 1967 (see http://www.environmentaldefense.org/).

The Environmental Defense Fund (EDF) was formed with the intention of pursuing environmental damage claims through legal solutions that eventually ended in the development and enforcement of laws to protect the environment (IISD, 2002). In 1968, Garrett Hardin wrote of "The Tragedy of the Commons" where the dangers of the over use of nature's resources leads to the destruction of the environment. The

'commons' of Hardin's writings encompass all areas of land, air and sea where the industry pollutants end up. This seminal piece is often overlooked because Hardin never explained 'common' was equivalent to 'open access' (Holden, 2005). 'Open Access' implies not only industry's responsibility to protect to the land, but the individuals' right to enjoy the natural environment. However, much like industry, "rational people will overuse a common resource because of the high personal benefits associated from increased usage, counterbalanced by the shared, and therefore lower, net cost/risk overuse" (McKercher, Prideaux, Cheung, and Law, 2010, p. 301). By 1969, the U.S. passed the National Environmental Policy Act creating a Council on Environmental Quality and a national policy for the environment that was considered a cornerstone of environmental law in the United States (http://es.epa.gov/oeca/ofa/nepa.html; http://water.usgs.gov/eap/nepa.html). The NEPA was enacted to provide information to public officials and citizens on the environmental impacts of any action that was federal or federally funded. (http://water.usgs.gov/eap/nepa.html). By 1970, the United States established the National Resources Defense Council consisting of lawyers and scientists pushing for comprehensive U.S. environmental policies (http://www.nrdc.org/). Through this period of Industrial Environmentalism, the awareness of environmental problems were brought to the forefront of society and beginning steps are taken to start working on solutions. From awareness, society can move on to establishing policies to limit and possibly halt further damage.

Regulatory Environmentalism (1970-1982)

The first of 10-yearly Earth Summit meetings convened in Stockholm, Sweden in 1972. Earth Summit, officially registered as the United Nations Conference on the Human Development, is generally accepted as the defining moment in international environmentalism (Reynolds, n.d.). This conference was initiated by global concerns expressed by the 113 nations represented and produced successes that included the United Nations Environment Program (UNEP) (Reynolds, n.d.; see http://www.unep.org/Documents.Multilingual/ Default.asp? DocumentID=97). Public awareness of global environmental threats continued increasing through this time. During this same time period, environmental groups around the world continued to meet to develop and attempt to define environmentalism. These groups consisted of economist, ecologist, lawyers, diplomats, ministers and other professionals representing various fields expressing environmental concern (Romeril, 1989). Concerns for environmental issues were the key elements of the United Nations UNEP Report of 1978 (Romeril, 1989). The United Nations UNEP Report of 1978 was a collaboration of the UNEP and WTO researchers establishing that the environment was a resource for society and not a constraint. This collaboration addresses both trade and climate change policy interactions and how they can be mutually supportive. Two years later, the World Conservation Strategy met in 1980 promoting the sustainable use of natural resources.

In December of 1970, the Environmental Protection Agency (EPA) was established through President Richard Nixon's "Reorganization Plan No.3" (U.S. caselaw, Eff. Dec. 2, 1970, 35 F.R. 15623, 84 Stat. 2086, as amended Pub. L. 98-80, § 2(a)(2), (b)(2), (c)(2)(C), Aug. 23, 1983, 97 Stat. 485, 486). Through the consolidation

of a variety of federal agencies, shown in Figure 1, the EPA's mission is to protect human

health and safeguard the natural environment that life depends upon to, include the air,

water, and land (Timeline of the EPA, 2007). Prior to the establishment of the EPA,

various federal entities attempted to control multiple aspects of the growing

environmental concern. The agencies were at odds with each other, and with industry

with no definitive boundaries of control for either (Hoffman, 1997). In the 1970s, the

Clean Water Act and the Clean Air Act were established by the EPA to begin regulating

industry. These acts were the first of many where big industry felt that government

regulations were "disproportionately driven by environmental concern" (Hoffman, 1997,

p. 12).

Department of Interior

- Pesticide research

- Federal Water Quality Administration

Department of Agriculture

- Pesticide Registration

EPA

Department of Health Education and Welfare

- National Air Pollution Administration

-Bureau of Water Hygiene

-Bureau of Solid Waste Management

-Bureau of Radiological Health

-Pesticide toleracnces and research

Executive Office of the President

- Federal radiation control

- Environmental radiation standards of the Atomic Energy Commission

- Environmnental systems studeis of the Council on Environmental Quality
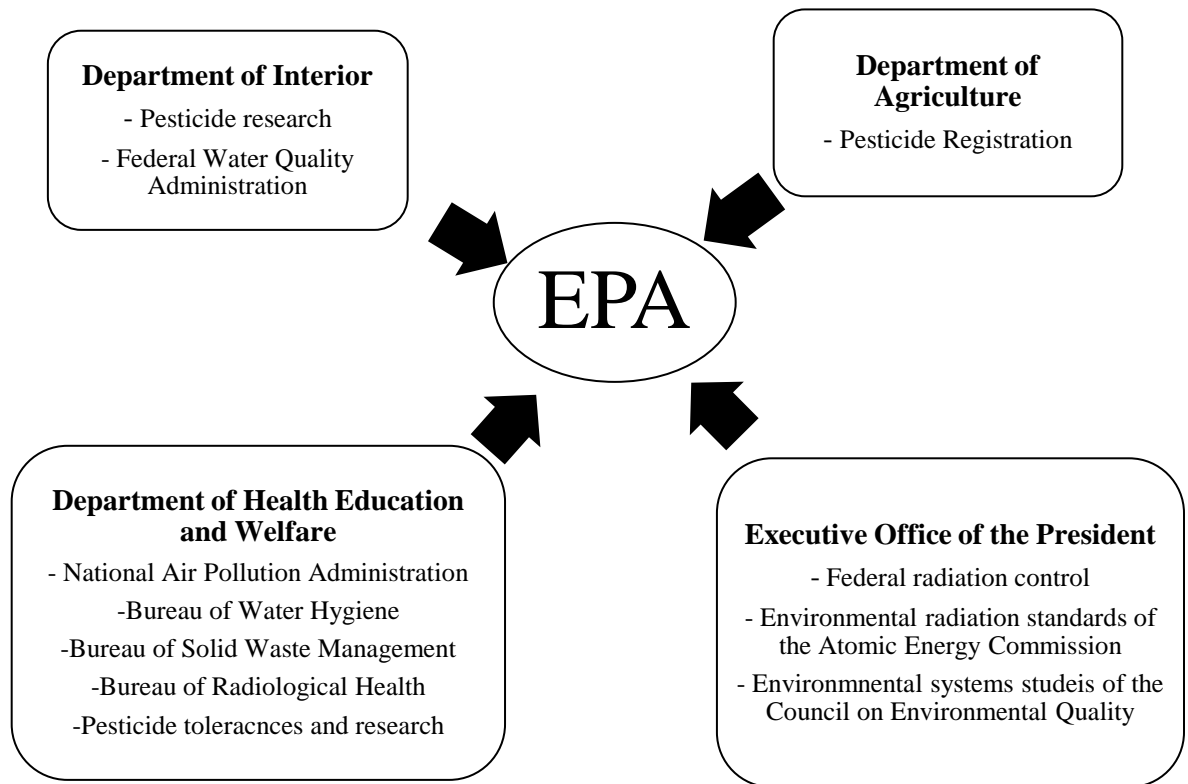
Figure 1: Functions Transferred to the EPA by Reauthorization Plan No. 3 of 1970
Source: From Heresy to Dogma Hoffman, 1997

During 1980s, the United States Congress established SuperFund by passing the Comprehensive Environmental Response, Compensation, and Liability Act (http://www.epa.gov/superfund/partners/osrti/index.htm). CERCLA, or SuperFund as it is more commonly known, authorizes the Federal government of the U.S. "authority to respond to hazardous substance emergencies, and to develop long-term solutions for the nation's most serious hazardous waste problems (http://www.epa.gov/superfund/partners/osrti/index.htm). The SuperFund was enacted in response to the discovery of toxic waste dump sites located at Love Canal and Times Beach in the1970s. Continuing government response and regulation led to industry becoming more socially responsible for their actions as awareness grew in society.

Environmentalism as Social Responsibility (1982-1988)

The EPA was designed not only to consolidate the regulating authority for environmental concern but also to be a buffer between industry and the activists. By the 1980s, that buffer no longer existed as activists became more aggressive and the EPA had lost its credibility (Hoffman, 1997). While a shift in perception of the EPA was taking place, environmental groups began more direct contact with industry, creating environmental pressure that would not go away. This time period established that environmental concern was not only here to stay, but was increasing. During this time, one of the more famous reports was released addressing sustainable development.

The Brundtland Report attempted to define sustainability, a term appropriated by environmentalists at some point in time from military logistics that refers to keeping the troops supplied with material and provisions (Ricketts, 2010; Meadowcroft, 2000;

Brundtland, 1987). Meadowcroft (2000) states that "it is important to note that because what is to be sustained in sustainable development is a process of improvement rather than any particular institution, practice or environment," activities they may not be sustainable can actually be a part – sometimes even a significant part- of the overall sustainable movement (p. 372). The commission report had three key outcomes championed by the WCED:

1. Economically a focus on development, the broad process of positive social change, was considered an advancement in material and moral circumstances of humanity – progress.

2. Environmentally 'meeting needs' was characterized to more than the just aspirations of all people, but more specifically, the legitimate moral claims of (i) the world's poor and (ii) future generations; this is a key point noting that the ability to meet the current needs of populations without compromising the needs of future generations is a major component of current and future developments.

3. Socially it invoked the idea of social limits as serious obstacles to social advance; the environment's capacity to support human activity was not fixed, but also that there were 'ultimate limits' (Meadowcroft, 2000).

As perhaps the most pivotal moment for environmental concern, the Brundtland Report in its attempts to define sustainable development and consequently offer worldwide communities access to the idea provided us with the most often quoted and paraphrased definition of sustainable development:

Sustainable development is development that meets the needs of the present

without compromising the ability of future generations to meet their own

needs....Development involves a progressive transformation of economy

and society. A development path that is sustainable in a physical sense

could theoretically be pursued even in a rigid social and political setting.

But physical sustainability cannot be secured unless development policies

pay attention to such considerations as changes in access to resources and in

the distribution of costs and benefits. Even the narrow notion of physical

sustainability implies a concern for social equity between generations, a

concern that must logically be extended to equity within each generation

(Ricketts, 2010, p. 43).

Strategic Environmentalism (1988-1993)

After the Brundtland Report in 1987, environmentalism shifted from a perspective

of Social Responsibility to Strategic Environmentalism. In this time multiple

organizations emerged that focused on climate change and environmental awareness.

Organizations that emerged included: Intergovernmental Panel on Climate Change in

1988; Stockholm Environmental Institute in 1989; Regional Environmental Centre for

Central and Eastern Europe in 1990; UN Summit for Children in 1990; the Earth Summit

and the Earth Council in 1992; and in 1993 the President's Council for Sustainable

Development. These organizations addressed: scientific, technical and socioeconomic

research; global and regional environmental research; non-profit organizations for

democratic sustainable societies; and research aimed at future generations and human

rights. Through the progression of events, agreements were reached globally to

implement sustainable practices through cooperation and intergovernmental policies.

1994-present

Although not a clearly defined timeframe, the period from 1994 until now has

witnessed important moments for environmentalism and sustainability. In 1994, NAFTA

(North American Free Trade Agreement) was established with a side agreement of

environmental cooperation established through the Commission for Environmental

Cooperation (see http://www.cec.org). The UN General Assembly Review of Earth

Summit in 1997 reminded participants that little progress had been made in implementing

Agenda 21 goals. This meeting ended without a significant commitment from members

to improve (see http://www.iisd.org/pdf/ 2002/sd_timeline2002.pdf). In 1999, industry

came to butt heads with individuals and environmental groups in Seattle at the Third

World Trade Organization Ministerial Conference. Demonstrators took to the streets for

days to protest negative effects of globalization (see

http://www.iisd.org/trade/wto/seattleandsd.htm). By the year 2000, urbanization had

increased to almost half of the world's population living in cities that occupy less than 2

percent of the Earth's surface but consume approximately 75 percent of the Earth's

resources (http://www.aaas.org/international/atlas/contents/pages/polpulation06.html).

Through each of these time periods, individuals and businesses are

acknowledging environmental problems that may be "caused by excessive use of energy

and non-renewable natural resources, copious supplies of foods and products,

environmentally unfriendly production processes, and environmental disasters" (Han,

Hsu, Lee and Sheu, 2011, p. 346). This awareness of environmental issues and the feeling

that natural resources are indeed limited and the environment is more fragile than we

previously realized has offered opportunity for behavior change to make an impact

(Easterling, Kenworthy, and Nemzoff, 1996).

Today, greater environmental responsibility is demanded of corporations from the

customers, suppliers, general public and government entities (Daily, Bishop, and

Govindarajulu, 2008). The organizational behavior of an industry plays a key role in how

environmental responsibility is formalized in the corporation. Organizational behavior

focuses on individual and group behaviors within an organizational setting, how the

behavior and organization interact, and ultimately the organization as a whole (Griffin

and Moorhead, n.d.). Figure 2 illustrates the linkage between human behaviors within the

organizational setting, the relationship of the individual and the organization, the

organization, and the environment that surrounds the organization.

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                          Environment

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┌──────────────────────────────────────────────────┐
│                                                    │
│                  Human Behavior in                 │
│                Organizational Settings             │←
│      ┌──────────────────────────────────────────────┐
│      │                                              │
↑      │        The Individual–Organization Interface │
│      │                                              │
└──────┼──────────────────────────────────────────────┘
  ↓    │                                              │ ↓
       │                  The Organization            │
       │                                              │
       └──────────────────────────────────────────────┘

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                          Environment
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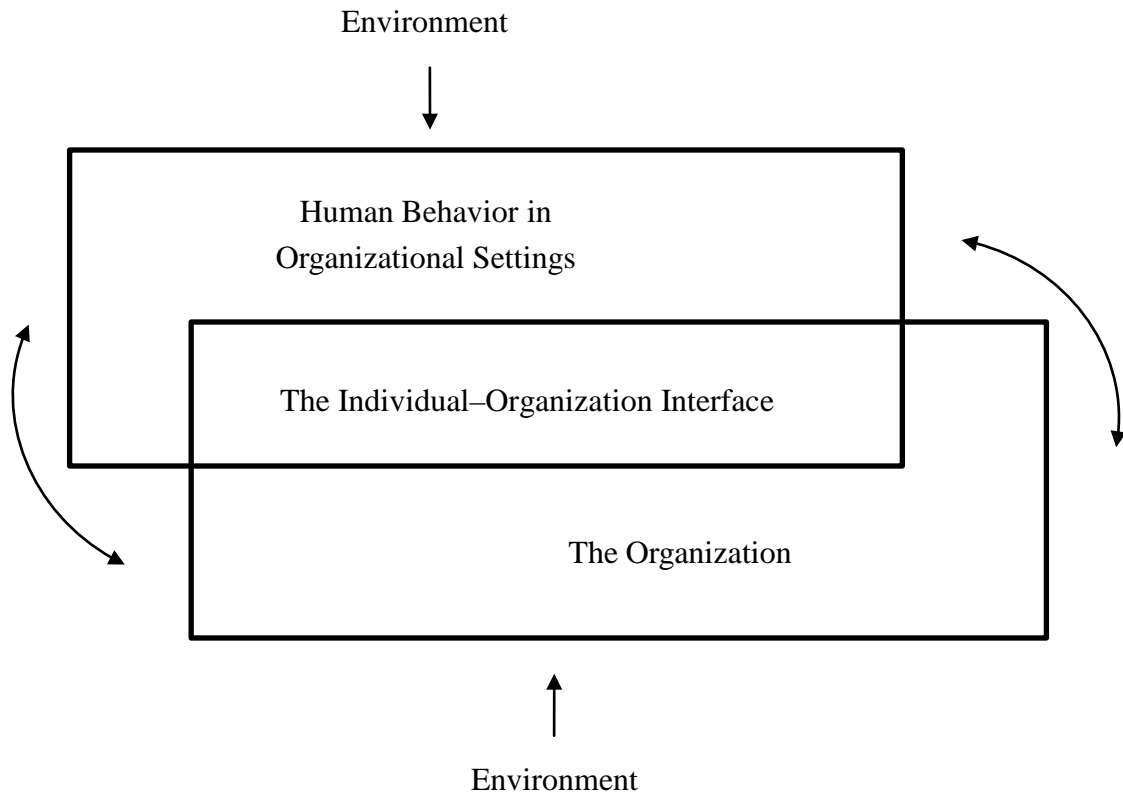
Figure 2: Organizational behavior linkages

This relationship acknowledges how the environment can affect organizational behavior

from both the organization side through customers, suppliers, the public and government

entities, and affects the human behavior of the individuals in the organization as well.

Organizational behaviors are also affected by the size and scope of operations (Sharma,

2000). For businesses to formalize environmental policy, the three components of

organizational behavior need to be addressed in the feedback loop. Environmental policy

for the organization must work with individual employees, and consequently their past

experiences personally and in business, and then how these behaviors will work within

the organization. Each of these factors is influenced by the external environment and each

other. For the hospitality and tourism industry, these variables are further compounded through the global nature and variety of the industry.

Hospitality and Tourism

Tourism literature is vast in content with regard to the subject of environmental sustainability. Studies in tourism environmental sustainability include: excess use and waste (Dief and Font, 2010; Manaktola and Jauhari, 2007; Wolfe and Shanklin, 2001); consumer green buying behaviors (Han, Hsu, Lee, and Sheu, 2011; Han and Kim, 2010; Eco-Friendly Hotels, 2008); and the managers and residents of the surrounding communities (Dief and Font, 2010; Dyer, Gursoy, Sharma and Carter, 2007; Yang, Lu, Zhang, Lu, and Xuan, 2004). Numerous studies show excess use and waste within the specific segments of the tourism industry (Dief and Font, 2010; Manaktola and Jauhari, 2007; Wolfe and Shanklin, 2001). These studies note high use rates and make recommendations to improve the degradation of the natural resources. As a customer driven industry, many researchers have focused on the environmental buying behaviors, and preferences of the consumer (Han, Hsu, Lee, and Sheu, 2011; Han and Kim, 2010; Eco-Friendly Hotels, 2008). Research has shown that and increasing number of consumers may be willing to pay more for hospitality and tourism services that are environmentally friendly as opposed to those establishments that disregard environmental activities (Manaktola & Jauhari, 2007; Mendleson & Plonsky, 1995). Managers in the tourism industry and the residents of the surrounding communities have also been given increasing attention in research (Dief and Font, 2010; Dyer, Gursoy, Sharma and Carter, 2007; Yang, Lu, Zhang, Lu, and Xuan, 2004). While each of these elements is important

to the overall environmental behavior of the tourism industry, little research exists on implementing behavior models to address the employees, managers and residents of the community. This research attempts to bridge this gap by seeking to understand the behaviors, attitudes, and beliefs of employees, homeowners and managers within the multi-resort complex.

There is an increasing awareness of the relationship between hospitality and tourism and the quality of nature and the environment (Nitsch and van Straaten, 1995). Tourism has an inevitable effect on the environment as the earth has a limited number of resources and the environment is the 'core' of the tourist product (Nijkamp, 2000; Buhalis and Fletcher, 1995). The tourist product also encompasses travelling, production, location and destination, making the tourist ultimately a 'consumer of the environment' (Goodall, 1992).

For the last two to three decades, the hospitality and tourism industry has witnessed a growing interest in the relationship between development and environmental quality (Hunter and Green, 1995). As such, sustainable development principles for the hospitality and tourism industry have been proposed, developed, adopted and published for a number of years. Although belated in the recognition of sustainable development practices as compared to other industries, the hospitality and tourism industry seem to be more aware that environmentally sensitive practices make good business sense and are more than a passing trend among consumers (Weaver, 1998; unpublished manuscript). The hospitality and tourism industry's contribution to sustainability falls in to a broad spectrum of economic, political and social contexts (Stabler and Goodall, 1997; unpublished manuscript). From an economic and political perspective, environmental

improvements should be viewed as a competitive advantage (Porter and van der Linde, 1995). Improvements mean gaining corporate advantage through enhanced image and access to public funds, higher selling prices, and costs savings (Font and Tribe, 2001; unpublished manuscript). In the social context, environmentally sensitive practices promote a sense of doing the right thing and improving relations with the public sector, non-profits, trading partners, employees and the community (Font and Tribe, 2001; Enz and Siquaw, 1999; unpublished manuscript).

As shown in Figure 3, Stabler and Goodall (1997) illustrate how sustainable development for the hospitality and tourism industry is situated in the broad spectrum of economic, political and social contexts. The contributions and key elements of actions to be taken are addressed by Stabler and Goodall (1997) in this figure but they also acknowledge this figure only outlines procedures and the business sequences to adopt sustainable development, not the principles that guide the actions.
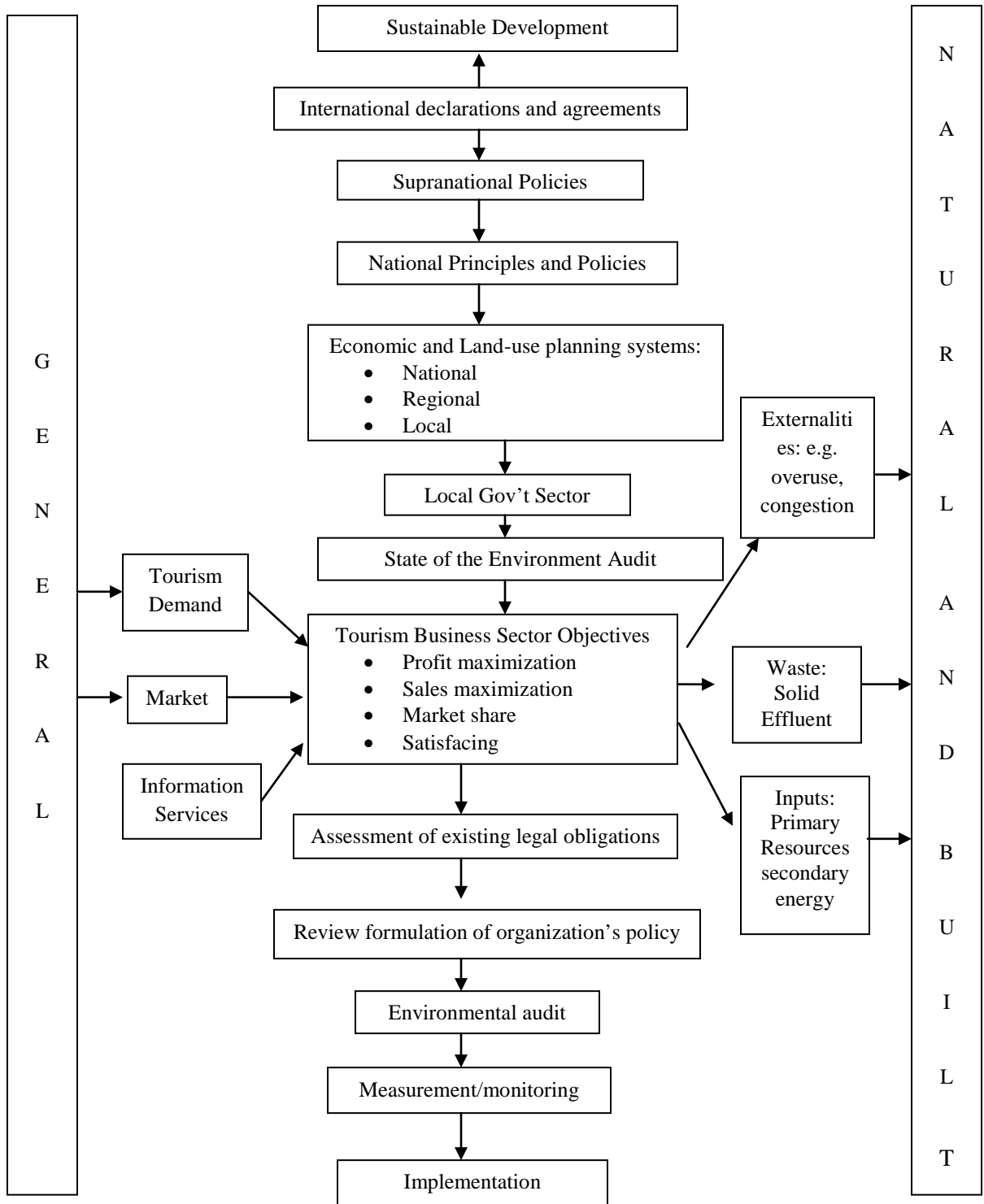
Figure 3: Environmental Action in the Context of Sustainable Development

Font and Ahjem (1999) state "tourism is one of the fastest growing industries in the second half of the twentieth century and is often used as a key for economic growth in both developed and developing countries" (p. 73). In tourism, the concept of sustainable tourism development refers not only to the economic growth of the industry, but also addresses preventing environmental degradation as this has consequences for the future quality of life (Nijkamp, 2000). The hospitality and tourism industry is resource dependent and must recognize its responsibility to the environment or risk its long-term viability (Horobin and Long, 1996). As an economic activity, the environment is inevitably affected by the tourism destination (Lim and McAleer, 2005). The environmental impact of the hospitality and tourism industry is not a new concern for academics or practitioners.

Historically, tourism and its continued development impact, in some form, everything and everyone it touches and should be positive in terms of the benefits extended to the destination and residents (Jackson, 2006). As such, the 'greening' of industry is an issue which has been more than 3 decades in the making (Brown, 1996; Hart 1996). Kelly, Haider, Williams and Englund (2007) note greater eco-efficiency in tourism operations relies on developing the dialogue of sustainable tourism development. For more than forty years hospitality and tourism conferences worldwide have acknowledged the need for environmentally sensitive behavior (IUCN-Morges, 1967; Working Together EuropaNostra, 1973; Rio Earth Summit, 1992; Seventh Session of UN Commission on Sustainable Development, 1999; APEC/PATA Code for Sustainable Tourism, 2001; International Year of Eco-Tourism – World Summit in Johannesburg, 2002; OECD – Tourism Committee, 2003), but in proclaiming awareness and sensitivity

to the environment the actions of the industry have not always corresponded to those

declarations (Wight, 1994). There is a lack of agreement in of the operations within

hospitality and tourism on the issue of environmental management that is further

exacerbated by the notion of re-use and recycling processes instead of overall reduction

(Alonso and Ogle, 2010; Hunter and Green, 1995). While tourism operations play a part

in conservation in the internal environment, the industry "is a microcosm of the external

environment… in terms of [the] attitudes to and use[s] of resources" (Wight, 1994).

Although many establishments tend to follow eco-friendly guidelines and actively

practice environmental management programs, studies show that overall positive

environmentally sensitive behaviors are low throughout the industry as individuals

involved in hospitality and tourism activities do not always retain a green outlook (Han,

Hsu, Lee, and Sheu, 2011; Alonso and Ogle, 2010; Han and Kim, 2010; Miller,

Rathouse, Scarles, Holmes and Tribe, 2010).

Since hospitality and tourism encompasses a variety of segments, use rates are

determined by segment. The two most recognized segments of the hospitality and tourism

industry are lodging and foodservice. Other segments, as part of a multi-resort complex,

include golf; meetings, incentives, conventions, and exhibitions (more commonly called

MICE), and travel. Ricord and Smith (2009) state that "hotels, restaurants and leisure

facilities are complex micro societies where customers are expecting to do what they

normally do at home, [where] both the challenges and benefits of contributing to the

green movement and overall sustainability could be significant" (p.1). Lodging managers

acknowledge the unfriendly view cast their direction because of the high amount of water

use and waste production that ultimately increases energy use and impacts the

environment (Alonso and Ogle, 2010). Manaktola and Jauhari (2007) assert that the environment receives significant negative impacts created by the construction and daily operation of hotels and their facilities. As awareness of environmental damage by regular business activities grows, the hotel industry is increasingly in the spotlight for contributing more than its share of harm and waste of environmental resources (Han and Kim, 2010; Manaktola and Jauhari, 2007; Wolfe and Shanklin, 2001). From an environmental perspective, the tourism industry consumes a significant amount of natural resources, and expels vast quantities of wastewater and solid waste, while landscaping pollutes water systems, promotes soil erosion and soil degradation and recreational activities consumer large quantities of natural resources and produce significant wastes (Scanlon, 2007; Kelly, Haider, Williams, and Englund, 2007).

In lodging, an estimated 180-250 billion gallons of water per year are used (Hemmila, 1998; FAU, 2008). Energy use in the lodging segment is the fourth highest in the commercial business sector (FAU, 2008; NRA, 2010). Waste is also a growing concern in the hospitality and tourism industry with an estimated 1-2 pounds of waste per day generated in hotel rooms with twice that amount generated on the day a guest checks out (NCDENR, 1998). It is estimated that up to 75 percent of the impact hotels have on the environment "can be contributed to excessive consumption of non-durable goods, energy and water, followed by emissions released to [the] air, water and soil" (Ruiz-Molina, Gil-Saua and Moliner-Velásquez, 2010; APAT, 2000).

Restaurants are looking for ways to decrease their impact on the planet by reducing waste, decreasing energy consumption, using sustainable resources and reducing water use. Recycling decreases the amount of waste contributed to landfills by

restaurants. Energy conservation practices include energy efficient lighting, infrared grills, and the use of energy efficient kitchen equipment are increasing and water conservation includes practices as simple as not serving water to every customer, and using water efficient equipment throughout the restaurant. As more people eat meals away from home each year, the amount of waste, energy and water used will continue to increase.

As the largest user of disposable products, water and energy, the foodservice industry has an estimated median annual bill for the use of natural gas and electricity averages of approximately $161 per seat using five times more energy per square foot than other commercial buildings with another five times more energy being used in the kitchen than the rest of the building (FAU, 2008; Stys, 2008; NRA, 2010). Restaurants dispose of an average of 275 pounds of waste per day according to a report by the Christian Science Monitor (2007). The foodservice industry water use can range from 6 – 29 gallons per meal (Kirby Restaurant). The Tampa Government's Water Efficiency Checklist estimates that approximately half of this use is in the kitchen, and another 35% is accounted for in the restaurant's restrooms (2008). Foodservice establishments are responsible for approximately 100 billion pounds of uneaten food per year with 65% attributed to prep waste and another 5% from spoilage (NRA, 2010; EatOutMagazine, 2010). According to the National Restaurant Association (2010) processing this waste costs the country roughly $100 billion a year in landfills and incinerators.

The game of golf in the United States has grown from 11.2 million in the 1970s to nearly 38 million in 2004 (Wheeler & Nauright, 2006). Worldwide there are over 25,000 golf courses with 16,057 in the United States at the end of December 2004 (Gange,

Lindsay, & Schofield, 2003; see http://www.golfchannelsolutions.com/markets/usa).

Golf, unlike other land based sporting activities, has a close interaction with the

environment, at the same time occupying and managing large areas of countryside

(Gange, Lindsay, & Schofield, 2003). Increased environmental concerns of development

and operations of the 1990s led to evaluations of the chemicals, water consumption, and

course construction Wheeler & Nauright, 2006). The management of golf courses and the

surrounding environment affect air, water, wildlife, and the land (Mackat, 2006).

Meeting, incentives, conventions and exhibitions (MICE) cover a variety of

venues from outdoor entertainment to large business conventions and meetings. Presbury

and Edwards (2005) note that "events and meetings around the globe are recognised as

being lucrative and fast growing areas of the tourism industry" (p. 31). Because MICE

are typically large scale productions, there is also a large impact on the environment. As

noted by Adema and Roehl (2010), previously an event was environmentally pro-active if

recycling was encouraged, however currently this practice is considered minimally

environmental. Until recently, little attention has been given to 'greening' of these events

(Laing & Frost, 2010), although Getz (1997, p. 36) mentions "prevailing values now

require that all events be environmentally friendly, and hopefully proactive about 'green'

management and operations". *Green events* are defined as those events that have a

sustainable policy or incorporate sustainable practices into their management and

operations (Laing & Frost, 2010). The MICE industry offers valuable economic, social,

cultural, and educational benefits to the hospitality and tourism industry (Dickson &

Arcodia, 2010). The need for the MICE segment of the hospitality and tourism industry

to go green is because of the increasing costs of resources, the higher expectations of

sponsors and attendees and ultimately the increase in government regulations. (Adema &

Roehl, 2010).

As a fundamental pre-requisite to tourism, travel facilitated through automobiles,

aircraft, buses, trains, and boats presents the most challenges to sustainability (Kelly,

Haider, & Williams, 2001; Thrasher, Hickey and Hudome, 2000). Travel to and from

destinations accounts for the largest consumption of energy in tourism, where in some

instances amounting to an estimated 90% of the total tourism energy consumption (Kelly,

Haider, Williams, and Englund, 2007; Becken, Simmons, & Frampton, 2003; Gossling,

2000). While air travel accounts for a major share of the tourism related energy use,

travel within and around destinations is also a consideration (Kelly, et. al., 2007). As an

essential component to the tourism package, the environmental effects of travel to, from

and within the destination environment create added opportunity to implement changes.

Sustainable programs, both self and government imposed, are popping up across

the country. Pressure to change the negative impacts of tourism come from multiple

sources including: consumer demand, increasing environmental regulations, customer

satisfaction, maintenance issues with physical plants, managerial ethics concerns, overall

aesthetics, "green" investors and increased pressure from environmental groups

(Manaktola and Jauhari, 2007; Roarty, 1997). Over the years numerous certification

programs have developed to increase awareness of and attention to the growing concern

of the environment. Both private and public organizations continue to create and improve

on accepted practices to establish the environmental credentials of the establishment.

There are numerous green certifications specific to the tourism industry. These include:

- Green Seal – established in 1989, "Green Seal meets the criteria of ISO 14020 and 14024, the standards for ecolabeling set by the International Organization for Standardization (ISO); the U.S. Environmental Protection Agency's criteria for third-party certifiers of environmentally preferable products; and the criteria for bona fide ecolabeling bodies of the Global Ecolabeling Network." (see www.greenseal.org).

- Green Globe – specifically for the hotels, transportation and business that support tourism, "Green Globe Certificated businesses meet rigorous sustainability standards and are verified by independent auditors." (see http://greenglobe.com/).

- United States Green Building Council – responsible for the LEEDs certification programs, whereby "LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality." (see http://www.usgbc.org/).

Other industry specific certification programs include: the Green Hotels Association, the Green Restaurant Association, GenGreen, Eco Crown Hospitality; as well as many state and local certification programs, and corporate initiated programs designed to decrease environmental impacts in all properties. Although some certification programs require membership costs, many programs and government entities offer free advice and recommendations for businesses wanting to implement programs to become environmentally sensitive.

Environmentally Sensitive Perspectives of Consumers

Studies indicate that 70 percent of a sample of U.S. travelers would likely stay in a hotel with environmentally responsible practices and that "customers appreciate the environmentally friendly efforts of tourism businesses" (Ruiz-Molina, et al., 2010, p.465). Adopting programs that are environmentally sensitive can offer: competitive advantage for green markets, media recognition of these environmental efforts, a reduction in future costs and minimized risks and the favorable recognition by stakeholders (Scanlon, 2007). Opportunities for more environmentally aware and sensitive behaviors have become not only more abundant but more cost efficient as consumer demand increases. A survey by the National Restaurant Association reports that 62% of adults were likely to make restaurant decisions based the environmentally friendly practices of the facility (National Restaurant Association Fact Sheet, 2008).Although locating hospitality products that are one-hundred percent environmentally friendly is difficult, initial cost efficient options can include: prohibiting extensive use in areas, stressing fuel use and efficiency standards within the destination, promoting less resource and energy dependent pursuits, and offering low-impact recreation options for visitors (Kelly, et al., 2007; Manaktola and Jauhari, 2007). Ruiz-Molina, et al. (2010) report "some studies identify segments of customers willing to pay more for products and services form travel companies that engage in environmental protection innovations and in particular for environmentally friendly accommodations" (p. 465).

As a customer focused industry, hospitality and tourism must take the lead in becoming more environmentally conscious in current and future behavior to be

competitive. Sustainable tourism development remains dependent on industry individuals' willingness and ability to act on implemented changes (Horobin and Long, 1996). A high degree of environmental consciousness alone will not translate into behaviors that are environmentally sensitive (Tzschentke, Kirk, and Lynch, 2008). Industry professionals also have to evaluate how social pressure affects their markets and adapt with policies that move beyond development and promotion (eco-exploitation), to identifying and implementing community governance programs (community and environmental stewardship) (Richins, 2009; Scanlon, 2007).

The environmental awareness of individuals and industry promotes a positive attitude toward activities that are eco-friendly, as well as encouraging people to engage in ecological behaviors more frequently (Han, Hsu, Lee and Sheu, 2011). As society continues to learn the effects of their behaviors on the environment, changes to these behaviors can be made to limit and potentially reverse the damage. Although regulations continue to be implemented, a better understanding of behavior and the intentions to perform these behaviors will assist in implementing environmental change. Research that leads to a better understanding of how to change established behaviors to those behaviors that are more environmentally sensitive will further the goals of protecting the environment for future generations. As the environment has become a forerunner in industry and individual lifestyles, addressing behaviors will be a key component of changes and positive outcomes.

Behavior

Environmental psychology literature suggests possessing environmental concern and strong green-practice attitudes are the first steps to environmentally sensitive behavior change (Park and Boo, 2010). Behavior formation is comprised of attitudes, beliefs, and subjective norms (Reid, Sutton, and Hunter, 2010). Each of these components works in combination with the others to determine how individuals will respond in various situations. Numerous researchers attempt an understanding and explanation of the behavior of individuals through the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1970; Fishbein and Ajzen, 1975). TRA attempts to predict behavior making the assumption that behavior is under volitional control, whereby behavior is determined by factors that are within the individual's control (Reid et. al., 2010). Fishbein and Ajzen (1985) suggest behavioral and normative intentions as the antecedents to behavioral intentions. The behavioral beliefs are consequently "postulated to be the underlying influence on an individual's attitude toward performing the behavior, whereas the normative beliefs influence the individual's subjective norm about performing the behavior" (Madden, Ellen, & Ajzen, 1992, p. 3). Because of this, TRA tends to focus only on determinants that relate to a single behavior but not on a group of behaviors (Sheppard, Hartwick, and Warsaw, 1988; Reid et.al., 2010). TRA uses attitudes about behavior and subjective norms to predict human intention and thereby predict human behavior. Therefore, variables that are external to the model "are assumed to influence intentions only to the extent that they affect either the attitudes or subjective norms" (Madden, et. al., 1992, p. 3-4).
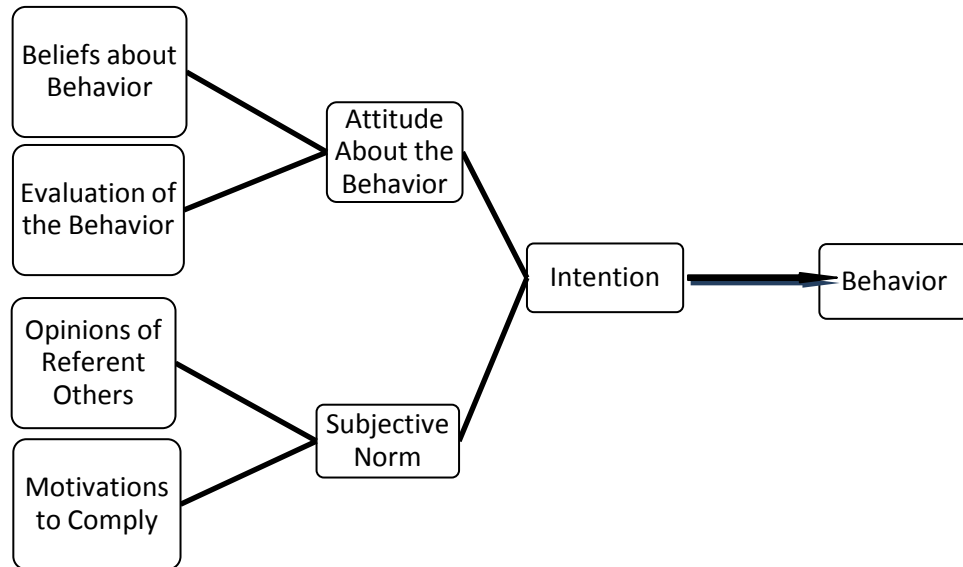
Beliefs about Behavior

Evaluation of the Behavior

Attitude About the Behavior

Opinions of Referent Others

Motivations to Comply

Subjective Norm

Intention

Behavior

Figure 4: Theory of Reasoned Action Fishbein and Ajzen, 1970

Theory of Planned Behavior

The Theory of Planned Behavior (TpB) was designed to predict and further explain human behavior as it pertains to specific circumstances (Ajzen, 1991). Employing the TpB model suggests that both knowledge and attitudes will hold a predictive power in terms of the positive environmental behavior of individuals (Kaiser and Fuhrer, 2003). Duerden and Witt (2010) maintain that an individual's intentions to engage in a particular behavior are best predicted with the use of the TpB model. The development of TpB was to overcome limitations of TRA, and more specifically to account for 'perceived' control over a particular behavior along with the 'actual' control of the individual (Reid, et.al.,2010). Both TRA and TpB make the assumption that individuals are basically rational and will make a systematic use of the information available when making decisions (Chang, 1998, p. 1826). While both TRA and TpB make the assumption that humans are essentially rational and will make use of the information available to them, TpB posits that people will have a strong intention to

perform actions that are evaluated positively, that the important referents will value and

approve of, and that would be easy to perform (Quintal, Lee, and Soutar, 2010; Chang,

1998; Sutton, 1998). According to Duerden and Witt (2010) an individual's actual

behavior is best predicted by his or her intentions to perform or engage in the behavior in

question. As with TRA, TpB has a central factor of the individual's intention to perform a

specific action (Ajzen, 1991). These intentions are predicted by attitudes towards

performing the behavior, the perceived behavioral control individuals feel they have over

engaging in the behavior and the subjective or social norms that are associated with the

behavior (Kaiser, Schultz, Berenguer, Corral-Verdugo, and Tankha, 2008; Schifter and

Ajzen, 1985). TpB offers three major determinants of intentions – attitude toward the

behavior, subjective norms, and perceived behavioral control, each corresponding to sets

of the individual's behavior relevant beliefs (Ajzen, 2005). Research notes that people

will carry out a particular behavior if three key elements are attained: 1) the outcome is

valued, 2) important others value and approve of the outcome, and 3) the resources,

abilities and opportunities are available to perform the task (Duerden and Witt, 2010;

Quintal, et. al., 2010; Lam and Hsu, 2006). When individuals are given the requisite

resource and opportunities, researchers propose the TpB model to better understand how

these individuals will contemplate and then implement behaviors (Duerden and Witt,
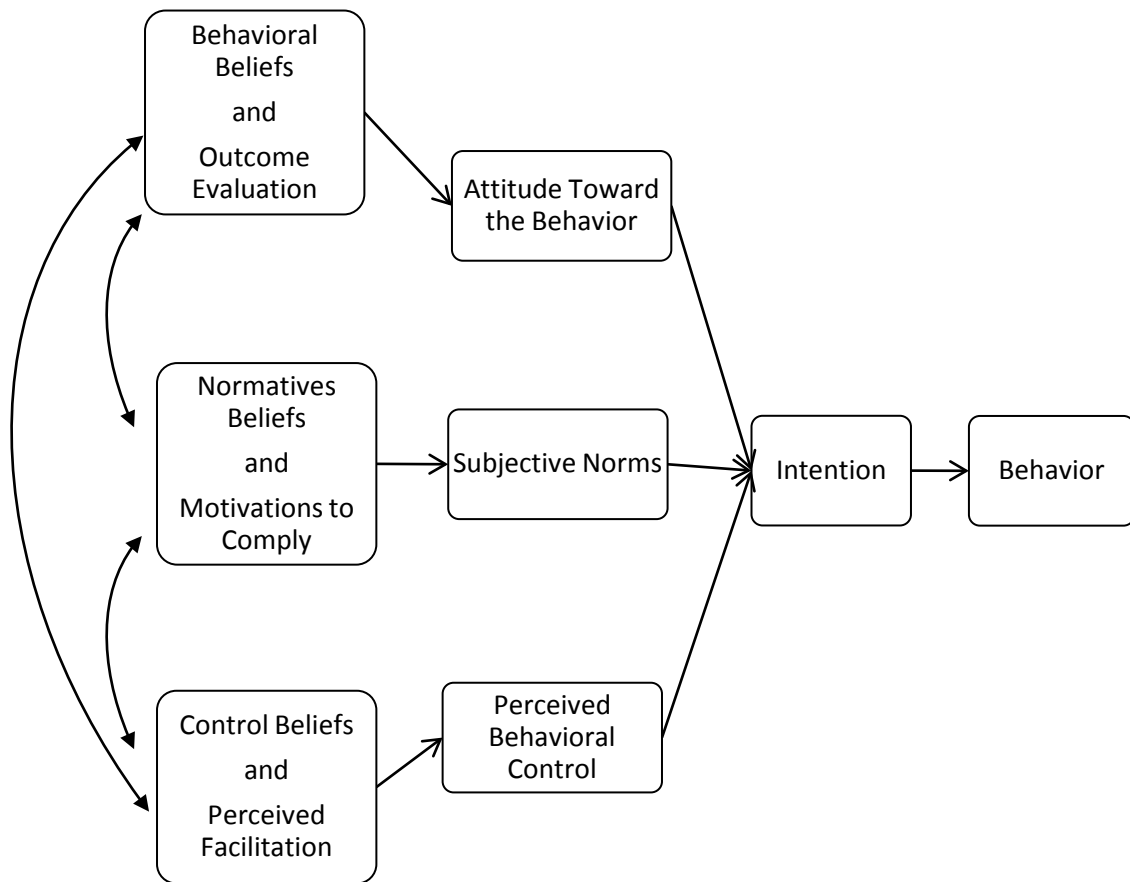
2010; Madden, Ellen and Ajzen, 1992).

Figure 5: Ajzen Theory of Planned Behavior

Environmentally sensitive behaviors integrated into the TpB model have been tested across a wide variety of contexts and disciplines including hospitality and tourism (Quintal, Lee, and Soutar, 2010). Environmentally sensitive behavior is an issue that sits in the 'sphere of concern' but outside of the 'sphere of influence' where everyone needs to take responsibility and no one does (Miller, Rathouse, Scarles, Holmes, and Tribe, 2010). Currently a gap exists between environmental intentions and specific behavior change in hospitality and tourism suggesting that tourism behavior is difficult to change (Miller, et al., 2010). According to McKercher, et. al. (2010) this gap is observed in

virtually all environmental matters as individuals are aware of adverse impacts created on

the environment, but are unwilling or unable to alter behaviors that would reduce those

impacts. Behavior relevant to the environment does not necessarily form consistent or

coherent patterns, therefore one environmentally sensitive behavior may not translate into

other environmentally sensitive behaviors (McKercher, et. al., 2010; Ester, Simoes, and

Vinken, 2004). Increasingly, customers, suppliers, public markets, and the government

are insisting that organizations assume a greater position in their environmental

responsibilities (Daily, Bishop, and Govindarajulu, 2008). Yang, et al. determined that

"resident's perception and attitude towards tourism are essential to the resort

development" (p. 90) but these perceptions and attitudes will vary with the different

stages of tourism development. In fact there is a certain connection between resident

perception and attitude and the development of the resort life cycle (Yang, et al., 2004).

Increasing the awareness and education among the public will encourage positive

environmental behaviors and assist in changing behavior that is not environmentally

sensitive (Miller, et al., 2010). Providing the community with specific knowledge of how

to act, specifically with regard to environmentally sensitive behaviors, creates greater

predictors of action and behavior (Miller, et al., 2010).

Behavioral Beliefs and Attitudes Toward the Behavior

Behavioral belief is the outcome an individual has of a particular behavior (Ajzen,

1991). Attitudes are then the extent of how an individual positively or negatively views

his or her performance of the behavior (e.g. recycling would be beneficial/would not be

beneficial) and the subjective probability that the behavior will lead to a particular

outcome that is fairly specific and effective (Orbell, Hodgkins, and Sheeran, 1997;

Matheison, 1991). Therefore, attempts to implement positive environmental change in individual behaviors must first understand the evaluation of the individual's favorable or unfavorable appraisal of this attitude. A positive attitude towards an outcome strengthens the intention to perform the behavior (Han, Hsu and Sheu, 2010; Azjen 1991). In determining whether the individual should perform a specific behavior, the benefits and costs resulting from the behavior are also likely to be assessed (Han, Hsu and Sheu, 2010). An evaluation of the behavioral belief and specific outcomes will assist in understanding how changes can be made to the behavioral beliefs of the individual. If the outcomes are positively evaluated for environmentally sensitive behavior changes for the individual, then he/she is more likely to engage in the behavior change (Han, Hsu and Sheu, 2010). Behavioral beliefs, as an expanded component beyond TRA, are assumed to influence an individual's attitudes towards a behavior (Ajzen and Madden, 1985).

Normative Beliefs and Subjective Norms

Subjective norms and normative beliefs are formed by the expectations of others and the motivations to comply with these expectations (Ajzen, 1991, p.). Subjective norms are the individuals' perceptions of how others evaluate them performing the behavior which can be broken down into two constructs: normative beliefs that are the perception of others evaluations; and the motivations to comply represented by the importance of others opinions of the individual (Collins and Carey, 2007). Chang (1998) notes that normative beliefs stem from the important others (such as friends, relatives, and colleagues) that in turn cause individuals to believe they should perform a behavior. The perception of others will therefore influence how motivated individuals will be to comply with positive environmental behavior changes in their daily activities. This belief

is considered a situational influence because of the constraints on and facilitation of behaviors beyond the control of the individual (Ajzen & Madden, 1986; Kaise, Wolfing, and Fuhrer, 1999). The situational influence of positive environmental behavior change will need to consider the ease and facilitation of individual activities within the daily life. Subjective norms as a determinant of behavioral intention is an important role well documented in contexts of marketing and consumer behavior (Han, Hsu, and Sheu, 2010). Individuals are constantly referring this behavior back to important reference groups and do not act independent of influences from cultural/social outlets (Burton, 2004). In the context of this research, when significant others (co-workers, neighbors, employers) believe environmentally sensitive behaviors should be implemented, TpB suggests that the perceived social pressure will increase the individual's motivation to comply.

Control Beliefs and Perceived Behavioral Control

The perceived behavioral control component of TpB identifies the extent to which people are realistic in their determinations of the behaviors difficulty, serving as an alternative for actual control (Ajzen, 1991, 2005). Perceived behavioral control influences behavior indirectly through intentions and directly to the prediction of the behavior in question (Collins and Carey, 2007). Simply, perceived behavioral control represents the individual's perception of how easy or difficult it will be to perform the behavior and can either impede or facilitate particular behaviors (Sparks, 2007; Aarts, Verplanken, & Van Knippenberg, 1998). These control beliefs are the individuals' perception of the presence, or in some cases the absence, of the resources and opportunities required to carry out specified behaviors (Chang, 1998). TpB extends the

TRA beyond those activities that are easily performed, volitional behaviors to those that with more complex goals and outcomes that are dependent are a variety of complex behaviors (Conner & Armitage, 1998). Time, financial resources, season, and family life cycle are structural barriers to control beliefs and can inhibit participation in environmentally sensitive behaviors (Crawford, Jackson, and Godbey, 1991; Sparks, 2007). Changing the daily activities of individuals must therefore provide the resources and opportunities for the individuals to incorporate and perform the tasks. By doing this, TpB identifies perceived behavioral control (PBC) as a determinant of intention and consequently the ease or difficulty of performing the behavior (Conner & Armitage, 1998; Sutton, 1998; Aarts, Verplanken & Van Knippenberg, 1998). Based on the TpB, if individuals are given the necessary resources (recycling facilities, reduce and re-use programs) to comply with environmentally sensitive behaviors, the behavioral intentions of the individuals will be higher in their efforts to perform the intended act.

Implementing positive environmental change may be perceived by individuals as an easily accomplishable task under their own control. Perceived control of the tasks is a key element for predicting the intentions of individuals (Sparks, 2007). If individuals feel that the behavior is under complete volitional control, then the individuals will need to have the requisites resources and opportunities readily and easily available to them to be able to perform the behavior (Chang, 1998). The individual's perception of whether or not they have the resources will affect their intentions to perform the behavior and have a successful outcome (Chang, 1998). Individual control and the resources to perform the behavior directly influences the successful outcome of positive environmental change. Perceived behavioral control is also acknowledged to "have a direct effect upon actual

behavior, especially when the behavior in question is perceived to be difficult to perform"
(Reid, Sutton, & Hunter, 2009, p. 314). This component of the TpB model addresses the
necessary resources that individuals need to perform specific environmentally sensitive
behaviors.

Behavioral Intentions

Behavioral intentions are guided by a combination of the three major factors:
"beliefs about the likely outcomes of the behavior and the evaluations of these outcomes
(behavioral beliefs), beliefs about the normative expectations of others and motivation to
comply with these expectations (normative beliefs), and beliefs about the presence of
factors that may facilitate or impede performance of the behavior and the perceived
power of these factors (control beliefs)." (Ajzen, 2002, 2006, p. 1). Generally speaking, if
attitudes and subjective norms are viewed as favorable by the individual, perceived
behavioral control is greater and the individual's intention to perform the behavior is
stronger (Ajzen, 2005). When individuals are given sufficient actual control over a
specific behavior, the intentions represent the motivation to consciously plan to carry out
a behavior (Eagley & Chaiken, 1993, p. 168). The intentions of individuals are therefore
guided by a combination of behavioral beliefs, normative beliefs, and control beliefs
where a combination of any two will assist in determining the behavior of the individual
(Azjen, 1991).

Intention is the immediate antecedent of any behavior (Ajzen, 2002; Ajzen and
Madden, 1985). The intentions of an individual will be influenced by two or more belief
constructs of TpB. According to TpB, the role of intention is twofold where attitude,
subjective norm and perceived behavioral control should predict intentions and intentions

should then predict the behavior of the individual (Collins and Carey, 2007). As such the stronger the intention to perform environmentally sensitive behaviors, the more an individual can be expected to try and the greater the likelihood the individual will be to perform the behavior (Ajsen and Madden, 1985). Understanding intentions of individuals will further assist in developing environmentally sensitive programs for the tourism industry.

Needs Assessment

In accordance with the individual's intentions and behavior, researchers must also understand what people consider to be of value and consequently a *need* in an attempt to produce positive feedback to influence ensuing attitudes and perceptions of the social norms and perceived behavioral controls of the individuals (Aarts, Ver Planken, and Van Knippenberg, 1998). Ajzen (1991) suggest that past behavior will impact later behavior, as it is mediated by behavioral beliefs, norms, behavioral control and the overall intentions to execute the behavior. While behavior can be predicted through TpB, further analysis of behavior can be accomplished with the use of needs assessment of a larger sample of the population. Individual responses within the needs assessment survey can further assist researchers in understanding the behavior and intentions by determining how knowledgeable participants are in regard to environmentally sensitive behaviors and how important they feel environmentally sensitive behavior is overall. Although the results of the needs assessment are the result of the people within the system, the needs assessment studies are for group data not individual diagnosis (Jennings, 2006; Witkin and Altschuld, 1984). These results assist organizations in implementing programs by better understanding the needs of the community overall.

According to Witkin and Altschuld (1995), a "*need* is generally considered to be a discrepancy or gap between "what is," or the present state of affairs in regard to the group and situation of interest, and "what should be," or a desired state of affairs" (p. 4). Assessments of needs are used to benefit groups of people in the implementation of policy making and programs designed from the information and perceptions gained from the study (Witkin & Altschuld, 1995). Witkin and Altschuld (1995) state,

"Some purposes of valid NA would be (a) laying the groundwork for designing a new or improved program of service or education, (b) restructuring an organization in light of better understanding of its goals, (c) setting criteria for hiring training personnel, or (d) determining possible solutions to a complex problem" (p. 6).

In tourism, implementing needs assessments provides a means to identify needs, prioritize them, use the information obtained to make needs-based decisions, and then allocate the resources and implement actions within the organization (Altschuld, 2004). The needs assessment focuses on the people within the system and addressing the knowledge gap of the value placed on environmentally sensitive behaviors.

Theoretical Framework

Environmentally sensitive behaviors are increasingly common in the life of many individuals both at home and work. As such, the attitudes that influence these behaviors should be further understood by industry and academics. While the end factors of environmentally sensitive behaviors are completely out of control of the individual or organization, (e.g. costs, benefits, end-use), the attitudes leading to these behaviors should be examined to implement successful programs.

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In a multi-resort complex, a detailed understanding of environmentally sensitive behaviors is necessary to the implementation of environmental practices and offers a clear direction for managers to capitalize on behaviors. It is essential to understand the beliefs behind environmentally sensitive behaviors of stakeholders in order to guide occurrences over time. Ultimately this serves to implement and improve environmental programs within the multi-resort complex.

Figure 6 is a graphic representation of this research's theoretical model. Environmentally sensitive behavior is multi-dimensional and complex in nature. It is hypothesized that environmentally sensitive behaviors are influenced by multiple internal and external factors. Based upon review of the literature, those factors include, but are not limited to: availability, ease of performance, peer pressure, and operational processes. It is the intention of the researcher to show that the factors mentioned here play a role in environmentally sensitive behaviors of stakeholders within the multi-resort complex.
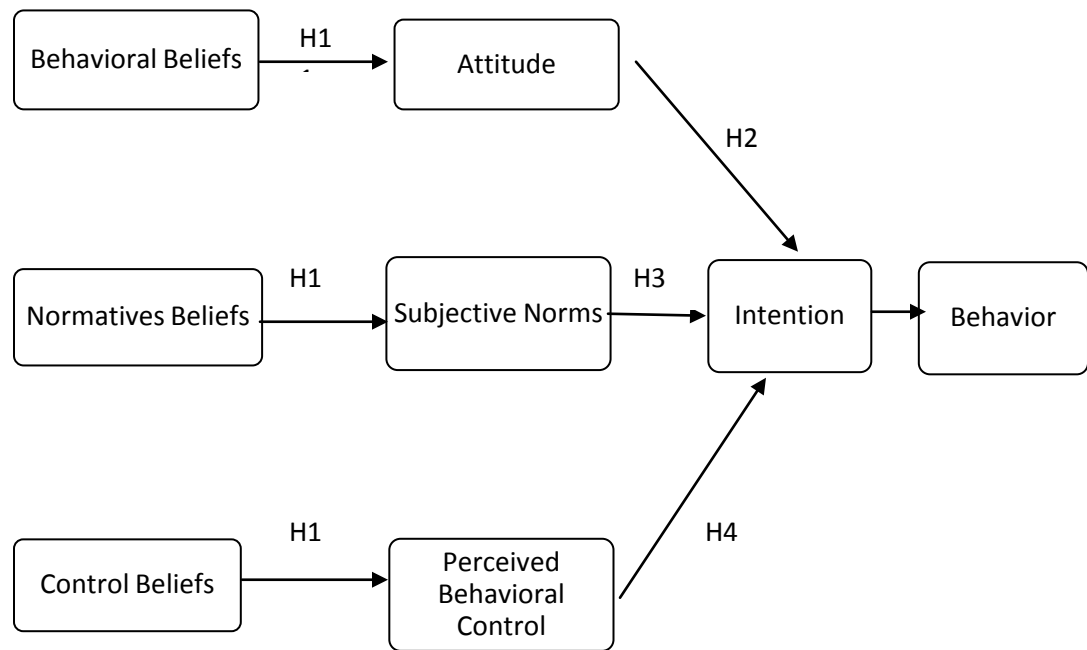
Figure 6: Proposed theoretical model for environmentally sensitive behaviors.

Summary

As the man–nature relationship continues to evolve, the impact on the environment will also continue to evolve. In order to make positive changes in this relationship, understanding what influences the behavior and intentions of individuals and groups is necessary to provide viable tools to promote conservation behaviors. The changing elements of environmentalism will play a key part in the promotion of environmentally sustainable initiatives within tourism and hospitality sectors.

Chapter III

Introduction

Multi-resort complexes are representative of a sector of the travel industry that offer a vast amount of amenities including multiple food, lodging, land and/or sporting activities as well as daily and nightly entertainment activities to the "captured clientele" on the property. These properties are destinations and residences, as well as employers to various stakeholders. The participation of these stakeholders, both individually and as a group, creates a need for understanding the behaviors related to environmentally sensitive activities within the multi-resort property. Therefore, the purpose of this exploratory research is to assess the level of commitment to environmental behavior of the Sandestin Golf and Beach Resort stakeholders. In order to accomplish this, researchers must understand how operators, homeowners and employees in multi-resort complexes approach environmental behavior and their part in the process by understanding the beliefs, intentions, and behaviors of the individuals. To address the objectives of this study, a case study method will be applied to the Sandestin Golf and Beach Resort in Destin, Florida. Sandestin Golf and Beach Resort is currently in the process of initiating environmental initiatives to establish Sandestin as a green community.

Research Questions

This empirical study was designed to address the following research questions and hypotheses, as well as to further research in the hospitality and tourism industry's environmental changes.

(1) How is environmental behavior currently formalized in the organizational culture of Sandestin Golf and Beach Resort?

(2) What beliefs do the stakeholders in Sandestin Golf and Beach Resort have towards environmental behavior?

(3) What has influenced these beliefs to date?

     (i) To what degree are the stakeholders knowledgeable about environmental activities within Sandestin?

     (ii) To what degree are the environmental activities within Sandestin important to the stakeholders?

(4) How do stakeholders actively practice environmental behaviors?

(5) Do the environmental behaviors (behavioral beliefs, control beliefs, and normative beliefs) of stakeholders vary between groups of employees, managers, and homeowners? In order to answer this question, the following hypotheses have been developed.

     H1: There is no difference in behavioral beliefs, normative beliefs, and control beliefs among the three stakeholder groups.

(6) Do personal attitudes, subjective norms, and perceived control beliefs affect environmentally sensitive behavioral intentions? In order to answer this question, the following hypotheses have been developed.

H2: Attitude has a positive influence on environmentally sensitive intentions.

H3: Subjective Norm has a positive influence on environmentally sensitive intentions.

H4: Perceived Behavioral Control has a positive influence on environmentally sensitive intentions.

Methods

This research applied a mixed-method design for collecting and analyzing both qualitative and quantitative data to understand the research problem more completely. The rationale for using a mixed-method research design is to gather both rich qualitative data and measurable quantitative data.

A mixed-method design applies multiple methods, qualitative and quantitative, to answer the proposed research questions. Therefore, it is useful to understand the components of each of the methods and how they work separately and together. Qualitative research relies on data in the form of words and interprets this data in a non-statistical manner (Schwandt, 2007). The process of gathering qualitative data is inductive where researchers do not seek to prove or disprove hypothesis, but rather gain understanding through open answers with participants (Bogdan and Biklen, 2007).

Quantitative research relies essentially on numbers, graphs, and/or formulas with analysis through statistical measures. The process of gathering quantitative data is deductive, attempting to support or disprove research hypothesis. Quantitative data focuses on large numbers representing the sample population.

The mixed-method approach uses both qualitative and quantitative measures to collect data to answer research questions and hypothesis. A mixed-method approach can begin with either qualitative or quantitative research methods and then progress to the other method. This research began with qualitative interviews and then a quantitative questionnaire to answer both the research questions and proposed hypothesis.

Plan of Research

The research plan included multiple information gathering trips prior to determining the research questions, methods, and hypotheses. The first of these information gathering trips involved learning about current environmentally sensitive projects at Sandestin Golf and Beach Resort and attending multiple meetings of the Sandestin Environmental Committee. The Sandestin Environmental Committee is a conglomeration of managers, homeowners, and employees, working towards a common goal of decreasing the negative environmental impact of the multi-resort complex. Within the overall Environmental Committee are subcommittees focusing on specific environmental concerns throughout the property. These subcommittees include: water use, energy use, recycling, resource conservation, eco-systems, chemical use, and communication and education. Along with attending Environmental Committee

meetings, individuals from the committee assisted with guided tours of previous, current and future environmental projects on the property.

After information gathering trips, sample groups were identified for the research process. Considerable research in the hospitality and tourism field focuses on the guest/consumer of the products and services. This research focuses on the managers, employees, and homeowners within the multi-resort complex as those directly involved and implementing environmentally sensitive behaviors. This sample was chosen for their daily involvement and opportunity to lead by example. In order to reach this sample, both Sandestin Golf and Beach Resort executive personnel and Sandestin Homeowners Association personnel were instrumental in setting appointments for interviews and distributing questionnaires online.

Qualitative interview questions were developed from a review of literature on environmentally sensitive behaviors and information gathered from the Environmental Committee meetings of Sandestin Golf and Beach Resort. These questions were used to determine an understanding of the term environmentally sensitive behavior, as well as how environmentally sensitive behaviors are communicated and practiced within the multi-resort complex.

Quantitative survey questions were composed based on the Theory of Planned Behavior (TpB) (Azjen, 1991). Although there is not an established questionnaire for TpB, the measurement items closely follow previous studies (Azjen, 1991; Laroche, Bergeron, & Barbaro-Forleo, 2001; Han, et. al., 2011). The TpB scale items were modified for the context of environmentally sensitive behaviors.

Sample

The population of Sandestin Golf and Beach Resort is approximately 4,900 individuals, with employees accounting for an estimated 1,100, and homeowners accounting for the other 3,800. Of the 1,100 Sandestin Golf and Beach Resort employees, 700 are year round employees and the remaining 400 employees are seasonal. With about 3,800 Sandestin homeowners approximately 670 provide this residence for receiving mail both year-around and temporarily. Homeowners can include those that consider the resort a primary residence, a vacation property or an income property.

Instrumentation

Interview questions (Appendix A) were developed from information gathered in a review of literature of environmentally sensitive behaviors and the initiatives currently underway within the multi-resort complex as established by the Environmental Committee. The subcommittees of the Sandestin Environmental Committee and the current projects that each subcommittee is currently working towards furthered the development of the interview questions. These questions were administered in one-on-one interviews with participants representing the three stakeholder groups: homeowners, employees, and managers.

The survey questionnaire consisted of four sections (Appendix B). These questions were developed through literature review, previous qualitative interviews, and information gathered in the Sandestin Environmental Committee meetings. The first section consisted on demographic questions such as age, gender, household income, and the highest level of education attained. The second section of the survey consisted of an

interest question pertaining to activities associated with environmentally sensitive behaviors. Items to determine knowledge and importance of established and/or proposed activities within the resort were presented in the third section of the survey questionnaire. Finally, the fourth section consisted of belief constructs (behavioral beliefs, normative beliefs and control beliefs), and predictor constructs (attitude, subjective norms, and perceived behavioral control).

Demographic questions were modified for two groups of participants: homeowners and employees. Resident demographic questions included: type of ownership (primary, vacation, or income property), length of time each year spent on property for income and vacation property owners, and the state of their primary residence. The employee demographic questions included: length of time employed with the resort, the department they were employed, and whether the employee was hourly or salary.

Two questions pertaining to interest and environmentally sensitive activities were presented in the second section of the questionnaire. The first was used to ascertain a level of interest in activities that lessen Sandestin's impact on the environment with a 5-point Likert-type scale (1 = not at all interested, 5 = very interested). The second question presented asked the frequency of participation in environmentally sensitive behaviors of reducing, re-using, recycling and conserving. Response choices were based on a 5-point Likert-type scale (1 = never, 5 = always).

The third section of the questionnaire asked participants about their knowledge and perceived importance of current and proposed environmental initiatives. These items

were developed through contact with the Environmental Committee of Sandestin Golf and Beach Resort. Scale items were ranked on a 5-point Likert-type scale for both knowledge and importance (1 = not at all knowledgeable, 5 =extremely knowledgeable and 1 = not at all important, 5 = extremely important) respectively. Items included recycling, alternative energy sources, pesticide and water management, and wildlife conservation.

The final section of the question consisted of belief constructs and predictor constructs. Specifically, 6 items were used to measure behavioral beliefs (BB), 3 items were used to measure normative beliefs (NB), and 5 items were used to measure control beliefs (CB). Each of these were assessed on a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree). Predictor constructs were measured in attitude, subjective norms, perceived behavioral control and intention. Attitude (AT) constructs were measured on a 5-point semantic differential scale. The semantic differential is a bipolar scale anchored on each end with adjectival terms. Three items were used for the subjective norms (SN), and four items were used for both perceived behavioral control (PBC) and intention (I). Each of these were assessed on a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree).

The questionnaire concluded with a section soliciting additional comments. This section provided participants the opportunity to express further thoughts about environmentally sensitive behaviors in a free-form format. The comments obtained provided a rich content of qualitative data revealing information not previously gathered in the interview or survey instruments. Some comments provided by participants revealed

emergent themes that are invaluable in understanding the quantitative instrument and allow for further research in the field of environmentally sensitive behaviors.

Ethical Considerations

Care to maintain the standards required for human subjects research was given throughout the data collection and analysis process. Researchers and faculty supervisors are all CITI trained and certified according to the research standards of the Internal Review Board (IRB) of Auburn University. The IRB reviewed the study prior to interviews and survey distribution examining the constructs, instruments, supporting literature and any perceived potential for harm. Having met the ethical considerations of the IRB, approval was granted to conduct the study (Appendix C). The protection and the anonymity of participants was imperative to illicit open honest responses during the interview process. All data collected was documented without identifiable markers to protect the participants.

Research inherently poses ethical challenges to the researcher and the data. The process of collecting data through face-to-face interviews poses a risk of leading the participant or interjecting the personal bias of the researcher into the questionnaire. As the instrument of qualitative research, the researcher should take care to be objective in the subjectivity of the process to limit contamination of data. In efforts to lead or interject bias, the researcher stuck with a set of questions that were phrased to be neutral towards the positioning the research in a set of beliefs.

Researching a topic with strong media presence, both positive and negative, can affect the responses on participants and lead their beliefs about the research and

researcher. The passion of some participants towards the subject matter can create a perceived connection with the researcher; whereby this same subject matter can create annoyance towards the researcher. Acknowledging the subject of environmental concern is both positive and negative; the researcher took care to follow the questionnaire and not be tempted to explain personal beliefs to the participant. It should be acknowledged for the transparency of this research that the researcher does not subscribe to media claims to global warming and climate change but instead believes in awareness, responsibility and stewardship of the planet.

Data Collection

Interviews of employees, homeowners, and managers were conducted on April 5th through the 7th of 2011. The interviews were scheduled throughout the property for the convenience of the interviewee. Each participant was informed of the process, given a letter of consent and the opportunity to ask any questions prior to the interview being recorded. Interviews were digitally recorded for transcription and analysis. The interviews consisted of 10 questions to illicit an understanding of environmentally sensitive behaviors and perceptions of the environmentally sensitive behaviors within the multi-resort complex. A total of 17 interviews were conducted. Theses interviews were with homeowners, hourly employees, and salaried managers. The interviews lasted from six to thirteen minutes. Each interview was digitally recorded except for one participant who chose to not be recorded. Digitally recording the interviews freed the researcher to listen to the participant and not miss important responses. The one participant who chose to not be recorded still participated and was documented through note-taking with participant confirmation of responses prior to exiting the interview. The process of

digitally recording also allowed the interview process to proceed at a faster pace, limiting the interruption of the flow of business which was an important commitment throughout the data collection process.

The survey questionnaire was adopted from previous research conducted by Han, Hsu and Sheu (2010) in their study of green hotels and the Theory of Planned Behavior. Questions were re-worded for environmentally sensitive behaviors of employees, homeowners and managers within the multi-resort complex. The survey was administered online for homeowners, and online and in hard copy for employees. Online survey distribution was handled through key personnel in the Sandestin Golf and Beach Resort executive office and the Sandestin Homeowners Association office. Distributing the survey in this format prevented the researcher from needing personal information releases for e-mail addresses. Hard-copies of the employee survey were distributed to managers during the weekly managers meeting and returned to the executive office by managers. This method was chosen for ease of distribution and limiting interruption of the flow of business during the busy season of the resort. Request to complete the online survey was made through the Sandestin Owners Association Communications Department to the homeowners, and through the Sandestin Golf and Beach Resort Executive Offices for employees and managers. The researcher also had the opportunity to request participation directly from the department managers in the Directors and Managers meeting. The survey was available online from July 28th until August 11th, with a reminder email sent to both homeowners and managers on the 5th of August. Hard copies of the survey were distributed to Department Heads and Managers during the

meeting and available in the executive offices until the 12th of August. A central collection point of the executive offices was used to collect completed surveys.

After the initial collection of data and a cursory preview of the completed surveys, the researcher was inclined to reach out for another round of survey completion. This round of data collection was scheduled six-weeks after the initial collection. The delay in a second collection was due to yearly employee surveys being conducted in the interim.

<div align="center">

Data Analysis

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Digital interviews were transcribed and analyzed for responses to the survey questions as well as adding depth to the survey questionnaire. The analysis of the data involved an initial read through of the text and then a division of text into information segments. The information segments were labeled with their fit to the research questions proposed. Responses from the interviews along with the information obtained from the Environmental Committee Meetings were referred to for the development of the quantitative survey questionnaire. The participant responses were used to enhance the results of the data analysis of the questionnaire by providing further insight about environmentally sensitive behaviors while maintaining a separation of bias from the questionnaire.

The survey questionnaire was designed to illicit responses for two forms of analysis. The first analysis is to determine the perceived knowledge and importance of current practices and proposed possible future practices as discussed in the meeting of the Sandestin Environmental Committee meetings. Questions for this segment are similar or identical for both the perceived knowledge and perceived importance. The remaining

survey items were developed to understand how the behavioral, normative, and control beliefs affect the behaviors of the participants. The survey responses were separated for the knowledge and importance items and those that addressed the environmentally sensitive behaviors.

The questionnaire used SPSS and AMOS to analyze the data. A measurement model was estimated using Confirmatory Factor Analysis (CFA) to determine the fit of the data with the model. Confirmatory Factor Analysis was used to assess the construct validity of the survey instrument and determine fit indices. Composite reliability for each construct was evaluated for internal consistency. Next, factor loadings within the constructs were assessed for validity. Structural Equation Modeling (SEM) was used to determine the best fit of the model with the data and then to test the causal relationships (Huck, 2012). SEM is useful testing models with several independent/dependent variables and the mediators of those variables (Han, et.al. 2011). The combination of multiple regression and factor analysis allows for analysis not possible with other multivariate techniques (Han, et.al. 2011).

The knowledge and importance scores where averaged and plotted into a two-by-two matrix. Lowy and Hood (2004) suggest utilizing a two-by-two matrix to achieve a clear starting point for balance and clarity. The X and Y axis are used by many to plot the median scores of the research instrument. The criticality function in matrix analysis (Hershkowtiz's matrix analysis as cited by Witkin, 1984) relates the perceptions of knowledge and importance using grand mean scores. To establish critical levels, scores are plotted along the X and Y axis. The mean scores are plotted on the graph for each individual knowledge and importance item and assessed in one of the four quadrants. The

points are then categorized into the following needs: critical need, low-level need, low-level successful programs, and successful programs (Figure 7).
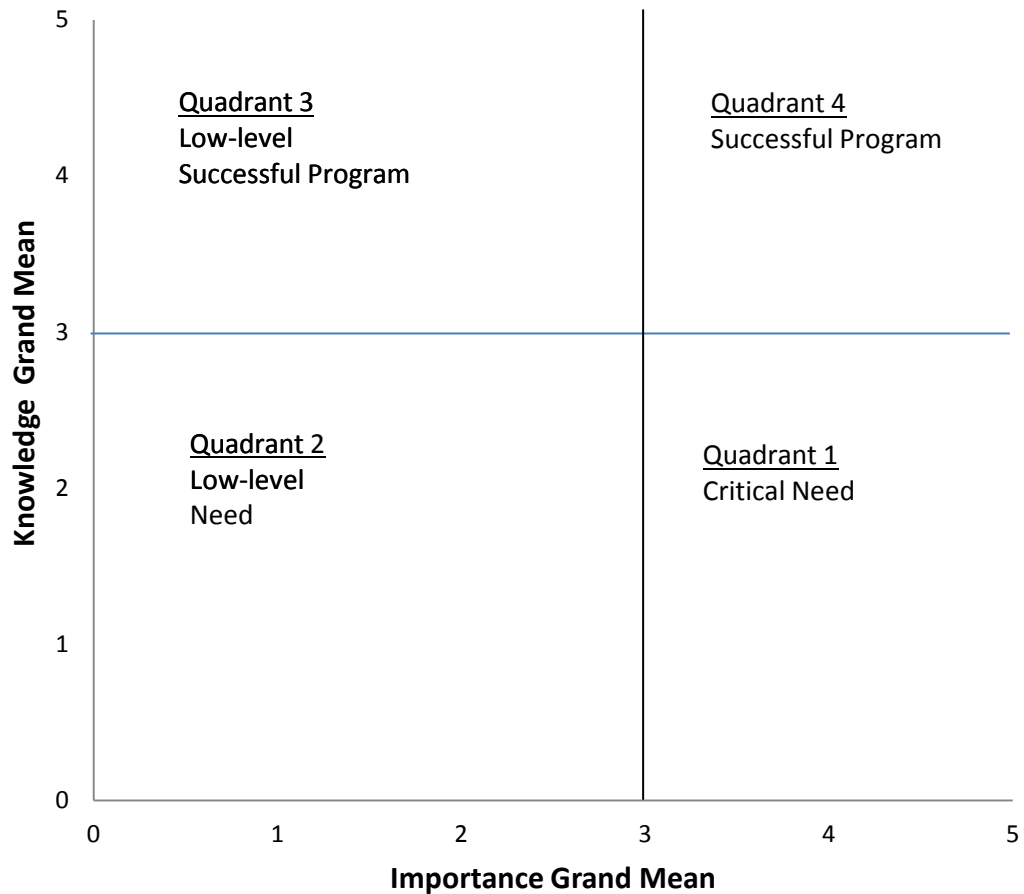

Figure 7: Needs Assessment Matrix for Knowledge and Importance (Hershkowitz's matrix analysis as cited in Witkin, 1984).

Mean scores that fell in quadrant one are those of critical need and would be given priority over the other quadrant items. Quadrant two mean scores are second level priority items. Quadrant three mean scores are for future evaluation and changes, while

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mean scores in quadrant four would be monitored for continuing performance (Witkin, 1984).

Summary

This chapter provided a detailed description of the research undertaken for the study of environmentally sensitive behaviors. The measures and methods used to obtain the data were fully disclosed, and the sample group, collection process, and tools were also discussed. The next chapter will present and discuss the analysis of data, research results, and a disposition of the research questions and hypothesis presented for this study.

Chapter IV

Introduction

This chapter will present the results and findings obtained from the interviews and

questionnaire in this study. The chapter is divided into five sections. The first section

presents the demographic profile of the respondents from the survey questionnaire. This

section is divided into two profiles based on the Importance and Knowledge Matrix

respondents and the TpB respondents. Section one also contains an overall assessment of

the respondent's interest in the impact of environmentally sensitive behaviors and the

participation in specified environmentally sensitive activities. The second section will

present the reliability of the survey instrument scales. Section three will discuss the

qualitative and quantitative data obtained from the interviews and questionnaire through

each research question and hypothesis. In the fourth section, the research model is

presented with data from the questionnaire. Finally, the chapter summary will recap the

results.

Demographic Information

Knowledge and Importance Demographics

Table 2 reveals a highly female response with approximately 41%, or close to half

of all respondents classifying themselves as female (31.93% male); additionally 93.8% of

the respondents self reported as Caucasian. The stakeholder classification indicates

approximately 67.4% of respondents are homeowners within Sandestin Golf and Beach

resort. The majority of respondents fell in the 50-65 (39.7%) age range with the next

highest range being over the age of 65 (23.6%). The highest majority, 36.4%, of

respondents, report an earned Bachelor's or higher graduate degree with 46.2% reporting

household income levels over $100,000. Although not listed in Table 2, 53.6% of

respondents report being married.

Table 2: Demographic profile for Knowledge & Importance Items

Frequency of Gender	N	%	Stakeholders	N	%
Male	143	36.7	Employees-Hourly	84	21.5
Female	160	41.0	Employees-Management	43	11.0
Missing*	87	22.3	Homeowners	263	67.4
Total	**390**	**100.0**	Missing*	0.0	0.0
			Total	**390**	**100.0**

Frequency of Age	N	%	Education Level	N	%
< 21	7	1.8	Some High School	1	.3
21-25	30	7.7	High school Grad or GED	23	5.9
26-34	35	9.0	Some College	74	19.0
35-49	71	18.2	Associate's Degree	29	7.4
50-65	155	39.7	Bachelor's Degree	142	36.4
>65	92	23.6	Graduate or Professional	114	29.2
Missing*	0	0.0	Other	5	1.3
Total	**390**	**100.0**	Missing*	2	.5
			Total	**390**	**100.0**

Annual Family Income (Thousands)	N	%
<15	24	6.2
15-19	5	1.3
20-24	22	5.6
25-29	17	4.4
30-34	16	4.1
35-49	29	7.4
50-74	39	10.0
75-99	34	8.7
100-149	49	12.6
>150	131	33.6
Missing*	24	6.2
Total	**390**	**100.0**

*Denotes non-response to these variables

Theory of Planned Behavior Demographics

The demographics for the behavior portion of the survey are presented in Table 3. While the response from females was higher at 40.9%, the male response was equally balanced with 37.9%. Although not reported here the majority of respondents self-reported Caucasian (93.9%). Homeowners were highly represented, 67.7%, accounting for approximately two-thirds of the responses, with hourly-employees following with 22%. The majority of responses were from individuals 50-65 (39.8%), followed by those over 65 with 24%; additionally the majority of individuals report a bachelor's or graduate professional degree as the highest level of education, 35.9% and 31.2 respectively. Nearly half of the respondents, 46.5%, report household income levels over $100,000, with more than half being married with children, 54.9% (not reported on this table).

Table 3: Demographic profile for Theory of Planned Behavior Items

Frequency of Gender	N	%	Stakeholders	N	%
Male	136	37.9	Employees-Hourly	79	22.0
Female	147	40.9	Employees-Management	36	10.0
Missing*	76	21.2	Homeowners	243	67.7
Total	**359**	**100.0**	Missing*	1	.3
			Total	**359**	**100.0**

Frequency of Age	N	%	Education Level	N	%
< 21	7	1.9	Some High School	1	.3
21-25	26	7.2	High school Grad or GED	23	6.4
26-34	31	8.6	Some College	64	17.8
35-49	66	18.4	Associate's Degree	25	7.0
50-65	143	39.8	Bachelor's Degree	129	35.9
>65	86	24	Graduate or Professional	112	31.2
Missing*	0	0.0	Other	3	.8
Total	**359**	**100.0**	Missing*	2	.6
			Total	**359**	**100.0**

Annual Family Income (Thousands)	N	%
<15	22	6.1
15-19	5	1.4
20-24	18	5.0
25-29	15	4.2
30-34	14	3.9
35-49	30	8.4
50-74	35	9.7
75-99	31	8.6
100-149	46	12.8
>150	121	33.7
Missing*	22	6.1
Total	**359**	**100.0**

*Denotes non-response to these variables

Environmental Interest and Activities

In order to better understand the environmentally sensitive behaviors and activities of respondents, two questions were used to assess interest and frequency. Table 4 shows that 75.3% of the 492 respondents are interested to very interested in activities that lessen the Sandestin's impact on the environment. This percentage allows for a strong inference that environmentally sensitive behaviors will be present in the stakeholders.

Table 4: Interest in decreasing environmental impact

Degree of Interest	N	%
Not at all interested	16	3.3
Uninterested	29	5.9
Interested	135	32.5
Somewhat Interested	74	17.8
Very interested	162	32.9
Missing*	76	15.4
Total	**492**	**100.0**

*Denotes non-response to this variable

Respondents were also asked to report their frequency in participation of specified environmentally sensitive activities. The items chosen for inclusion include those activities currently available within the resort, as well as those that are either in the works or determined to be unachievable at this time. The resort currently offers recycling for plastics, paper, aluminum, and cardboard products. Questionnaire items that are currently being investigated include: reducing energy use, reducing water use, composting and other water conservation practices. At this time, glass recycling is not available to Walton County.

Table 5 illustrates that the majority of respondents participate in activities that are environmentally sensitive. The majority of respondents, 32.9% and 37.2% respectively, always recycle plastic and paper. In reducing energy and water use, the majority of respondents indicate a sometimes to always degree of participation (73.2% and 70.4%), while 62% of respondents indicate they never compost.

Table 5: Environmentally sensitive activities

	Never		Rarely		Sometimes		Often		Always	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Recycle Plastics	99	20.1	25	5.1	81	1.65	54	11.0	162	32.9
Recycle Glass	166	33.7	22	4.5	77	15.7	42	8.5	104	21.1
Recycle Paper	84	17.1	17	3.5	74	15.0	63	12.8	183	37.2
Reduce Energy Use	32	6.5	22	4.5	110	22.4	116	23.6	134	27.2
Reduce Water Use	43	8.7	29	5.9	117	23.8	111	22.6	118	24.0
Re-use Items	26	5.3	24	4.9	106	21.5	129	26.2	133	27.0
Compost	305	62.0	28	5.7	36	7.3	14	2.8	19	3.9
Conserve Water	51	10.4	49	10.0	123	25.0	95	19.3	95	19.3

Note: n=492

Reliability

Huck (2004) defines the reliability of an instrument as the consistency of a measure. In other words, the ability of the solutions to achieve valid reliability scores indicates that the measure alone, not error or chance, explains the results. A reliable research instrument then allows future research to consistently measure the same factors with different results reliably attributed to the differences in the sample and not the instrument. Literature concerning standard reliability scores varies with .50 and above as acceptable. More stringent Cronbach's (1951) standards require an alpha of .70 and above on a scale of 0 to 1.0 in order to demonstrate reliability. Overall agreement for reliability scores is a higher number (closer to one) establishes greater internal reliability increasing the likelihood that error or chance did not produce the results. Table 6 illustrates the results of the scale indicating a robust coefficient for the knowledge and importance matrix. Coefficient scores of the TpB survey items present robust scores for behavioral beliefs and normative beliefs, however control beliefs did not indicate reliable scores (below .50).

Table 6: Coefficient alpha of scale

Knowledge and Importance Scale	Alpha
KNOW3 and KNOW4	.94
KNOW5, KNOW6, KNOW7, KNOW8, KNOW9, KNOW10 and KNOW11	.91
KNOW1 and KNOW2	.88
IMP3 and IMP4	.89
IMP5, IMP6, IMP7, IMP8, IMP9, IMP10, IMP11	.90
IMP1 and IMP2	.87

TpB Scale	Alpha
BB1, BB2, BB3, BB4, BB5, BB6	.88
NB1, NB2, NB3	.79
CB1, CB2, CB3, CB4, CB5	.46*
ATT1, ATT2, ATT3, ATT4, ATT5, ATT6, ATT7	.95
SB1, SB2, SB3	.94
PBC1, PBC2, PBC3, PBC4	.75
INT1, INT2, INT3, INT4	.91
EFA1, EFA2, EFA3, EFA4, EFA5	.80

*Denotes score below acceptable reliability of .70

Measurement Instrument Properties

Two measurement instruments were used study as outlined in previous chapters. The first, a Needs Assessment matrix, assesses the perceived knowledge and perceived importance of environmentally sensitive behaviors. The second measurement tool was composed of items fitting into the Theory of Planned Behavior. The following two sections further discuss these two scales.

Knowledge and Importance

The knowledge and importance needs assessment matrix is comprised of eleven items to ascertain the perceived knowledge and importance of the respondents. Each single item evaluates both perceived knowledge and perceived importance of activities

currently in practice within the resort, and proposed activities for possible future

development. A five-point Likert-type scale was used for both the perceived importance

and perceived knowledge. Table 7 shows the mean values for perceived importance of

each of the eleven items. Table 8 describes the mean values for knowledge for each of the

eleven items.

Table 7: Means for perceived importance

Importance - Survey Items	Mean	S.D.
Recycling programs at Sandestin	4.21	1.07
Wildlife conservation programs within Sandestin	4.11	1.04
Water management within Sandestin	4.09	1.00
Recycling facilities within Sandestin	3.98	1.18
Transportation alternatives within Sandestin	3.90	1.22
Landscape materials used within Sandestin	3.87	1.07
Pesticide use on the golf courses within Sandestin	3.83	1.13
Pesticide use in private yards within Sandestin	3.67	1.17
Environmental Committee at Sandestin	3.64	1.22
Solar energy at Sandestin	3.58	1.22
Wind energy at Sandestin	3.24	1.32
GRAND MEAN	3.83	

Note: Scores based on a 5 point Likert-type scale ranging from 1-5

Table 8: Means for perceived knowledge

Knowledge - Survey Items	Mean	S.D.
Recycling programs within Sandestin	2.98	1.35
Recycling facilities within Sandestin	2.73	1.36
Transportation alternatives within Sandestin	2.73	1.20
Water management within Sandestin	2.38	1.17
Solar energy in general	2.29	1.21
Wind energy in general	2.18	1.19
Landscape materials used within Sandestin	2.13	1.09
Pesticide use on the golf courses within Sandestin	2.07	1.07
Wildlife conservation programs within Sandestin	2.05	1.05
Environmental Committee at Sandestin	1.94	1.08
Pesticide use in private yards within Sandestin	1.76	.93
GRAND MEAN	2.29	

Note: Scores based on a 5 point Likert-type scale ranging from 1-5

Using the Hershkowitz matrix analysis (as cited in Witkin, 1984), the needs assessment for perceived importance and perceived knowledge was constructed as shown in Figure 8 using the Grand Mean (GM) for determining the X axis and Y axis to establish the four quadrants. The grand mean for importance (GM = 3.83) is plotted on the X axis and the grand mean for knowledge (GM = 2.29) is plotted on the Y axis. These scales are based on a five-point Likert-type scale. Each survey item mean from Tables 7 and 8 were plotted to determine a needs assessment. Survey items for importance were plotted along the X axis, and survey items for knowledge were plotted along the Y axis.
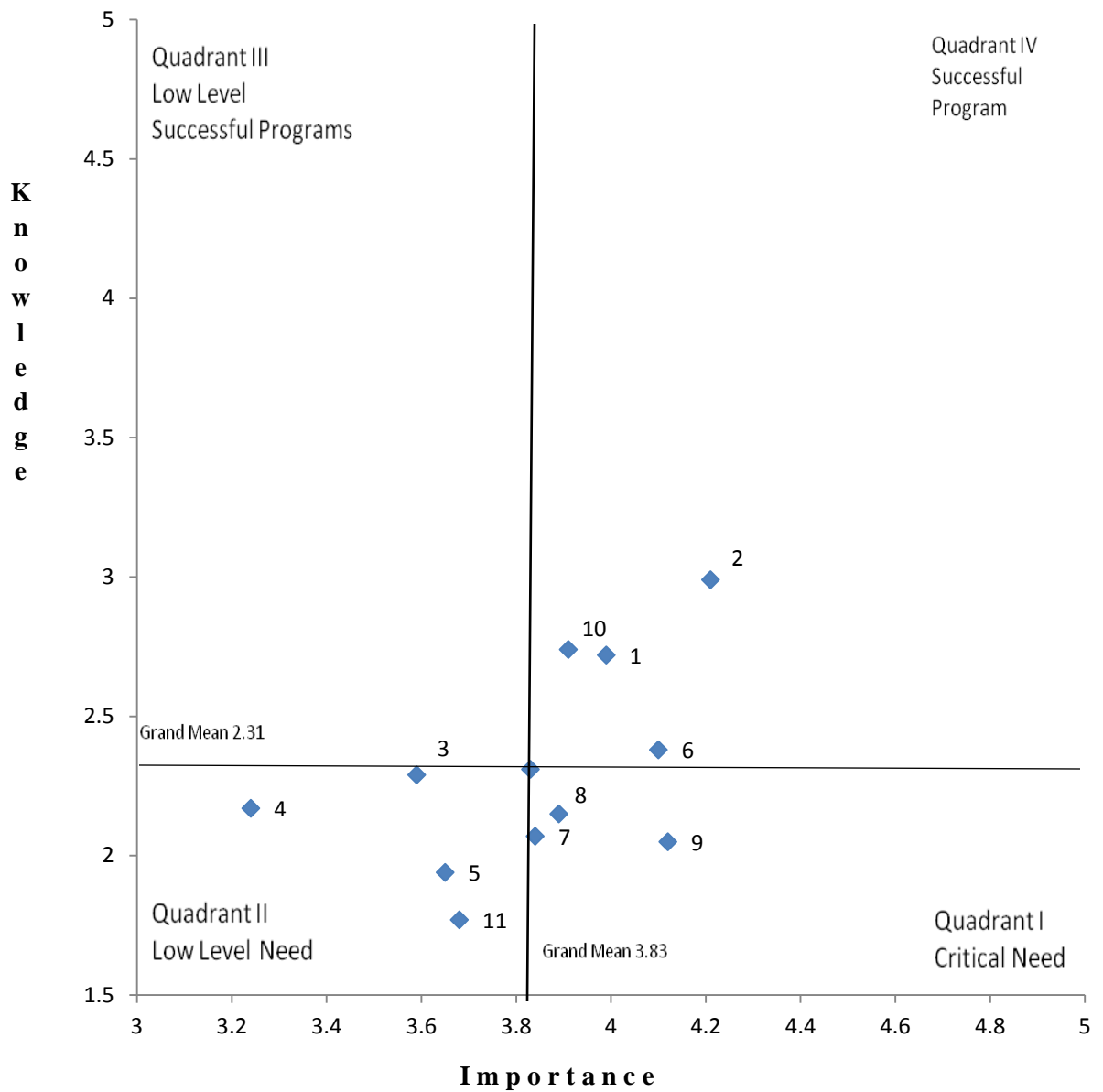
Figure 8: Needs assessment matrix for importance and knowledge (Hershkowitz's matrix analysis as cited by Witkin, 1984).

The numbering of survey items corresponds with the survey item number in Table 10. Additional analysis of the survey items indicated that each item paired significantly at <.001 as seen in Table 9.

Table 9: Paired sample t-test results of the difference between Importance and Knowledge

Survey Items	Mean Values		Difference between Means	Paired t-value	Sig.
	Importance	Knowledge			
1 Recycling facilities within Sandestin	3.98	2.74	-1.27	17.62	.001
2 Recycling programs within Sandestin	4.21	2.99	-1.22	16.67	.001
3 Solar energy at Sandestin	3.60	2.30	-1.30	15.89	.001
4 Wind energy at Sandestin	3.24	2.19	-1.07	11.61	.001
5 Environmental Committee at Sandestin	3.62	1.95	-1.71	22.56	.001
6 Water management within Sandestin	4.10	2.40	-1.72	24.51	.001
7 Pesticide use on the golf courses within Sandestin	3.83	2.09	-1.77	23.39	.001
8 Landscape materials used within Sandestin	3.87	2.15	-1.74	23.87	.001
9 Wildlife conservation programs within Sandestin	4.11	2.08	-2.07	29.77	.001
10 Transportation alternatives within Sandestin	3.90	2.75	-1.17	13.34	.001
11 Pesticide use in private yards within Sandestin	3.66	1.78	-1.91	25.56	.001

Theory of Planned Behavior

The second measurement instrument used in this study was composed of a scale for the Theory of Planned Behavior, as described in the earlier chapters. The scale was used to measure behaviors of stakeholders, specifically those that are environmentally sensitive in nature. Scale items were based off of previous research based on green hotels and revisit intentions. The items were modified for environmentally sensitive behaviors that were determined through qualitative interviews and environmental committee meetings. Table 10 illustrates the full complement of variables with each of the individual survey items accompanied descriptive statistics.

Table 10: TpB Survey Items

Behavioral Beliefs	Mean	SD	Skew
BB1: Environmentally sensitive behaviors enable me to save money	3.37	.99	-.19
BB2: Environmentally sensitive behaviors allow me to leave a better place for the future	4.33	.83	-1.57
BB3: Environmentally sensitive behaviors enable me to be more socially responsible	4.13	.94	-1.20
BB4: Environmentally sensitive behaviors enable me to protect mother nature	4.23	.87	-1.22
BB5: Environmentally sensitive behaviors save time	2.91	.96	.16
BB6: Environmentally sensitive behaviors save wildlife	4.18	.88	-.95

Normative Beliefs	Mean	SD	Skew
NB1: My friends think environmentally sensitive behaviors are important	3.73	.80	-.45
NB2: My family thinks environmentally sensitive behaviors are important	3.91	.88	-.68
NB3: My colleagues think environmentally sensitive behaviors are important	3.64	.78	-.23

Control Beliefs	Mean	SD	Skew
CB1: Practicing environmentally sensitive behaviors is more expensive	3.34	.89	-.33
CB2: Environmentally sensitive behaviors are time consuming	3.38	.91	-.38
CB3: Practicing environmentally sensitive behaviors saves the planet	4.03	.98	-1.00
CB4: Environmentally sensitive behaviors will reduce the use of natural resources	3.92	.98	-.77
CB5: Environmentally sensitive behaviors should be required	3.50	1.20	-.60

Attitude – For me, the practice of environmentally sensitive behaviors is:	Mean	SD	Skew
ATT1: Extremely Bad: Extremely Good	4.19	.90	-.98
ATT2: Extremely Useless: Extremely Useful	4.08	.98	-.91
ATT3: Extremely Unpleasant: Extremely Pleasant	3.65	.89	-.08
ATT4: Extremely Foolish: Extremely Wise	4.18	1.00	-1.24
ATT5: Extremely Harmful: Extremely Beneficial	4.20	.95	-1.21
ATT6: Extremely Undesirable: Extremely Desirable	4.09	.99	-.99
ATT7: Extremely Negative: Extremely Positive	4.16	.97	-1.20

Table 10 *(cont.)*

Subjective Norms	Mean	SD	Skew
SN1: Most people who are important to me think I should practice environmentally sensitive behaviors	3.65	.84	-.36
SN2: Most people who are important to me would want me to practice environmentally sensitive behaviors	3.71	.83	-.44
SN3: People whose opinions I value would prefer I practice environmentally sensitive behaviors	3.73	.84	-.58

Perceived Behavioral Control	Mean	SD	Skew
PBC1: Whether or not I practice environmentally sensitive behaviors at Sandestin is completely up to me	3.55	1.06	-.49
PBC2: I am confident that if I want to, I can practice environmentally sensitive behaviors at Sandestin	3.95	.81	-.62
PBC3: I have the time, resources, and opportunities to practice environmentally sensitive behaviors at Sandestin	3.54	1.03	-.43
PBC4: It is easy for me to practice environmentally sensitive behaviors at Sandestin	3.27	1.04	-.22

Intentions	Mean	SD	Skew
INT1: I am willing to practice environmentally sensitive behaviors at Sandestin	4.25	.71	-.81
INT2: I plan to practice environmentally sensitive behaviors at Sandestin	4.06	.77	-.54
INT3: I will make an effort to practice environmentally sensitive behaviors at Sandestin	4.20	.69	-.65
INT4: I am willing to follow guidelines of environmentally sensitive behaviors at Sandestin	4.14	.79	-.89

Environmental Behaviors	Mean	SD	Skew
EB1: I frequently use the recycling facilities that are available at Sandestin	3.48	1.25	-.40
EB2: When purchasing items at Sandestin, I often check to see if the product uses recyclable materials.	2.68	1.13	.23
EB3: I frequently buy products at Sandestin that are disposable	3.01	1.04	-.24
EB4: I recycle everything I can at Sandestin	3.46	1.25	-.37
EB5: I always practice environmentally sensitive behaviors at Sandestin	3.27	1.05	-.29

Confirmatory Factor Analysis

Prior to testing the measurement model, the behavior data were screened for standardized factor loadings. Nine factors were eliminated for not meeting the minimum criterion of 0.40, thus increasing the reliability and decreasing the measurement error (cited in Han, Hsu, & Sheu, 2010). The remaining 28 variables were maintained for the confirmatory factor analysis and structural equation modeling.

The confirmatory factor analysis (CFA) was used to produce a measurement model indentifying the statistical relationship between the latent and observed variables. All 28 measures were assessed for unidimensionality, reliability, and construct validity. The CFA results showed the data fit the model well (χ^2 695.206= , df = 322, p < .001, NFI = .919, CFI = .954, TLI = .946, RMSEA = .057). All items loaded above .65 on their assigned factors and were significantly associated with their construct (p< .001). Figure 9 shows the initial CFA with all variables connected to their constructs. Figure 10 follows with the 28 variables used in the final model.
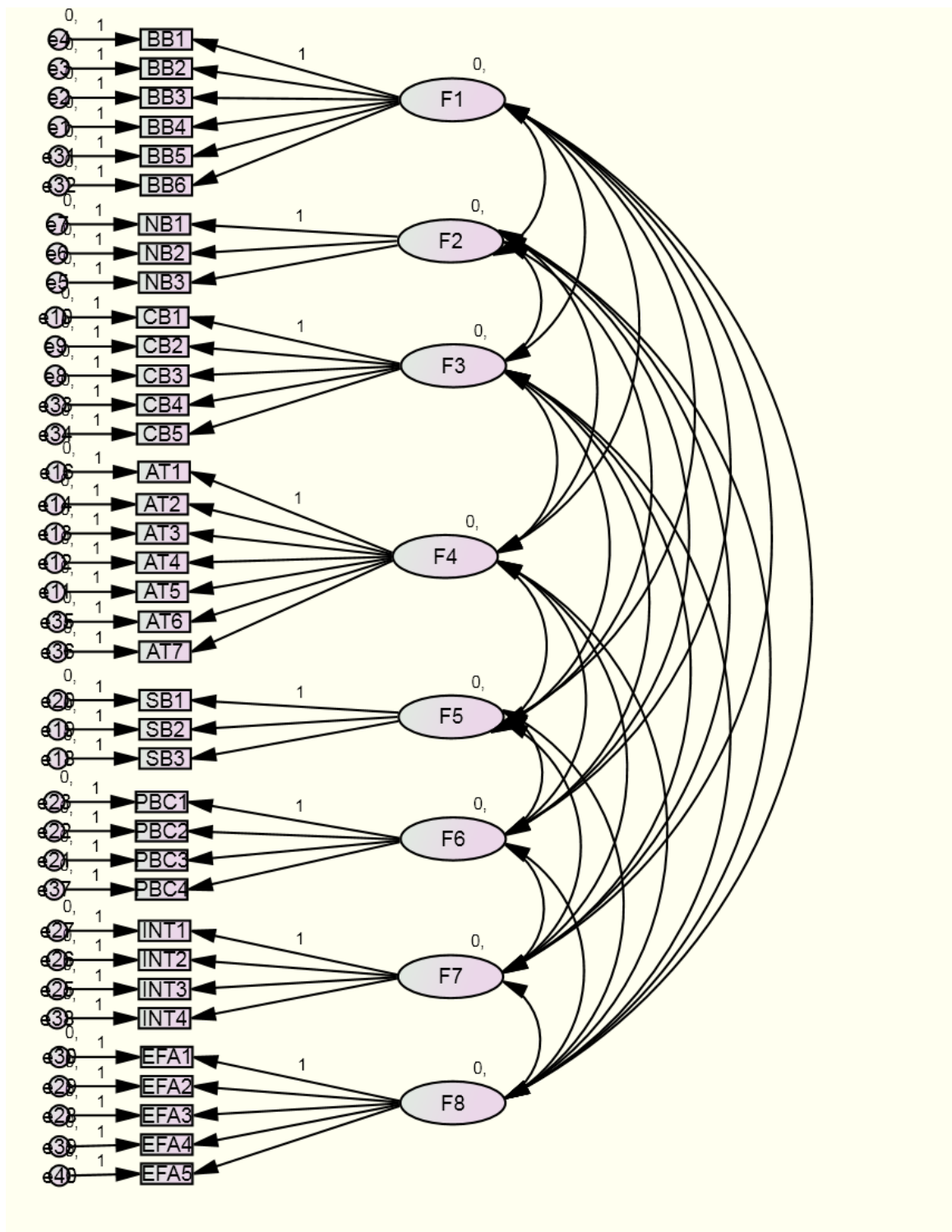
Figure 9: Initial CFA model. Note. BB=Behavioral Beliefs, NB=Normative Beliefs, CB=Control Beliefs, ATT=Attitude, SB=Subjective Norms, PBC=Perceived Behavioral Control, INT=Intention, BVR= Behavior.
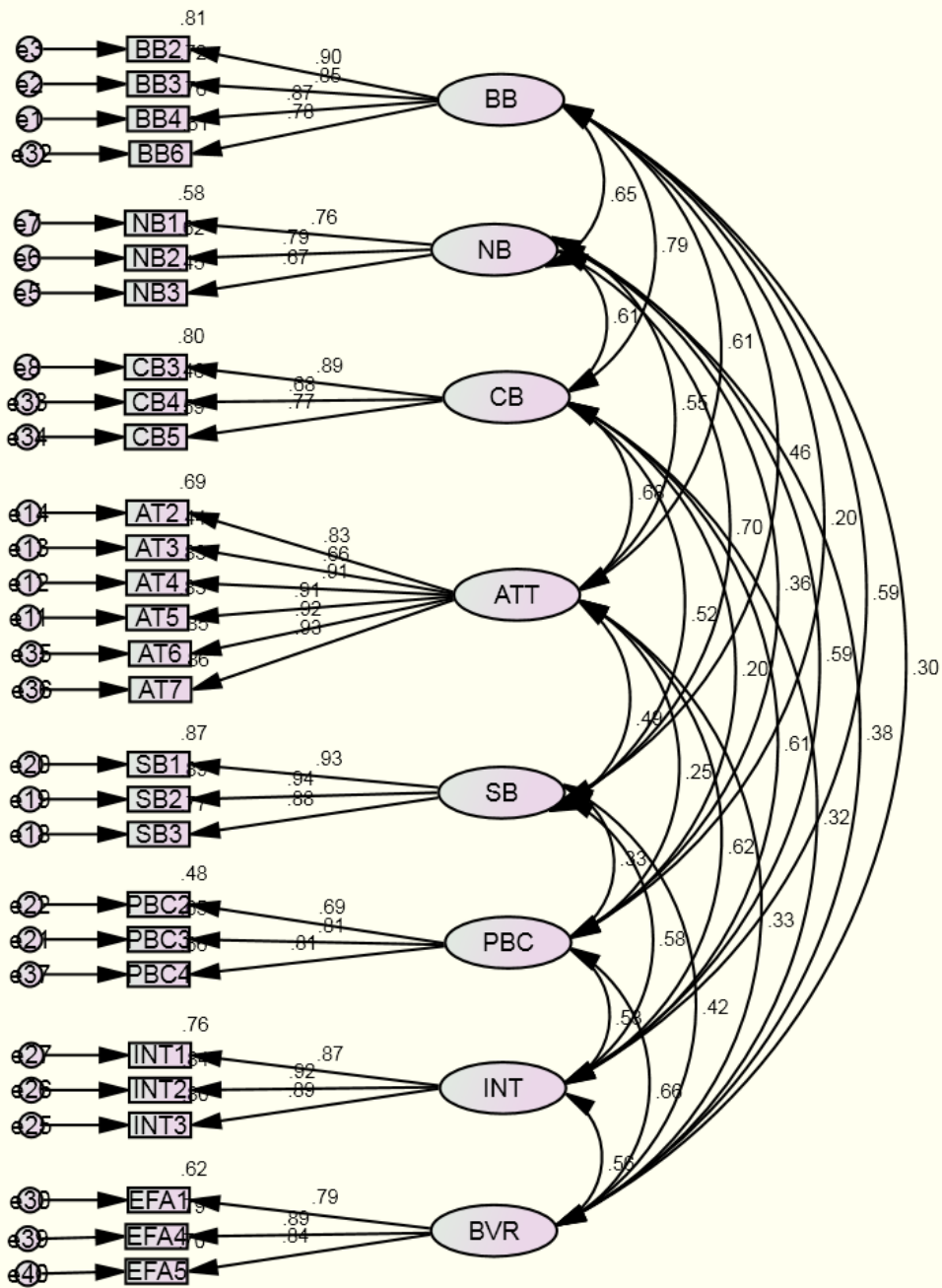
Figure 10: Final CFA. Note. BB=Behavioral Beliefs, NB=Normative Beliefs, CB=Control Beliefs, ATT=Attitude, SB=Subjective Norms, PBC=Perceived Behavioral Control, INT=Intention, BVR= Behavior.

Theory of Planned Behavior

The 28 items of the TpB questionnaire were tested to identify the factors that best explained the environmentally sensitive behaviors as they pertain to Sandestin Golf and Beach Resort. The theoretical model was evaluated through AMOS 19 software using the maximum likelihood factor analysis (Arbuckle, 2007). The model was evaluated through five fit measures: (a) chi square, (b) normal fit index (NFI), (c) comparative fit index (CFI), (d) Tucker-Lewis Index (TLI), and (e) root mean square error of approximation (RMSEA). The results of the data suggested a reasonable fit of the proposed model. The chi-square had a value of 877.718, (df 340, n = 359), $p < .001$ making it significant. The NFI and CFI are measures of fit comparing the theoretical model with the proposed model. A recommended value of .95 for these indexes were attained with NFI = .897 and CFI = .934. A TLI score reflects a good fit with values >.90. The TLI compares a null model with a theoretical model, penalizing for complexity and indicating a need to re-specify the model if the values are below .90. TLI for the model was .927 reflecting a good fit. The RMSEA value measures the discrepancy between the sample and population coefficients with a value of < .08 indicating a well fitting model. The RMSEA for the proposed model was .066. The fit measures obtained indicate the model is a reasonable fit.

The theoretical model is presented in Figure 11, followed by the final TpB model in Figure 12.
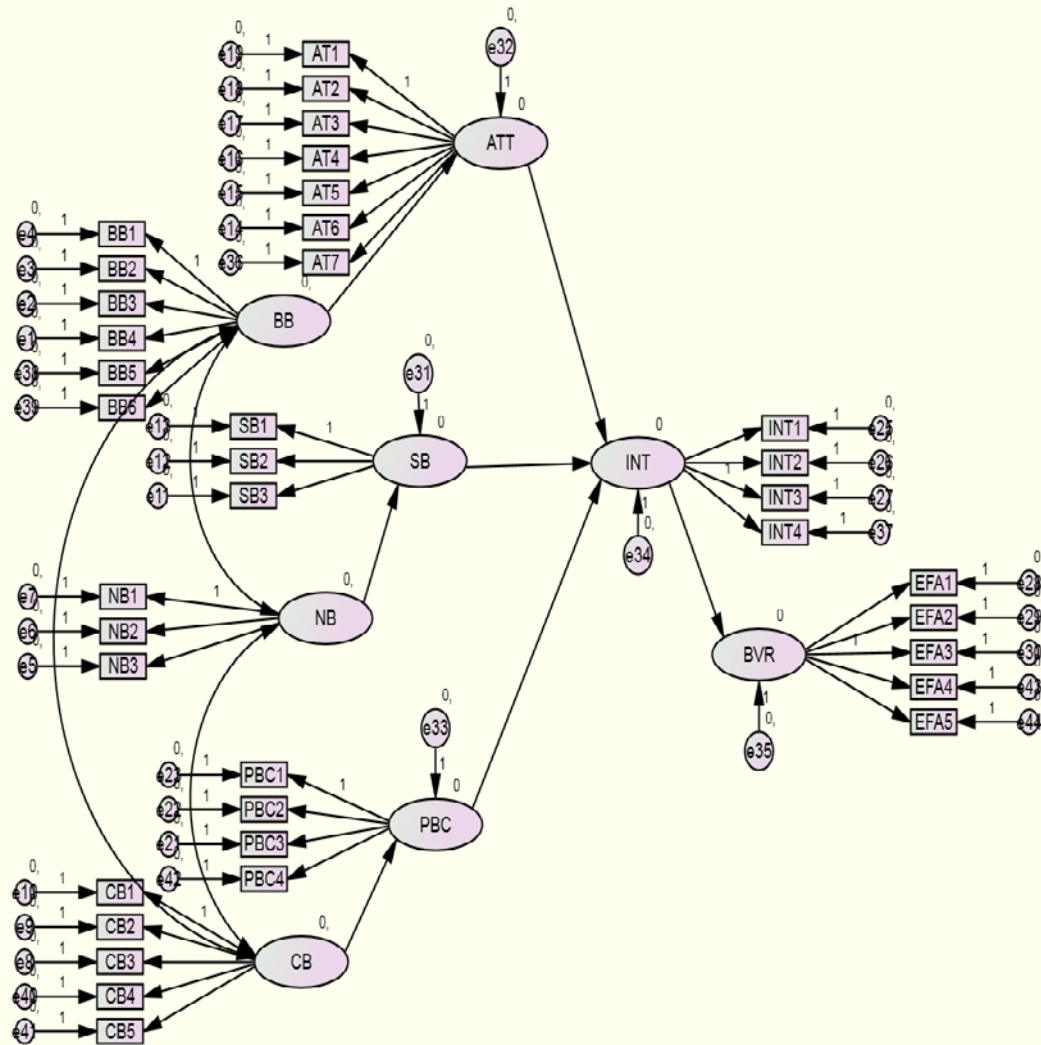
Figure 11: Theoretical Model for TpB. Note. BB=Behavioral Beliefs, NB=Normative Beliefs, CB=Control Beliefs, ATT=Attitude, SB=Subjective Norms, PBC=Perceived Behavioral Control, INT=Intention, BVR= Behavior.
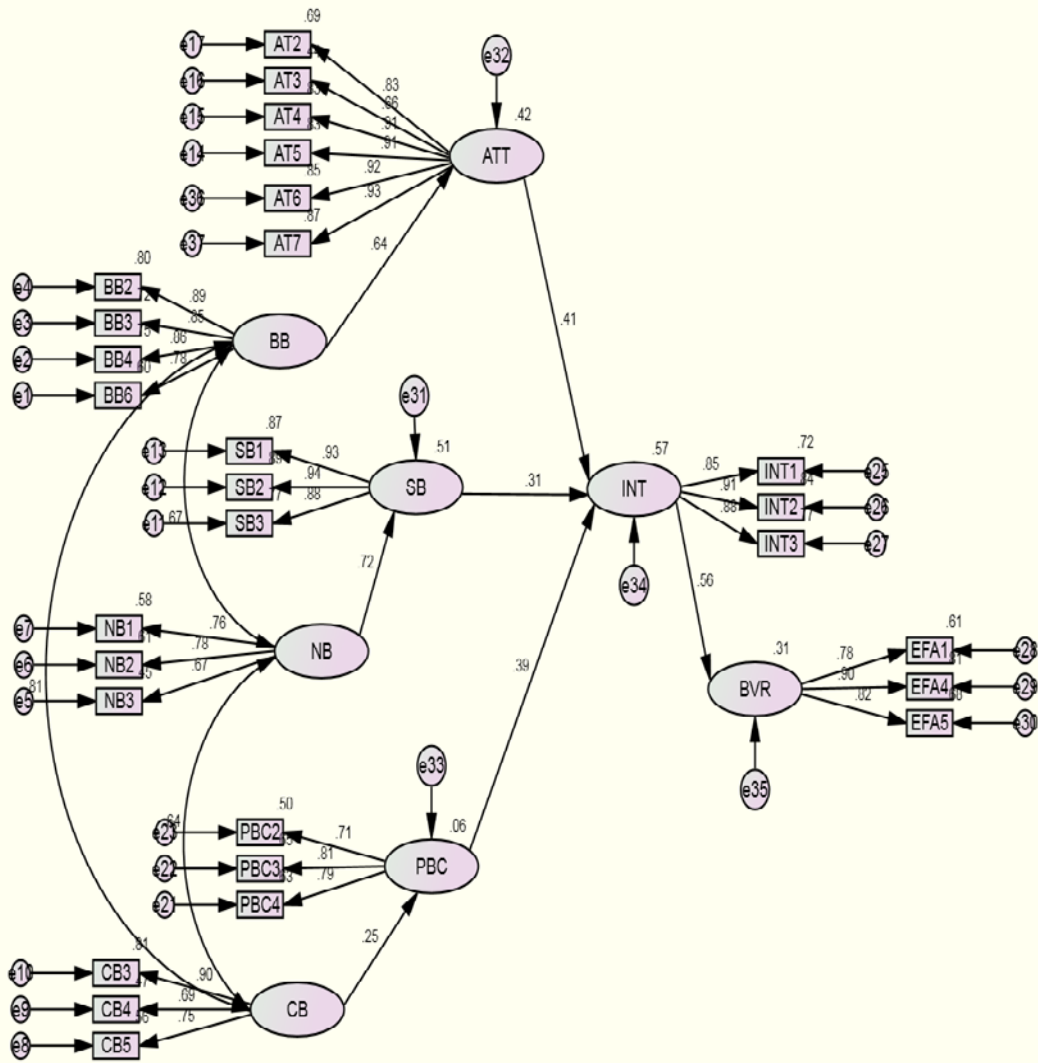
Figure 12: Final TpB Model. Note. BB=Behavioral Beliefs, NB=Normative Beliefs, CB=Control Beliefs, ATT=Attitude, SB=Subjective Norms, PBC=Perceived Behavioral Control, INT=Intention, BVR= Behavior.

Research Questions

Research Question 1: How is environmental behavior currently formalized in the organizational culture of Sandestin Golf and Beach Resort? At the beginning of this research process, Sandestin Golf and Beach Resort used the following mission statement:

"Mission: We are a principle-centered organization of hospitality professionals that attracts, develops and retains talented employees. We create loyalty and enliven the senses through innovation and use of quality methods to deliver defect free products and services in a genuine, caring and polished manner. We produce superior financial results for those who entrust us to be stewards of their assets."

As the research continued to develop, along with the environmentally sensitive activities within Sandestin, a new mission statement was proposed to incorporate a more sustainable outlook for the company.

"Environmental Sustainability Program: The SANDESTIN GOLF AND BEACH RESORT is dedicated to sustainability through conservation, recycling, preservation and other environmental efforts. The resort is committed to being an industry leader by creating an on-going Sustainability Program focusing on: economic viability, operational efficiency, natural resource conversation and social responsibility."

The new mission of Sandestin Golf and Beach Resort encourages sustainability programs as part of defining the culture of the resort and the people living and working within. Further environmental behaviors are encouraged through the Sandestin Owners Association Newsletter, and activities on property. These programs are strongly encouraged through stakeholders within the resort by way of their behavior and actions.

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The following notes some ways stakeholders encourage others to actively engage in environmentally sensitive behaviors:

"Each day I remind them you know about breaking down the boxes, keeping everything separate from the trash, the food, you know divide the food into one thing and keep the bottles cans paper, one side and just by letting them know the environment, we need to take care of it"

"Simple questions. Do you love your kids? Do you want to leave them a trashy world? Trash around every where? Well no well if you like then take care of the future"

"You know it's, we've kind of created that culture, around us, especially in our individual departments and I think our employee have gotten really sensitive and they're behind it, they see it and we share with them the numbers and the impacts that what petroleum does to the environment, the BP oil spill was a big wake-up for a lot of people, they saw their livelihoods threatened first hand with that situation and to be honest with you it really didn't take a whole lot of motivating once people starting seeing us start to save cardboard and not to throw boxes away and break them down and it caught on pretty quick."

Research Question 2: What beliefs do the stakeholders in Sandestin Golf and Beach Resort have towards environmental behavior? Through interviews with various stakeholders within Sandestin Golf and Beach Resort, environmental beliefs focused on taking care and leaving a better place for future generations. All of the stakeholders

interviewed believed that is was our individual responsibility to do our part in caring for what the environment and decreasing the impacts made on it each day. To further explain this, the needs assessment matrix points to environmentally sensitive activities, both in practice and proposed, that stakeholders are not knowledgeable of but deem important.

> (i) To what degree are the environmental activities within Sandestin important to the stakeholders? The majority of perceived importance survey items on the needs assessment matrix indicated high importance scores. The grand mean for importance items was 3.83 on a five-point, Likert-type scale. The scale ranged from one to five with one being not at all important to five being extremely important.

> (ii) To what degree are the stakeholders knowledgeable about environmental activities within Sandestin? The needs assessment matrix shows that the stakeholders within Sandestin Golf and Beach Resort are not highly knowledgeable about the environmental activities within the resort. The grand mean for knowledge was 2.29 on a five-point, Likert-type scale of one to five with one being not at all knowledgeable and 5 being extremely knowledgeable.

The needs assessment matrix indicates that the stakeholders within Sandestin Golf and Beach Resort place a high degree of importance on environmentally sensitive behaviors but are not highly knowledgeable of the activities currently in place, and proposed, within the resort. This finding indicates a need for more communication and research into the environmental activities currently practiced. A high importance score point to a stakeholder group willing to participate in environmentally sensitive practices

and open to changes within the resort. The low knowledge scores shows that many stakeholders are not informed of the practices currently in place and those being proposed. Items that fell in the critical need quadrant, where there is a perceived high importance but low perceived knowledge, were pesticide use on the golf course, landscaping materials, and the wildlife conservation programs. Each of these items are routinely discussed at the Environmental Committee Meetings each month and are programs actively pursued by the committee. The matrix shows that while important to the stakeholders, and a constant project of the committee, there is a noticeable disconnect of information to the stakeholders. Highly successful programs include the recycling facilities and programs, water conservation, and encouraging transportation alternatives. It can be surmised that if the knowledge of environmentally sensitive practices were increased, the level of participation would also increase.

Research Question 3: What has influenced these beliefs to date? The beliefs of the stakeholders are influenced through media outlets and experience. Although environmentally sensitive behaviors are recognized among the stakeholders, the needs assessment matrix of importance and knowledge indicated that the activities of the resort may not be as well known.

Research Question 4: How do stakeholders actively practice environmental behaviors? Stakeholders within Sandestin Golf and Beach Resort practice environmental behaviors daily through recycling, reducing, and re-using items throughout their daily activities within the resort. The statements below note many ways stakeholders practice these behaviors:

"We recycle, we don't litter, we use both sides of the paper when we print, we try to make smart purchases; we plant a lot of stuff, trees and things like that. We are very active in the community with regard to the neighborhood"

"Okay, here at work I collect and separate the food from boxes, from the glass, and I practice that by keeping cans by their selves in a certain container, and at home I do the same at home, I do it here so I adopted also to do it at home. Separate the boxes and breaking them down, the glass and the plastics and everything."

"Okay at work is a pretty big one, I'm the purchasing director so at work in a lot of different ways. just in general, kind of an overview, we implemented cardboard recycling program, we've replaced our foam where we can with environmentally friendly products, and we've tried eliminate our petroleum based plastics with corn based and sugarcane items, so it's been in quite a few areas actually. I work in f& b so it kind of touches all parts of our job and we are very conscious about anything we buy or purchase, especially in cardboards, plastics and etc."

"At home it depends, not as much as here [at Sandestin], but we try to be as conscious as possible. we have the green bags to shop with to save on the plastic bags and we try to recycle what we can, you know Walton County is not there yet as some other states and certainly some other countries if you compare us to

Canada, or Europe and so we do what we can but there is a long way to go in our country."

Research Question 5: Do the environmental behaviors (behavioral beliefs, control beliefs, and normative beliefs) of stakeholders vary between groups of employees, managers, and homeowners? In order to answer this question, the following hypothesis was developed.

> H1: There is no difference in behavioral beliefs, normative beliefs, and control beliefs among the three stakeholder group.

Hypothesis 1 was tested. Analysis of Covariance was conducted for variables individually and as overall means. The outcomes of the ANOVA reveal no significant relationships between the three groups of stakeholders and their environmental beliefs (behavioral beliefs, control beliefs, and normative beliefs). These findings are consistent with previous studies (Ajzen, 1991; Han and Kim, 2010).

Research Question 6: Do personal attitudes, subjective norms, and perceived behavioral controls affect environmentally sensitive behavioral intentions? In order to answer this question, the following hypotheses have been developed.

> H2: Attitude has a positive influence on environmentally sensitive intentions.
>
> H3: Subjective Norm has a positive influence on environmentally sensitive intentions.
>
> H4: Perceived Behavioral Control has a positive influence on environmentally sensitive intentions.

Hypothesis 2, 3, and 4 were tested. The results indicate that attitude ($\beta = .503$, $t = 15.579$, $p < .001$), subjective norms ($\beta = .464$, $t = 12.613$, $p < .001$), and perceived behavioral control ($\beta = .337$, $t = 8.660$, $p < .001$) were significantly and positively associated with environmentally sensitive intentions. These findings support hypothesis 2, 3, and 4. Previous studies with more specific intentions also imply that increases in favorable attitudes, subjective norms, and perceived behavioral control will result in the increase in environmentally sensitive intentions.

Summary

In conclusion, Chapter 4 presented both statistical and qualitative data from the research instrument and interviews. The results included a comprehensive overview of the demographics of the respondents, and the level of participation in activities that are environmentally sensitive in nature. The reliability of the survey items were discussed and supported with high reliability scores. Analysis of the measurement properties of the instrument were conducted as well, with a needs assessment matrix, and confirmatory factor analysis. The results lead to opportunities for more research in the field of environmentally sensitive behaviors of stakeholders within a multi-resort complex.

Chapter V

Introduction

This chapter is divided into five sections. The first provides a brief description of the research study and the purpose. The research results will be synthesized in the next section, followed by a review of significance and the contributions of the study in the third section. Next, future research opportunities are offered to improve and further advance the presented research. Finally, a brief conclusion to summarize both the chapter and the study as a whole is provided.

Description and Purpose of Research

As previously noted, this research is composed of both qualitative and quantitative measures. The study undertaken here combined two different measurement scales as well as qualitative interviews that further developed the research instruments and understanding of the environmentally sensitive behaviors of the stakeholders within Sandestin Golf and Beach Resort.

The qualitative research consisted of one-on-one interviews with employees, managers, and residents. These interviews were recorded and transcribed for analysis of recurring themes. The themes were then incorporated into the survey instrument to

continue to develop an understanding of the behaviors of stakeholders. Qualitative data revealed consistency in beliefs and the formation of the beliefs towards environmental behavior. The qualitative data also suggested consistency in the practice of environmental behaviors of the stakeholders. Results of the qualitative interviews were incorporated into both the research questions and composing the statements for the quantitative research instrument.

The quantitative research consisted of a survey instrument distributed both in hard copy and online for stakeholders. The Importance and Knowledge matrix was used to create a needs assessment to determine where environmentally sensitive behaviors, both currently in practice and proposed activities, were successful or possibly needing more attention to the development and implementation within the multi-resort complex. The assessment matrix resulted in higher mean scores for the importance items, but lower means scores for the knowledge items. Results from the matrix both confirm the previous qualitative research findings, and indicate which environmentally sensitive activities within the multi-resort complex should be further developed and implemented.

The Theory of Planned Behavior, an established method of understanding behavior, was used to measure and assess the environmentally sensitive behavior of participants. In the Theory of Planned Behavior, the individual's behavior is predicted from their intentions. These intentions can only predict attempts to perform the behavior not necessarily the attainment of the behavior. The behavioral intentions of participants in this research study are therefore predicted attempts rather than the actual behaviors. Participants in the study indicate positive intentions to practice environmentally sensitive

behaviors, although the extent to which they do may be prohibited by outside factors (i.e. glass recycling in unavailable in Walton County).

The advantage to using multiple method research is supported through the data and results and findings obtained from the study. It was previously posited that the strength of multiple methods was the ability to provide corroboration between methods. An examination of the study indicates that this criterion was achieved in data analysis confirming and contributing to results in other methods.

The sample population for the study is adequate and represents a wide spectrum of age and education levels (see Table 3). The wide spectrum of participants, the statistical output, and the shared interest in environmentally sensitive behaviors support further research and development of understanding these behaviors. The shared interest in the issues concerning the environment by the study participants supports generalizability to other populations, particularly in the multi-resort complex with shared stakeholder involvement.

Discussion

Little research has focused on various stakeholders involved in the multi-resort complex. This current study sought to provide insight into the perceived knowledge and importance of stakeholders, as well as their environmentally sensitive behaviors. Specifically, the study results indicate that the proposed Theory of Planned Behavior had a satisfactory fit to the data.

The needs assessment matrix evaluating the perceived importance and knowledge of the various stakeholders indicates that environmentally sensitive practices are viewed

as being important; however, the knowledge of these activities within the resort is low. Stakeholders are interested in participating in activities that will decrease their impact on the environment within the resort and the planet overall. The perceived knowledge among stakeholders for environmentally sensitive activities around the multi-resort complex is low indicating more emphasis should be made to inform all stakeholders of the opportunities to practice environmentally sensitive practices.

The TpB model has been used in various environmental setting within hospitality and tourism, though most research is focused on the guest. For environmentally sensitive behavior research within a multi-resort complex, the other stakeholders groups (managers, employees, and homeowners) must also be considered for the outcomes to be beneficial. Understanding the varying behaviors of these stakeholders groups, and continually monitoring these behaviors and programs will assist in furthering the goals of environmentally sensitive behaviors.

Although stakeholders responded that environmentally sensitive practices are important, the application of the TpB allows for predicting these behaviors. The link between behavioral beliefs, normative beliefs, and control show a strong predictive power towards attitude, however control beliefs and normative beliefs do not seem to have the same predictive power. Although the questionnaire was developed from previous research (Han, Hsu, Lee and Sheu, 2011; Han and Kim, 2010), the results were unexpected in their predictive power. It can be inferred from both this study and that of Han, Hsu, Lee and Sheu (2011) that the reverse coded items could have confused participants and therefore caused errors with undesirable results.

The nature of a multi-resort complex presents many opportunities for stakeholders to practice environmentally sensitive behaviors. For Sandestin Golf and Beach Resort, the various stakeholder groups have expressed interest in the environmentally sensitive behaviors involved in creating a green community. The results of the needs assessment indicate stakeholders perceive the current and proposed environmentally sensitive behaviors are important, however the stakeholders expressed little knowledge of these activities within the multi-resort complex. Furthermore, stakeholders indicate strong behaviors and attitudes towards environmentally sensitive behaviors, but expressed that the resources, opportunities, and ability to practice environmentally sensitive behaviors are not available to them. During the course of this study, Sandestin Golf and Beach Resort has implemented many programs increasing recycling and reducing waste. These programs have helped to further the Sustainability Program outlined in the new Mission Statement of the property. The mission of Sandestin Golf and Beach Resort to become a property "dedicated to sustainability through conservation, recycling, preservation and other environmental efforts…[and further] …committed to being an industry leader by creating an on-going Sustainability Program focusing on: economic viability, operational efficiency, natural resource conversation and social responsibility" is evident in the continued implementation of programs for the various stakeholders to decrease their impact on the environment. The multi-resort complex encompasses a variety of stakeholders that must all be considered when implementing environmentally sensitive programs. This study represents an initial understanding of the behaviors of these stakeholders to better communicate and implement environmentally sensitive programs.

Implications

The implications that can be taken from this study are profound. From an academic standpoint, it is the belief of this researcher that this is the first multiple method approach aimed at multiple stakeholders within the multi-resort complex. The results call for education and training of the implementation of environmentally sensitive activities with the multi-resort complex. Understanding behaviors of the stakeholders can be useful in the success of programs aimed at reducing the impact created in the tourism environment. The beliefs of stakeholders are a key component of the success or failure of programs, as well as the communication and education of the initiatives. The broad scope of the hospitality and tourism industry can benefit from the empirical understanding of this research.

For managers in the hospitality and tourism industry, this research has broad implications for both the internal and external customer. Literature is abundant in the changing attitude towards environmentally sensitive behaviors for the guests, however little research considers the complex relationship of the multi-resort complex and the various stakeholders. Internal and external customers have voiced their stance in imploring the hospitality and tourism industry to change and decrease their impact on the environment. The complexity for managers is appeasing stakeholders as well as the limiting the impact on the environment and maintaining or increasing profits, also known as the Triple-Bottom Line. The Triple-Bottom Line approach for managers must encompass the people, planet and profits. This serves to give support to the literature that posits that environmentally sensitive awareness is increasing and needs to be a focus for

management. This seems especially true for those hospitality and tourism segments that rely heavily on the environment to create the destination.

For academics, who are interested in both the hospitality and tourism industry and the environment, behavior scales to predict or determine behaviors has implications to transcend multiple disciplines and collaborations. Increasingly research is published with regard to the hospitality and tourism industry and the environment. These studies include numerical measurements of waste and savings (Dief and Font, 2010; Manaktola and Jauhari, 2007; Wolfe and Shanklin, 2001) as well as those that address perceptions of different stakeholders (Han, Hsu, Lee, and Sheu, 2011; Han and Kim, 2010; Dyer, et. al., 2007; Yang, et. al., 2004). Furthermore, the study of environmentally sensitive activities and programs continue to be of significance as more and more emphasis is created protecting the environment. The push from consumers, environmentalist, governments, and employees establishes the need to continue to research and develop knowledge of the impacts to the Triple-Bottom Line for hospitality and tourism industry segments.

Limitations

While every effort was taken to minimize the limitations of this research, limitations are inherent to the research process. As such, caution should be exercised in attempting to generalize and explain the results to other populations. The following section is offered to highlight the limitations in attempts to improve the research instrument for future researchers who might be inclined to build upon this work.

One limitation of the study lies within the sample size. This sample was limited to the stakeholders (employees, managers, and residents) within Sandestin Golf and Beach

Resort. This research does directly address stakeholders from other multi-resort complexes or individual resorts. Within the sample, stakeholders encompass a vast group and individuals of varied backgrounds. Some employees are seasonal, from other areas of the world and will only be around for one season. There are managers within the resort with a dual-role being both management and resident therefore intentions and attitude may be mixed. Residents are year-around, temporary, or seasonal. For these individuals, environmentally sensitive behavior may or may not impact their actions while they are within Sandestin.

The survey was delivered online, and in hard copy for some employees, and was consequently a self-administered study. Therefore attendant issues and ramifications inherent to the completion of the study must be acknowledged. Subjectivity, misunderstanding or confusion about the wording, and the lack of expert administration can potentially lead to response error or non-response altogether. Additionally the survey was lengthy with extensive demographics between the stakeholder groups, environmentally sensitive activities, importance and knowledge scales, the TpB questions and a section for additional comments. As individuals are bombarded daily with research inquiries, and endless performance/satisfaction surveys, combined with the length of the survey, a general fatigue should be considered in the percentages of responses and the quality. Although there is much support for electronically administered surveys (ease of use, data transfer accuracy, comfort of time from a personal space, etc.) there is no question that those individuals without easy access to the internet where excluded from the survey. Finally, a lack of comparability for other research encompassing the three stakeholder groups and a multi-resort complex limits any comparison of findings.

A final limitation to this research was the timing of the survey. Being administered in the final weeks of the busy summer season, should be acknowledged as a reason for non-response. Although the timing increased the potential reach of individuals, the increased business within the resort could have created a time, energy and availability issue for many individuals.

Future Research

The first step for research would be re-administering the survey in-person, with expert administration, to a captive audience. Although the timing for such would be vast, re-administering with the presence of an expert could increase response rates through timing and the availability to instruct and explain any misunderstandings in the survey instrument.

The next step in future research includes addressing the component of control beliefs. As this variable proved the least reliable, future research could include modifying this variable and testing the new model for goodness of fit to the theoretical model. Once confirmation is achieved, the next step would be to replicate the study applying it to other multi-resort complexes. A confirmed survey instrument that could be applied to other multi-resort complexes would represent a significant contribution to research in the area of environmentally sensitive behaviors in the hospitality and tourism industry. Understanding the behaviors of the various stakeholders within the multi-resort complex provides many benefits to: the environment, individuals, business, and ultimately the combination that culminates in the triple-bottom line.

Further research is implied in the results of the importance and knowledge matrix. The results from the scores indicate that individuals place a high level of importance on the environmentally sensitive activities but have a low level of knowledge of these activities. Future research would include educational components to increase the knowledge of individuals thereby increasing the likelihood of participation in the environmentally sensitive activities within Sandestin.

Organizational Citizenship Behavior (OCB) is has been defined as the job behaviors that are discretionary, promoting the effectiveness of the organization but not formally or directly recognized by the organizational system (Moorman and Blakely, 1995; Organ, 1990). One of the fundamental interests to OCB is the cause of the employee's decision to perform, not perform, OCB (Moorman and Blakely, 1995). This continually emerging area of study should also be considered for means of future research. The concept of organizational citizenship behavior is the willing to cooperate (Organ, 1990) where employees often support the interest of the group or organization. For future research, conducting future research using the concept of OCB, can offer greater insight into the motivation of stakeholders within the multi-resort complex. The OCB also offers the element of determining employee commit to environmentally sensitive behaviors implemented by the company.

Conclusion

This study has presented substantive analysis of the needs assessment for knowledge and importance and environmentally sensitive behaviors. The benefits derived from this research are varied and significant to the increasing interest for environmentally

sensitive behaviors. More importantly, the study contributes to the continually growing body of knowledge of hospitality and tourism and environmental concerns. As a destination dependent industry, the hospitality and tourism industry has and continues to make strides into becoming more aware of the environment and their impact on it. The study advances the understanding of to be found in green literature and ideas to continually support the advancement of environmentally sensitive behaviors within the industry.

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Appendix A

Interview Questions

1. **What does environmental behavior mean to you?**

   a. **How did you come to this understanding?**

   b. **What experiences have helped you form this definition?**

2. **How do you practice environmental behavior at work? at home?**

3. **How does Sandestin communicate their environmental objectives?**

4. **How is Sandestin becoming environmentally sensitive? Do you see the changes?**

5. **How do you motivate the (employees, managers, residents) to actively participate in environmentally positive behavior?**

6. **Where do opportunities exist for more positive environmental changes at Sandestin?**

7. **What motivates you to be environmentally sensitive?**

8. **Do you think being sensitive to the environment is necessary? Why?**

9. **Do you think enough is being done to become environmentally aware at Sandestin?**

10. **Are there opportunities to express your ideas on environmental changes within Sandestin?**

Appendix B

Environmentally Sensitive Behaviors at Sandestin

The purpose of this study is to understand the environmentally sensitive behaviors and practices of employees of Sandestin Golf and Beach Resort.

Please answer the following questions as they relate to your job at Sandestin.

1. **What is your gender?**

          O Male   O Female

2. **What is your age?**

   O under 21
   O 21 - 25
   O 26 - 34
   O 35 - 49
   O 50 - 65
   O over 65

3. **How long have you been an employee of Sandestin Golf and Beach Resort?**

   O Less than 1 year
   O 1 – 2 years
   O 3 – 5 years
   O over 5 years
   O Seasonal employee – If seasonal, how many seasons? _____

4. **What is your position at Sandestin Golf and Beach Resort?**

O Administrative
O Banquet Services
O Beach Services
O Food and Beverage
O Front Office
O Golf Operations
O Guest Services
O Housekeeping
O Maintenance
O Management
O Marina
O Recreation
O Reservations
O Retail
O Transportation
O Other: _____

5. **What is your race?**

O White/Caucasian
O African American
O Hispanic
O Asian
O American Indian
O Pacific Islander
O Other

6. **If of Hispanic, Latino or Spanish descent then from which country?**
   _____

7. What is your current status?

O   Single, never married
O   Married without children
O   Married with children
O   Divorced
O   Separated
O   Widowed
O   Living with partner

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

O   Did not complete high school
O   High School Diploma or GED
O   Some College but no degree
O   Associate Degree
O   Bachelor Degree
O   Graduate or Professional Degree
O   Other – Please explain_____

9. What is your annual income (including bonuses and commissions) in U.S. dollars for 2010?

O $0 - $14,999
O $15,000 - $19,999
O $20,000 - $24,999
O $25,000 - $29,999
O $30,000 - $34,999
O $35,000 - $49,999
O $50,000 - $74,999
O $75,000 - $99,999
O $100,000 – $149,999
O $150,000 plus

10. Please indicate whether you are:

O   Sandestin Employee - Hourly
O   Sandestin Employee - Management

11. How interested are you in activities that lessen Sandestin's impact on the environment?

Not at All Interested		Interested		Very Interested
O	O	O	O	O

12. How frequently do you participate in the following environmentally sensitive behaviors at Sandestin?

	Never		Sometimes		Always
recycling plastic	O	O	O	O	O
recycling glass	O	O	O	O	O
recycling paper	O	O	O	O	O
reducing energy use	O	O	O	O	O
reducing water use	O	O	O	O	O
reusing items	O	O	O	O	O
composting	O	O	O	O	O
water conservation	O	O	O	O	O

13. Please indicate how important each of the following environmentally sensitive programs at Sandestin are to you.

	Not at all Important				Extremely Important
cling facilities within Sandestin	O	O	O	O	O
Recycling programs within Sandestin	O	O	O	O	O
Solar Energy at Sandestin	O	O	O	O	O
Wind Energy at Sandestin	O	O	O	O	O
Environmental Committee at Sandestin	O	O	O	O	O
Water management within Sandestin	O	O	O	O	O
Pesticide use on the golf courses within Sandestin	O	O	O	O	O
Landscape materials used within Sandestin	O	O	O	O	O
Wildlife Conservation Programs within Sandestin	O	O	O	O	O
Transportation alternatives within Sandestin	O	O	O	O	O
Pesticide use in private yards within Sandestin	O	O	O	O	O

14. Please indicate how knowledgeable you are about each of the following environmentally sensitive programs at Sandestin.

	Not at all Knowledgeable				Extremely Knowledgeable
Recycling facilities within Sandestin	O	O	O	O	O
Recycling programs within Sandestin	O	O	O	O	O
Solar Energy in general	O	O	O	O	O
Wind Energy in general	O	O	O	O	O
Environmental Committee at Sandestin	O	O	O	O	O
Water management within Sandestin	O	O	O	O	O
Pesticide use on the golf courses within Sandestin	O	O	O	O	O
Landscape materials used within Sandestin	O	O	O	O	O
Wildlife Conservation Programs within Sandestin	O	O	O	O	O
Transportation alternatives within Sandestin	O	O	O	O	O
Pesticide use in private yards within Sandestin	O	O	O	O	O

15. Please indicate your level of agreement with the following belief statements:

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
Environmentally sensitive behaviors enable me to save money	O	O	O	O	O
Environmentally sensitive behaviors allow me to leave a better place for the future.	O	O	O	O	O
Environmentally sensitive behaviors enable me to be more socially responsible.	O	O	O	O	O
Environmentally sensitive behaviors enable me to protect mother nature.	O	O	O	O	O
Environmentally sensitive behaviors save time.	O	O	O	O	O
Environmentally sensitive behaviors save wildlife.	O	O	O	O	O

16. Please indicate your level of agreement with the following statements:

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
My friends think environmentally sensitive behaviors are important.	O	O	O	O	O
My family thinks environmentally sensitive behaviors are important.	O	O	O	O	O
My colleagues think environmentally sensitive behaviors are important.	O	O	O	O	O

17. Please indicate your level of agreement with the following statements:

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
Practicing environmentally sensitive behaviors is more expensive.	O	O	O	O	O
Environmentally sensitive behaviors are time consuming	O	O	O	O	O
Practicing environmentally sensitive behaviors saves the planet.	O	O	O	O	O
Environmentally sensitive behaviors will reduce the use of natural resources.	O	O	O	O	O
Environmentally sensitive behaviors should be required.	O	O	O	O	O

18. Please tell us about your attitude toward environmentally sensitive practices.

For me, the practice of environmentally sensitive behavior is:

Extremely Bad	1	2	3	4	5	Extremely Good
Extremely Useless	1	2	3	4	5	Extremely Useful
Extremely Unpleasant	1	2	3	4	5	Extremely Pleasant
Extremely Foolish	1	2	3	4	5	Extremely Wise
Extremely Harmful	1	2	3	4	5	Extremely Beneficial
Extremely Undesirable	1	2	3	4	5	Extremely Desirable
Extremely Negative	1	2	3	4	5	Extremely Positive

19. Please indicate your level of agreement with the following statements:

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
Environmental policy should be required.	O	O	O	O	O
I should take responsibility for the environment of the resort community.	O	O	O	O	O

20. Please share your level of agreement with the following statements:

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
Most people who are important to me think I should practice environmentally sensitive behaviors.	O	O	O	O	O
Most people who are important to me would want me to practice environmentally sensitive behaviors.	O	O	O	O	O
People whose opinions I value would prefer I practice environmentally sensitive behaviors.	O	O	O	O	O

21. Please share your level of agreement with the following statements:

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
Whether or not I practice environmentally sensitive behaviors at Sandestin is completely up to me.	O	O	O	O	O
I am confident that if I want to, I can practice environmentally sensitive behaviors at Sandestin.	O	O	O	O	O
I have the time, resources, and opportunities to practice environmentally sensitive behaviors at Sandestin.	O	O	O	O	O
It is easy for me to practice environmentally sensitive behaviors at Sandestin.	O	O	O	O	O

22. Please share your level of agreement with the following statements:

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
I am willing to practice environmentally sensitive behaviors at Sandestin.	O	O	O	O	O
I plan to practice environmentally sensitive behaviors Sandestin.	O	O	O	O	O
I will make an effort to practice environmentally sensitive behaviors Sandestin.	O	O	O	O	O
I am willing to follow guidelines of environmentally sensitive behaviors at Sandestin.	O	O	O	O	O

23. Please share your level of agreement with the following environmentally friendly activities:

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
I frequently use the recycling facilities that are available at Sandestin.	O	O	O	O	O
When purchasing items at Sandestin, I often check to see if the product uses recyclable materials.	O	O	O	O	O
I frequently buy products at Sandestin that are disposable.	O	O	O	O	O
I recycle everything I can at Sandestin.	O	O	O	O	O
I always practice environmentally sensitive behaviors at Sandestin.	O	O	O	O	O

THANK YOU for participating in our survey. In the section below, please let us know if there is anything else you would like us to know about your attitudes to environmentally sensitive behaviors and practices at Sandestin.

COLLEGE OF HUMAN SCIENCES

DEPARTMENT OF NUTRITION, DIETETICS,

AND HOSPITALITY MANAGEMENT

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN IRB APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)

INFORMED CONSENT
for a Research Study entitled
"Green Fun in the Sun: A case study of the environmental behaviors of stakeholders within Sandestin Golf and Beach Resort"

You are invited to participate in a research study to assess the level of commitment to environmental behavior of the Sandestin Golf and Beach Resort stakeholders. The participants for this research include residents, employees and managers within Sandestin Golf and Beach Resort. This population encompasses those people who will be directly involved in Sandestin becoming a green community through their daily lives. The study is being conducted by Megan K. Johnson under the direction of Dr. Alecia Douglas, Assistant Professor in the Auburn University Department of Nutrition, Dietetics and Hospitality Management. You were selected as a possible participant because you are an employee, manager and/or resident of Sandestin Golf and Beach Resort and are age 19 or older.
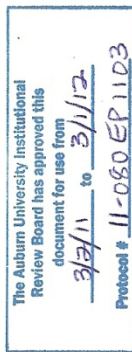
What will be involved if you participate? If you decide to participate in this research study, you will be interviewed in an audio-recorded, face-to-face interview. You will be asked to answer questions pertaining to conservation and greening practices in your daily activities as an employee, manager, or resident of Sandestin Golf and Beach Resort. Your total time commitment will be approximately 1 hour.

Participation in this research will not have any foreseeable risks or discomforts. This study is being conducted as independent research and only the final results will be shared.

Are there any benefits to yourself or others? If you participate in this study, you can expect to contribute knowledge to how environmental changes are addressed and implemented within Sandestin Golf and Beach Resort. This study will assist in a better understanding of how employees, managers, and residents understand the greening and conservation practices within Sandestin Golf and Beach Resort and their role in the goals of creating and maintaining a positive environmental community and future. These results will also assist other multi-resort complexes environmentally sensitive initiatives. We/I cannot promise you that you will receive any or all of the benefits described.

Participant's initials _____   Page 1 of 2

The Auburn University Institutional Review Board has approved this document for use from 3/2/11 to 3/1/12 Protocol # 11-060 EP 1103

If you change your mind about participating, you can withdraw at any time during the interview. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop the interview will not jeopardize your future relations with Sandestin Golf and Beach Resort, nor with Auburn University, the Department of Nutrition, Dietetics and Hospitality Management.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not collecting any identifiable data. As a further step to protect your identity as a participant, your name will not be associated with any responses you give in the interview. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, presented at a professional meeting, and/or used for further research.

At any time during this process the investigator reserves the right to terminate subject participation.

If you have questions about this study, *please ask them now or* contact Megan K. Johnson at (334) 332-4363 or Dr. Alecia Douglas at (334) 844-1434.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

_____   _____   *Megan K Johnso* 3/1/2011
Participant's signature   Date   Investigator obtaining consent   Date

                                            Megan K Johnson
_____   _____
Printed Name   Printed Name

                                            _____
                                            Co-Investigator   Date

                                            _____
                                            Printed Name

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for a Research Study entitled
"Green Fun in the Sun: A case study of the environmental behaviors of stakeholders within Sandestin Golf and Beach Resort"

You are invited to participate in a research study to assess the level of commitment to environmental behavior of the Sandestin Golf and Beach Resort stakeholders. The participants for this research include residents, employees and managers within Sandestin Golf and Beach Resort. This population encompasses those people who will be directly involved in Sandestin becoming a green community through their daily lives. The study is being conducted by Megan K. Johnson under the direction of Dr. Alecia Douglas, Assistant Professor in the Auburn University Department of Nutrition, Dietetics and Hospitality Management. You were selected as a possible participant because you are an employee, manager and/or resident of Sandestin Golf and Beach Resort and are age 19 or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to answer questions in an online survey. Your total time commitment will be approximately 30 minutes.

Participation in this research will not have any foreseeable risks or discomforts. This study is being conducted as independent research and only the final results will be shared.

Are there any benefits to yourself or others? If you participate in this study, you can expect to contribute knowledge to how environmental changes are addressed and implemented within Sandestin Golf and Beach Resort. This study will assist in a better understanding of how employees, managers, and residents understand the greening and conservation practices within Sandestin Golf and Beach Resort and their role in the goals of creating and maintaining a positive environmental community and future. These results will also assist other multi-resort complexes environmentally sensitive initiatives. We/I cannot promise you that you will receive any or all of the benefits described.

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If you change your mind about participating, you can withdraw at any time by closing your browser window. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Once you've submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate or to stop the survey will not jeopardize your future relations with Sandestin Golf and Beach Resort, nor with Auburn University, the Department of Nutrition, Dietetics and Hospitality Management.
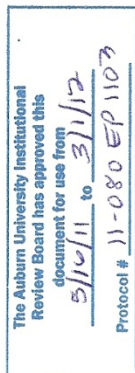
Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not collecting any identifiable data. As a further step to protect your identity as a participant, your name will not be associated with any responses you give in the survey. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, presented at a professional meeting, and/or used for further research.

If you have questions about this study, please contact Megan K. Johnson at (334) 332-4363 or Dr. Alecia Douglas at (334) 844-1434.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW.
YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

_____
Investigator   Date

_____
Co-Investigator   Date

The Auburn University Institutional Review Board has approved this document for use from 5/16/11 *to* 5/1/12. *Protocol #* 11-080 EP 1103

https://humsci.qualtrics.com/SE/?SID=SV_ewCIGrGG1uh0ZCc

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