

# Consumer Selection of Green Hotels: Role of Guilt and Environmentalism in Consumer Decision Making

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## Abstract

*The purpose of this study is to propose and test an extended consumer's generally acknowledged behavioral framework, the Theory of Planned Behavior (TPB), by incorporating the notion of anticipated guilt. More specifically, the behavioral influence of anticipated guilt is examined in the context of consumer environmental actions by investigating the mediating role of this emotion, between a consumer's attitudes (antedecedent by behavioral beliefs) and purchase intentions. The study was conducted through a web-based survey; four hundred and thirty eight surveys were collected. Structural equation modeling was used to test the proposed research model and two other competing models. Results of the data analysis showed that there was empirical support for the proposed model. To compare these competing models, the  $\chi^2$  difference tests were conducted. The partially mediated model appeared to fit the data best. The study findings*

*largely supported the relationships proposed to explain consumer behavioral intentions. More importantly, this study deepened the TPB model by establishing that the notion of anticipated guilt is an integral part of consumers' decision-making process and a significant partial mediator between consumers' attitudes and behavioral intentions. Managers should develop strategies aimed at encouraging consumers to act in an environmentally friendly manner by influencing consumers' emotional experiences, more specifically by applying anticipation of guilt. The manuscript demonstrates original work in the area of hospitality and environmentalism. The study extends the consumers' generally acknowledged behavioral framework by incorporating the notion of anticipated guilt and its positive impact in consumer environmental behavior.*

**Keywords:** Consumer, Environment, Decision Making, Guilt.

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## 1. Introduction

In an effort to gain physical comfort, achieve labor efficiency, improve existing modes of transportation, find pleasure and develop technology, human beings have overly exploited the finite resources. Some of the results of this unchecked resource exploitation have been detrimental to the environment; in some situations destroying whole ecosystem and even wiping out entire species of plants and/or animals. This realization has led to the development of several corrective actions, including numerous environmental awareness programs. The purpose of these programs is to encourage activities that will not only restore the earth but, also ensure its future habitability. Despite all these efforts, environmental destruction does not seem to be decelerating (Grant, 2000, p.5), and the causes of environmental degradation seem to be increasing as well ranging from individuals to large manufacturers. Unfortunately about 30 to 40 percent of environmental destruction originates at the consumer/household level (Grunert, 1993). Therefore, it is envisaged that improving environmental behavior or getting consumers to behave in a pro-environmental (PE) manner is likely to result in a great reduction in environmental degradation.

Behaving in a pro-environmental manner, though, has several implications. For example, pro-environmentalism calls for the consumer to deal with the imbalance between the individual cost and the collective benefits to the greater community or, simply stated, consumers must choose between their own personal interests and those of the society. Pro-environmental behaviors (PEBs) call for the individual to make sacrifices, because they are generally opposed to clearly perceptible and immediate consumer gratifications; being to the advantage of the population as a whole, their benefits appear distant in time and place (Vlek & Keren, 1992). For example, in the hotel industry, when hotel guests want their sheets and towels changed daily, and their room temperature controlled even when they are away, they are seeking a comfortable

environment. In the short run, this behavior does indeed provide the consumer with satisfaction, but in the long run it is likely to endanger and deplete the natural resources such as electricity, water and natural forests available for future generations and even contribute to environmental destruction. Consumers are therefore caught in a dilemma, having to choose between immediate gratifications versus acting in a manner considered pro-environmental for going some of their immediate comforts. Interestingly, consumers often elect to act in their own benefit at the expense of the greater society, as Van Vugt, Meertens and Van Lange (1995) have shown in their study of car use versus public transport. On the other hand, the extant literature documents the fact that a considerable number of consumers sacrifice not only their comfort but also their short-term advantage to act in a manner that is likely to benefit the greater society. These individuals engage in PEBs such as recycling (Guerin, Crete, & Mercier, 2001; Bratt, 1999), the consumption of organically produced foods (Sparks & Shepherd, 1992) etc. Additionally, the documented preference for locally grown foods and green restaurants and hotels, suggests that consumers are willing to sacrifice their short-term enjoyment for the benefit of the society. Engagement in PEBs is an indication that consumers have realized that their purchase and consumption patterns are likely to have an adverse effect on the environment (Laroche, Bergeron, & Babaro-Forleo, 2001). Consumers are therefore seeking environmentally friendly products. For example, Manaktola and Jauhari (2007) found that consumers are actively seeking hotels that follow eco-friendly practices. In response, the hospitality sector is developing more environmentally friendly establishments (Brown, 1996).

The purpose of this study, therefore, is to examine the motivation behind hospitality consumers' desire to engage in PEBs and, specifically, to provide some insight into the question: "What motivates consumers to engage in PEB by selecting green hotels where they are encouraged to minimize the use of the available resources?" Indeed, why would consumers elect to spend their nights and their

money at establishments whose conservation-oriented nature tends to encourage them to use the available resources sparingly, practice recycling and other saving techniques? Understanding what motivates consumers to select green hotels is important for both marketing and theoretical purposes. The hospitality industry has been selected for various reasons but, most of all, on account of its unique characteristic of “non-ownership” (Fitzsimmons & Fitzsimmons, 2008). Non-ownership implies that services cannot be transferred from the owner to the buyer/consumer. Thus, despite a purchase having occurred, there is no dual exchange of physical products; the physical aspects of the service are only experienced, and then left behind when the consumer departs. For example, the service provider assembles resources such as water, fuel and even space in order to cater to the needs of the consumer, but the consumer cannot take away any of these. One implication of non-ownership is the likelihood that the consumer will not practice PEB in their private sphere such as a hotel room. They are under no obligation to do so. In addition, in the lodging sector, customers stay overnight and are seek a home away from home, in search of comfort. Therefore one is bound to ask the question, why consumers would elect to spend a night at a hotel whose policy appears contrary to what they are seeking: comfort. If comfort is likely to be achieved through the utilization of the available resources, why would consumers elect to stay at properties that are likely to provide less comfort or subtly discourage the use of resources for which, in a real sense, the customer has paid for? Understanding these consumer practices is important for both theoretical and managerial purposes. “Green” hotels are environmentally-friendly properties whose managers are eager to institute programs that conserve water, save energy and reduce solid waste while saving money to help protect our one and only Earth (Green Hotels Association-GHA, 2010). Studies in the area of environmentalism are numerous. However, minimal work has been pursued relating emotions (guilt) and PEB. In addition, little research has focused on hotel customers’ decision-making processes when selecting green

hotels (Han, Hsu & Sheu, 2010). In this study, therefore, guilt is selected as the emotion of concern and is examined in the context of the Theory of Planned Behavior (TPB) (Ajzen, 1988, 1991), while seeking to provide an insight into the research question. Examining environmental behavior from the perspective of an emotion (guilt) gains support from several angles. Thøgersen (1996), for example, presented the view that environmentally relevant behavior should not be classified in the domain of economic behaviors because people perceive and evaluate it in terms of right and wrong, and therefore as having a moral implication. In addition, Stern, Dietz and Guagnano, (1995) suggested that environmentally relevant behavior is based on three value orientations: egoistic, biospheric and social altruistic. The social altruistic value orientation concerns the welfare of other people. This orientation seems to be closely related to Baumeister, Stillwell, and Heatherton’s (1994) conceptualization of guilt.

The specific objectives of this study are: (1) extend the generally accepted behavioral decision model of TPB by incorporating the notion of anticipated guilt. More specifically, the role of anticipated guilt is examined in the context of consumer social responsibility by investigating its mediating role between the consumer’s anticipated guilt and intention to select green hotels; and (2) test the proposed augmented model in which anticipated guilt has been incorporated.

## 2. Review of Literature

To provide insight into the research question, a model previously used to examine motives and which appears relevant in this context: Theory of Planned Behavior (TPB) (Ajzen, 1988, 1991; Ajzen & Madden, 1986) was employed here. The TPB selected as the underpinning model of the study. The model has been applied in examining and explaining several phenomena in social and health sciences, ranging from determinants of the use of table salt (Shepherd & Farleigh, 1986b), consumption of organic vegetables (Sparks & Shepherd, 1992),

intentions to eat genetically modified foods (GMF) (Cook, Kerr & Moore, 2002), and intentions to eat less chocolate and meat (Sparks, Conner, James, Shepherd, & Povey, 2001). In summary, research has successfully applied the model to predict intentions and behavior ranging from shoplifting (Tonglet, 2002) to attending a language rights rally (Louis, Taylor & Neal, 2004). According to Godin and Kok (1996), the model has provided a basis for the understanding of health behavior. In the hospitality research, the TPB has been used widely, particularly in the sustainability research, for example, Han, Hsu and Sheu (2010) just to mention.

### Theory of Planned Behavior

The strength of the theory of planned behavior (Ajzen, 1991; Ajzen & Madden, 1986) has been its application and usage in the prediction and explanation of a wide range of behaviors in terms of a limited set of constructs (attitude toward the behavior, subjective norm, perceived behavioral control, and behavioral intention). In this theory, salient beliefs are considered to play an important role. *Salient beliefs* are those that first come to mind when respondents are asked open-ended questions such as “What do you think would be the advantages for you of performing a mentioned or identified behavior X?” They are also referred to as *accessible* beliefs (Ajzen & Fishbein, 2000; Higgins, 1996). These salient beliefs are the antecedents of attitude, subjective norms as well as perceived behavioral control and are the corresponding beliefs that reflect the underlying cognitive structure of these constructs.

In summary, salient behavioral beliefs and outcome evaluations (beliefs about the consequences of performing the behavior) are held to determine attitude toward the behavior. Salient normative beliefs and motivation to comply (beliefs about the views of significant others) are held to determine the subjective norm. Salient control beliefs and power to control (beliefs about factors that may facilitate or impede performance of the behavior) are assumed to determine perceived behavioral

control. Therefore, it is reasonable to hypothesize that:

- H<sub>1</sub>: Salient beliefs are the determinants of the constructs of theory of planned behavior.
- H<sub>1a</sub>: Salient behavioral beliefs and outcome evaluations (beliefs about the consequences of performing the behavior) are held to determine attitude toward the behavior
- H<sub>1b</sub>: Salient normative beliefs and motivations to comply (beliefs about the views of significant others) are held to determine subjective norms.
- H<sub>1c</sub>: Salient control beliefs and power of control (beliefs about factors that facilitate or impede performance of behavior) are assumed to determine perceived behavioral control.

### Antecedents of Intentions

In the TPB, it is suggested that behavioral intention is the best predictor of future behavior, and that intention is determined by three components: subjective norms (SN), attitude (ATT) and perceived behavioral control (PBC). The attitude towards a behavior or the global evaluation of engaging in a particular behavior is an important antecedent to intention and therefore to behavior itself. Several studies based on the TPB have documented the role of attitude on intentions (for a detailed review, see Ajzen, 1991; Eagly & Chaiken, 1993). Attitude is described as the “degree to which a person has favorable or unfavorable evaluation or appraisal of the behavior in question” (Ajzen, 1991, p.188). Attitude is a function of salient beliefs and the evaluation of the significance of the consequences. Attitudes are learned in that over time, an individual begins to understand that a particular behavior will elicit a given reaction. According to (Ajzen, 1991) the relationship between attitude and the likelihood of engaging in a given behavior is positive. It is predicted that since pro-environmental behavior is socially encourage, there is a positive and significant relationship among consumer attitude toward the behavior and the intention

to engage in a given behavior – in this study, the selection of green hotels. Therefore we hypothesize that:

H<sub>2</sub>: There is a positive relationship between the antecedents of planned behavior and the selection intention of green hotels.

H<sub>2a</sub>: There is a positive relationship between attitudes and selection intention of green hotels.

Subjective norms, whether people important to the individual think they should engage in the behavior or not, is another cognitive determinant of intention. According to Kelman (1974), subjective norms can be equated with what is referred to in the influence literature as compliance. Bagozzi, Bergami, and Leone (2003), stated that subjective norms and attitude provide a reason to act and not the motivation. This variable of the TPB captures the interpersonal aspect of behavior and does reflect the need for approval. Subjective norms therefore depict the perceived social pressure to engage in a given behavior (Ajzen, 1991, p.188). Thus, it is the opinion of others that are close or important to the individual that influence their decision including relatives, co-workers, friends, and colleagues (Ajzen, 1991). Subjective norms have also been described as “whether significant others will approve or not approve the behavior (Ajzen, 1991).” In this context, when significant others think it is important to stay at green hotels; the pressure exerted upon the individual is greater, and they attempt to decrease this pressure by complying or increasing their motivation to select a green hotel. It is therefore reasonable to predict that there exists a positive relationship between the level of influence of subjective norms and a consumer’s intention to select green hotels. The higher the need for acceptance by significant others, the more likely the consumer will comply by selecting a green hotel.

H<sub>2b</sub>: Positive relationship between subjective norms and selection intention of green hotels.

The perceived behavioral control is “the perceived ease or difficulty of engaging in, or

performing a particular behavior” (Ajzen, 1991, p.122). It is assumed that perceived behavioral control is determined by the total set of accessible control beliefs – how well one can control the factors that may facilitate or constrain the actions needed to deal with a specific situation. People’s intentions and behavior are influenced by their ability to control the resources required to engage in a particular behavior. In this study, PBC will refer to the perceived ability to select a green hotel, the availability of such accommodation, and the control of resources required to do so. It is therefore logical to hypothesize that there exists a positive and significant relationship between the PBC variables and intentions to select green hotels.

H<sub>2c</sub>: Positive relationship between perceived behavioral control and selection intention of green hotels.

Intentions to engage in a behavior are considered the most immediate and important predictor of performance. Intentions mediate the effects of attitudes, subjective norms and, in certain circumstances, PBC (Ajzen, 1991; Ajzen & Madden, 1986). In particular, Warshaw and Davis (1984) show that intentions are good predictors of behaviors in a variety of situations. Indeed, intentions have been shown to account for 20 to 40 percent of the variance in behavior (Conner & Armitage, 1998; Conner & Sparks, 1996; Godin & Kok, 1996; Randall & Wolff, 1994; Sheeran & Orbell, 1998). In their meta-analysis of TPB, Armitage and Conner (2001) revealed that PBC and intentions jointly accounted for 27 percent of the variance in behavior. These findings are consistent with Ajzen’s (1991) estimation of 25 to 30 percent variance. In this case, the higher the intentions, the higher the probability of the consumer actually engaging in the behavior of selecting a green hotel.

Several meta-analyses (Sheeran & Taylor, 1999; Shepherd, Hartwick & Warshaw, 1988) have found that attitude and subjective norms account for 30 to 46 percent of the variance in behavioral intentions. When attitudes, subjective norms and PBC are considered

together, they explained variance in intentions of 40 to 50 percent (Ajzen, 1991; Conner & Armitage, 1998; Sheeran & Taylor, 1999). Studies have revealed that PBC contributes a 5 to 14 percent increment in the variance in intentions over and above the effects of attitudes and subjective norms (Sheeran & Taylor, 1999; Sheeran, Trafimow, Finlay, & Norman, 2002), though this value varies for different intended behaviors (Sheeran et al., 1999).

The antecedent variables of the TPB explain up to 50 percent of the variance in intention. This is indeed a reasonable variance but, one can conclude equally that about 50 percent of the variance is not explained by the present variables of the TPB. Therefore the question remains, should we as the users of this theory remain content with this 50/50 explanation/deficiency? This study therefore seeks to examine environmental behavior by augmenting the TPB with the variable of anticipated guilt. It is envisaged that anticipated guilt should predict the variance in intentions significantly over and above the other three antecedents of intention (PBC, ATT and SN).

### **Conceptualization of Guilt and Anticipated Guilt**

Guilt has been described as: “a common form of emotional distress and a common factor in behavioral decisions” (Baumeister, Stillwell, & Heatherton, 1994, p.243). Feeling guilty has been associated with thoughts of wanting to make amends, wishing one had acted differently, and wanting to undo what has already been done (Lazarus, 1991). Guilt also occurs when individuals imagine doing something wrong that is going to have an adverse effect on someone who is either physically present or not (Lazarus, 1991). Guilt arises when there is a capacity to feel or anticipate the suffering and distress likely to be experienced by others (Baumeister et al., 1994) and self-attribution of the responsibility for their suffering (Hoffman, 1982).

The conceptualization of guilt has been controversial, examined as both an

intrapersonal and an interpersonal emotion. For example, Freud (1933/1964) treated guilt as the product of intrapsychic conflicts; Freud postulated that guilt was the weapon used by the superego to influence the ego’s decisions: “moral sense of guilt is the expression of the tension between the ego and the super-ego” (1933/1964, p.76). Freud later proposed that the operation of the superego involved generating feelings of guilt without regard to the external world (1933/1964, p.97).

Lewis (e.g. 1971, p.95) asserted that interpersonal factors and processes were irrelevant to guilt, stating “guilt is evoked only from within the self” (p. 85). Lewis (1971) emphasized that guilt does not even derive from an imaginary contact with another person. “The imagery of the self vis-a-vis the ‘other’ is absent in guilt” (Lewis, 1971, p.251). This analysis explicitly denies any significant role to interpersonal processes.

In contrast, contemporary theories of emotion define guilt as an interpersonal phenomenon, presenting guilt as a negative emotional state resulting from violating one’s internalized standards of proper behavior or when contemplating a future violation (Baumeister, Stillwell, & Heatherton, 1994). Specifically, guilt has been defined as “an individual’s unpleasant emotional state associated with possible objections to his or her actions, inaction, circumstances, or intentions.” (p.245). It is therefore reasonable to infer that whatever perspective one takes, the end result is that, guilt results in discomfort that individuals will seek to alleviate.

At least three primary types of guilt are proposed and discussed in the extant literature: reactive, anticipatory, and existential (Huhmann & Botherton, 1997). Reactive guilt occurs when one’s own standards of acceptable behavior are infringed or one’s own internal standards are violated (e.g. failing to point out that an item has been missed off the bill at a restaurant). Anticipatory guilt refers to guilt that is experienced when one considers going against one’s own standards of acceptable behavior (e.g. planning to call in to work sick when one is in

good health). This feeling may prevent the person from committing an act. Finally, existential guilt is experienced when one feels better off, or more fortunate than others, resulting in feelings of empathy (e.g. when seeing a homeless person). This latter type of guilt is similar to what Burnett and Lunsford (1994) refer to as social-responsibility guilt, whereby “guilt may result from not living up to one’s social obligations” (p. 41). This study focuses on the concept of anticipated guilt or the anticipatory nature of guilt.

Consumer guilt occurs at three levels: During purchasing (for example buying items and products that have a high potential to destroy the environment: see Rook, 1987) or splurging (this is a purchasing level guilt: see Pirisi, 1995). Guilt can also occur during the use of a product and even at the disposal stage (e.g. feeling guilty for disposing of batteries in a river). Guilt has been proposed as an important variable in rewards programs (Kivetz & Simonson, 2002) and even sales promotions (Strahilevitz & Myers, 1998). However, most research has focused on the consumer response to the needs of others by considering those needs when buying items (buying as a mechanism to escape the discomfort caused by the guilt).

Recent studies have differentiated between guilt and other negative emotions such as shame. Tangney and Dearing (2002) proposed that the difference lies in the generalization: guilt focuses on the act, while shame focuses on the individual. For example, guilt will suggest that “I did a bad thing”, whereas shame will make one feel that “I am a bad person.” Shame is generally destructive while guilt is generally constructive. When one is faced with guilt, it signifies that a good person has done a bad thing and there are plenty of ways to remedy this isolated act: apologize, make amends, reaffirm commitment to the relationship, or promise not to repeat the act. Shame, on the other hand, makes one feel that one is an innately bad person, and nothing can be done about it.

Guilt therefore prompts good deeds (Baumeister, Vohs, DeWall, and Zhang, 2007).

For example, when people are guilty, they apologize, indicating that they are taking responsibility for the action, and are therefore willing not to engage in such an act again. Apologies allow people to make amends through performing positive or good deeds. In the environmental context, we can therefore state that, when consumers feel they are guilty of engaging in an anti-environmental behavior, they are likely to apologize and make amends and will therefore be motivated to engage in PEBs. In this context, it is suggested that if a consumer contemplates staying at a non-green hotel, the anticipated guilt will make them alter their plan and engage in a more PEB by selecting a green hotel.

### **Anticipated Guilt**

Anticipated guilt falls within the group of emotions that are forward oriented in nature. The existing literature reveals that the effortful decision-making process by individuals/consumers not only involves emotions, but activates forward-looking emotional responses. According to Bagozzi et al. (2000), during the decision-making process, while the individuals/consumers examine their objectives, they also examine the possible outcomes associated with failure and success. The result of this consideration is an emotional reaction. These emotions elicited and activated in anticipation of an action are referred to as anticipated emotion since they are “forward looking” in nature (Bagozzi et al., 2000; Zeelenberg, 1999). Anticipated emotions have a significant influence on consumer decision-making (Zeelenberg, 1999).

Several researchers have encouraged incorporation of anticipated emotions into the decision-making inquiry. Sarin (1992), for example, stated that: “Psychological concerns such as anxiety, nervousness, regret, and fear play an enormous role in decision making. These concerns, though unaccounted for in the economics of decision, are real to a person and should be incorporated in the analyses” (p.145).

Research (see Bagozzi, Baumgartner, Pieters, &

Zeelenberg, 2000) has isolated the two functions of emotions: as a feedback mechanism, and as a motivational factor. The feedback function is also known as the informational function, while the motivational function encourages an individual to engage in a certain behavior/activity. Emotions provide feedback after engaging in a given behavior, while their motivational role comes into play when one is considering engaging in a given activity.

Lazarus (1991) suggested that the role of emotions as a feedback has been well established and accepted, but research into the role of anticipated emotions as a motivational factor remains in its infancy and needs further investigation. Several studies have examined the effects of anticipated affective reactions on behavior in the context of Ajzen's (1991) TPB. For example, Richard, Van der Pligt, and De Vries (1996) examined the influence of anticipated worry, tension and regret. As hypothesized, anticipated affective reactions were significant determinants of behavioral expectations for both refraining from sexual intercourse and using a condom. In separate studies, Richard, Van der Pligt, and De Vries (1996) as well as Parker, Manstead, and Stradling (1995), found that anticipated negative affect had a significant influence on intentions to commit driving violations, in addition to attitude, subjective norms, perceived behavioral control, and personal norms. Perugini and Bagozzi (2004) stated that empirical studies to date have only investigated the behavioral effects of anticipated positive and negative affect and regret, and that little is known about other negative emotions. Consequently, it is necessary to examine the effect of additional negative emotions such as guilt.

Given that guilt motivates people to engage in behaviors that alleviate such feelings, anticipated guilt has also been hypothesized to serve as a behavioral motivation. Okeefe (2002) proposed that if people can anticipate that failing to act will result in a feeling of guilt, they will then engage in activities that minimize the guilt. In line with Okeefe's (2002) proposal, this study predicts that the tendency for action associated with anticipated guilt is

similar to that of guilt. As people desire to avoid feeling guilty, they will take action to avoid it.

These studies discussed have been useful in contributing to the understanding of the role of anticipated emotion on decision-making in the context of attitude-theoretic models. A great proportion of these studies however, have treated anticipated emotion as a parallel to the other antecedents of intention. Thus, they have used anticipated emotions as an additional predictor of variance in the outcome variable, intention, thus broadening the theory of planned behavior.

The current literature on the role of anticipated emotion on intention remains contradictory. Richard, Vries, and van der Pligt, (1998), for example, found that the predictive ability of anticipated emotions on the outcome variable differed according to context; for example, these authors found that anticipated emotions do not always predict a significant percentage of variance in intention in the absence of attitude. Richard et al. (1998) then suggested that anticipated emotion and attitude should be treated as a one single latent variable with six indicators. But after examining this model, these authors combined these two variables and the resulting variable did not predict a significantly different variance in the outcome variable. They concluded that these two variables were independent. As a result of this observation, it is suggested that anticipated emotion (e.g. anticipated guilt) is a mechanism through which attitude influences intentions. This suggestion is supported by the findings of Baron (1992), who concluded that a significant relationship exists between anticipated emotion, attitude and outcome variables.

Following the above reasoning, it is reasonable to hypothesize that there should be a significant improvement in the predictive ability of TPB framework when the notion of anticipated guilt is introduced as a mediating variable between attitude and the intention to select green hotels. This suggests that consumers' intentions in situations involving environmental decision-making are influenced directly by attitude, subjective norms and perceived behavioral



control, as well as indirectly by attitude through anticipated guilt. It is therefore hypothesized that:

H<sub>3</sub>: The relationship between attitude and consumer green purchase intention is mediated by the emotion of anticipated guilt.

H<sub>4</sub>: Integrating the concept of guilt in the TPB will increase the variance explained in the consumer intention to select green hotels.

Following the theoretical foundation presented regarding guilt and TPB and the established relationship between PBC, ATT, SN and intentions, the current study incorporates the notion of guilt (anticipated guilt) within the general framework of TPB.

Several justifications exist for the augmentation of the TPB with the emotion-anticipated guilt. Augmenting the TPB is no new phenomenon, and is in line with the suggestions of TPB's proponents. For example, Eagly and Chaiken (1993 for review) suggested that the sufficiency of the TPB has received considerable attention, with suggestions that a number of additional constructs can be incorporated into the model to improve its performance. In addition, Kaiser, Huber and Bogner (2005) suggested that if the TPB is tested using reliable compound measures, an explanatory power greater than 50 percent and as high as 90 percent can be achieved. Following the suggestion of Kaiser and Gutscher (2003), the direct influence of the PBC on behavior was omitted in this study.

Ajzen (1991) described the model as open to further elaboration. Thus, besides the relationship and predictive ability of the model, Ajzen (1991) suggested that the TPB is open to further expansion provided that the supplementary concept captures a unique and significant proportion of the explained variance of intention/behavior.

The theory of planned behavior is in principle open to the inclusion of additional predictors if it can be shown that they can capture a significant proportion of variance in intention

or behaviors after the theory's current variables have been taken into account. (Ajzen, 1991, p.199).

Additionally, Wicker's (1969) findings, based on a review of research examining the relationship between attitude and behavior, revealed that attitudes perhaps do not predict intentions/behavior accurately. Since then, social scientists have endeavored to improve the predictive power of attitudes. For example, several variables have been added to the TPB model to increase its predictive power. Therefore augmentation of the TPB is an ongoing process and allows for the improvement of its predictive ability.

Also, the TPB has been considered too cognitive, neglecting the emotional aspect of behavior (See Loewenstein, 1996; Bagozzi, Gurhan-Canli, & Priester, 2009). Conner and Armitage (1998) noted that several authors have raised concern over the inability of the traditional TPB model to elicit the affective outcomes associated with the performance of a behavior (Manstead & Parker, 1995; Richard, et al., 1998), particularly where the consequences of the behavior are unpleasant or have negative outcomes.

Following the suggestions by Baumeister et al. (2007) and the establishment of theoretical and empirical findings that anticipated emotions predict action (Richard et al., 1996), anticipated guilt was deemed apt for augmenting the TPB. Thus, if confronted with a situation that calls for engagement in a questionable environmental behavior, consumers will anticipate the post-action guilt feelings and consider them when deciding whether or not to engage in the behavior under consideration. But rather than act as an independent variable, anticipated guilt will provide the mechanism through which consumer attitude influences the variance in intention to select green hotels.

The following augmented TPB model is proposed based on the hypotheses and discussion of the theoretical framework. This is the fully extended version of the TPB in the consumer selection of green hotels incorporating Eagly and Chaiken's (1993) suggestion as well as Kaiser and Gutscher's

(2003) proposal that the direct path between PBC and behaviors needs to be eliminated.

### 3. Methodology

#### Sample and Data Collection

The population for this study was the general US lodging customer. A web survey was used to collect data. Questionnaires were sent to 40,000 randomly selected US hotel customers through an online survey database administered through a large Midwestern Tourism Research Center. A description of the green hotel was provided. The general response rate for this database had been established at 1 to 2 percent (previous surveys utilizing this database have received similar response rates).

Four hundred and thirty eight (438) questionnaires were collected over 43 days. The returned questionnaires were screened for usability and to meet several assumptions and requirements of the structural equation modeling. A total of 406 usable responses were identified. Following the guidelines of Schreiber, Nora, Stage, Barlow and King, (2006), both nontechnical and technical issues expected to be reported in SEM or CFA article were observed.

Data collected were screened for any violation of the assumptions of the general linear models. No outliers were found. Several incomplete surveys and some incomplete data were detected and they were deleted. Returned questionnaires with severely missing data were also deleted. In the end, there were no missing data and 406 usable questionnaires were coded and inputted into the data analysis software, AMOS 21.

The sample size utilized was deemed sufficient. Schreiber et al. (2006) and Pohlmann (2004) presented that for one sample analysis, there is no exact rule for the number of participants needed: but 10 per estimated parameter appear to be the general consensus.

Indeed the appropriate sample sizes required for SEM techniques remain inconclusive, with

several researchers and authors proposing different numbers. Bollen (1989), for example, stated that: “though I know of no hard and fast rule, a useful suggestion is to have at least several cases per free parameter” (p.268).

Bentler (1989) suggested a 5:1 ratio of sample size to number of free parameters. In this study, the ratio of 15:1 was used. Indeed, Westland (2010) reported that sample sizes in several streams of SEM literature averaged only 50 percent of the minimum needed to draw the conclusions and that the overall, 80 percent of the research articles drew conclusions from insufficient samples. To alleviate this, Westland (2010) proposed method of calculating the sample size, which has been used for this study. Sample size was computed as a function of the ratio of indicator variables to latent variables (see Westland, 2010 for detailed discussions).

Stevens (2002) has also provided a good rule of thumb of 15 cases per predictor in standard ordinary least squares multiple regression analysis. Stevens (2002) suggested that since SEM is closely related to multiple regression in some respects, 15 cases per measured variable in SEM is not unreasonable. Bentler and Chou (1987) noted that researchers may go as low as five cases per parameter estimate in SEM analyses, but only if the data are perfectly well-behaved (i.e. normally distributed, with no missing data or outlying cases, etc.). More generally, Loehlin (1992) recommended collecting at least 100 cases, with 200 being better (if possible). Following these suggestions, the data and sample size were deemed apt for the study.

#### Instrument

A questionnaire was developed using a two-stage process guided by the TPB (Ajzen and Fishbein, 1980). The first stage consisted of developing an initial open-ended questionnaire to obtain the salient beliefs underlying the selection of green hotels. Utilizing seven open-ended questions, the participants were asked to list behavioral, normative, and control beliefs related to selection of green hotels. This

questionnaire was administered to travelers with characteristics similar to the target population. An online data collection procedure was utilized to target the population. The return rate after 14 days was very poor and low. Out of the 500 open ended questionnaires mailed, only twelve had been returned. Of the twelve, four were not complete. It was, therefore, decided that data for this initial stage shall be collected through face to face interviews. Frequent travelers were identified and invited to participate in the study. The interviews were conducted over a period of two weeks. A total of ten travelers were interviewed. Saturation (Strauss and Corbin, 1990) was attained by the sixth interview, but interviewing continued with a hope that new information would arise. Also, the interviews with the remaining travelers were already scheduled. Through the content analysis and inter-rater analysis, the items to be included in the final questionnaire were identified.

The final questionnaire used in this study consisted of five sections. The first was designed to measure the selection intention and the antecedent constructs of the TPB (attitude, perceived behavioral control and subjective norm). The second collected data on the augmented construct: anticipated guilt. The third section gathered demographic data. The fourth section examined the salient beliefs of the respondents. Other data gathered included the recent usage or selection of green hotels. For clarification purposes, a description of green hotels was provided to the respondents.

The questionnaire utilized existing validated items from several previously used scales (Ajzen 1991; Mathieson, 1991; Roseman. Et al., 1994; Tangey & Dearing, 2002). The wording of the items was modified where necessary to reflect the context of measurement. The Likert-like scales (e.g., *not at all–very much; very unlikely–very likely; strongly disagree–strongly agree; no control at all – totally in control*) were used to capture the consumer responses to the items of the constructs.

To measure *Selection Intention*, participants rated on an 7-point scale (1-*strongly disagree*, 7-

*strongly agree*; 1-*very unlikely*, 7-*very likely*) three items: “I intend to select a green hotel on my next trip”; “How likely is it that you will select a green hotel on your next trip?” and “If everything goes as I plan, I will select a green hotel on my next trip.” To examine *Attitude*, *Subjective Norms*, *Perceived Behavioral Control* Participants rated on a 7-point scale each of the items.

Anticipated guilt was measured by providing the respondents with a short scenario describing two hotels (“green” and “non-green”) then asking them to describe their feelings if they did not engage in a socially responsible behavior. Specifically, the respondents were asked to identify their feelings if they had not selected a green hotel over a non-green one. Five items were used to assess anticipated guilt. To avoid relying on the respondent’s verbal skills (cf: Tangey & Dearing, 2002), the phenomenological description or the respondent’s lived experience was used to assess guilt. The study adapted the items from Roseman et al. (1994) to measure guilt (see Appendix 2). Five items presented in a 7-point Likert scale ranging from 1 = *strongly disagree* to 7=*strongly agree* were used. These items tapped all the five experiential categories of emotions: feelings, thoughts, action tendencies, actions, and motivational goals. The original Roseman et al. (1994) guilt scale consists of ten items. But to avoid respondent fatigue, only five were utilized. The five items were deemed sufficient to capture the construct of guilt (see Table 1 for details).

#### 4. Data Analysis and Results

Data were analyzed using the SPSS 21 and AMOS 19 (IBM) to perform the multiple regression analyses and Confirmatory Factor Analysis (CFA). This was based on data from 406 respondents found in the general US travelers database. Maximum Likelihood estimation was used because the data was normally distributed. The data was collected from questions developed from a five-factor model of the augmented/mediated theory of planned behavior. The theoretical model is

presented in Figure 1. A five-factor model was hypothesized to be confirmed in the measurement portion of the model. The assumptions of multivariate normality and general linear models were evaluated through SPSS 19.0. Using the scatter plot output, no outliers were detected nor deleted from the data.

The validity of the model was assessed in a two-step procedure. First a measurement model of the constructs was tested for key validity dimensions (unidimensionality, convergent validity, reliability, and discriminant validity). Next, the hypothesized causal relationships were estimated in several structural path model relationships while investigating which model fitted the data best.

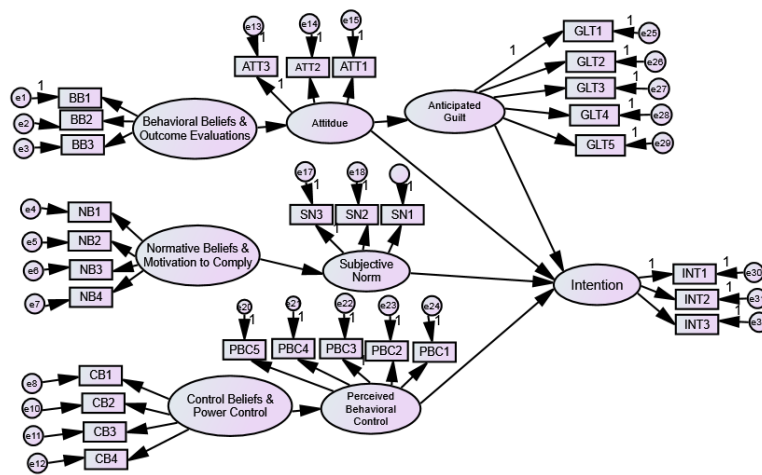
**Measurement Model**

The first step to the data analysis was to examine the measurement model. This procedure evaluates the unidimensionality and convergent validity of the measured constructs (i.e. PBC, SN, SI, A-Guilt and ATT): a maximum likelihood confirmatory factor analysis (CFA) was undertaken. After the iterations, a satisfactory five-factor model was obtained ( $\chi^2 = 235, p < 0.001$ ); which was significant. Other

fit indices can be used to examine the goodness of fit of the model. Therefore, the following indices were examined: CFI = .97; RMSEA = 0.075; Tucker Lewis index NNFI = 0.931; SRMR = 0.060; IFI = 0.951, all indicating a good model fit (Figure 2). The reliability of the constructs was measured by the composite reliability indicator of Bagozzi (1980). All factors exceeded the minimal value of 0.60 suggested by Bagozzi and Yi (1988), indicating the internal consistency of multiple indicators for each construct (see Table I). The Average Variance Extracted (AVE) was also computed. The minimal value of 0.5 recommended by Fornell and Larcker (1981) was exceeded, thus confirming the convergent validity of the instrument. The AVE value for each construct was greater than the squared correlation between the constructs, indicating that the instrument achieved the discriminant validity. This process addressed research hypothesis H<sub>1a</sub>, H<sub>1b</sub>, and H<sub>1c</sub>. Only the items loading on the latent variables with a factor of .7 (Hair, et al., 1998) and above were retained in the model (Figure 1).

**Structural Model**

To test the hypotheses H2, (specifically H<sub>2a</sub>, H<sub>2b</sub> and H<sub>2c</sub>), H3 and H4 and therefore the variance explained by guilt as a mediating variable in the augmented model, a structural equation



**Figure 1: Augmented Theory of Planned Behavior**

(Adapted from Praatkanis AR, Breckler, AG, eds. Attitude Structure and Function. Hillsdale, NJ: Lawrence Erlbaum: 1989: 241-274.)

**Table 1: Dimensions of the Measurement Model**

<b>Antecedents of Intention</b>	<b>Items</b>			<b>Comp. Reliability</b>	<b>AVE</b>
Behavioral Beliefs and Outcome	Environmental friendly products are more effective	BB1	0.70	.81	0.86
	I trust green products	BB2	0.83		
	Green products tend to be of better quality	BB3	0.80		
Evaluations Normative Beliefs and Motivation to Comply	Practicing green consumption can enhance my personal image.	BB4	0.77	.74	0.70
	My family thinks should practice green consumption.	NB1	0.70		
	I value the opinion and feeling of my family on green consumption.	NB2	0.83		
	I value the opinion of my friends regarding green consumption.	NB3	0.80		
	My friends think I should practice green consumption	NB4	0.77		
Control Beliefs and Power of Control	I have enough money to purchase environmental friendly products.	CB1	0.95	.96	.91
	I have sufficient time to purchase environmental friendly products.	CB2	0.87		
	I have sufficient resource to support green consumption.	CB3	0.91		
	I consider that I am capable of practicing green consumption	CB4	0.82		
<b>Antecedents of Intention</b>	<b>Items</b>			<b>Comp. Reliability</b>	<b>AVE</b>
Attitude (ATT)	Practicing green consumption is good	ATT1	0.89	.89	0.86
	Practicing green consumption is valuable	ATT2	0.85		
	Practicing green consumption is delightful.	ATT3	0.84		
Subjective Norm (SN) Perceived Behavioral Control (PBC)	Purchasing environmental friendly products is good for others	SN1	0.71	.74	0.71
	I purchase green products to ease the pressure of others	SN2	0.88		
	I purchase green products to benefit myself	SN3	0.55		
	I have much knowledge regarding green consumption.	PBC1	0.95	.91	.89
	I can make the decision to purchase green products by myself	PBC2	0.87		
I do participate in the decision-making process of purchasing	PBC3	0.91			
	I make independent decisions when purchasing green products.	PBC4	0.82		
	I am free to select green products when purchasing.	PBC5	0.89		
<b>Guilt</b>	<b>Items</b>			<b>Comp. Reliability</b>	<b>AVE</b>
Guilt	Feel tension	GLT1	0.82	0.86.	0.84
	Feel remorse	GLT2	0.93		
	Apologize	GLT3	0.89		
	I would think I was wrong	GLT4	0.81		
	I would feel like punishing myself	GLT5	0.73		
<b>Selection Intention</b>	<b>Items</b>			<b>Comp. Reliability</b>	<b>AVE</b>
Selection Intention	I intend to select a green hotel on my next trip	INT1	0.88	0.89	0.87
	Selection Likelihood	INT2	0.90		
	If all goes well, I will select a green on next trip	INT3	0.91		

model using AMOS was developed. Three competing models were tested: the baseline or generally acknowledged TPB model (Ajzen, 1991), with no anticipated guilt included, versus the two mediated models, the complete mediated model with only an indirect influence of guilt on selection intentions through anticipated guilt, and the partially mediated model with both direct and indirect influence. Hypotheses  $H_{2a, 2b \text{ and } 2c}$ ,  $H_3$ , and  $H_4$  were all supported.

In the partially mediated model (see Table 2 for path coefficients), a significant and positive path coefficient was found between anticipated guilt and intention (0.33,  $p < 0.01$ ). The paths from attitude to anticipated guilt (0.48,  $p < 0.05$ ) and attitude to intention (0.60,  $p < 0.05$ )

were both found to be significant as well. Subjective norms had a positive and significant influence on consumers' intention to select a green hotel (0.38,  $p < 0.01$ ). Furthermore, a positive path coefficient was found between perceived behavioral control and intentions (0.42,  $p < 0.01$ ). Following the procedure proposed by Baron and Kenny (1986), it is possible to that the data confirmed the partial mediating role of anticipated guilt within the relationships between attitude and intentions.

To compare these models, the  $\chi^2$  difference tests were conducted. The partially mediated model appeared to fit the data best (see Table 3). Additionally, the partially mediated model explained 6 percent more of the variance in selection intention of green hotels compared

**Table 2: Table of Parameters/Path Coefficients of the Partially Mediated Model**

	Attitude-Guilt	Guilt-Intentions	Attitude-Intention	SN-Intention	PBC-Intention
Parameters	0.48*	0.33**	0.60	0.38*	0.42**
Sig	P<.05	P<.01	P<.01	<.05	P<.01

to the base model. In the partially mediated model, significant path coefficients were found between attitude and selection intention. The following table provides the comparison statistics.

**5. Discussion**

The purpose of this study was to explore the question: "What motivates consumers to engage in pro-environmental behavior?" Specifically, the study examined the motivation for consumers' selection of green hotels. The theory

**Table 3: Comparison of the Three Models' Statistics**

	$\chi^2$	df	NFI	CFI	RMSEA	R <sup>2</sup>
Baseline Mode	180	342	0.917	0.947	0.087	0.55
Partially Mediated	242	349	0.910	0.949	0.076	0.61
Fully Mediated	252	348	0.906	0.945	0.078	0.58

of planned behavior, a well-established theory in the context of consumer behavior, was selected to provide the theoretical background to the study.

Despite its robustness and ability to not only predict human behavior but to also explain it, the TPB has been criticized in the current

literature on the grounds that it is a purely cognitive model and does not truly reflect the decision processes that lead to consumer and human behavior. Sutton (1997) in particular suggested that the TRA and TPB require further conceptualization, definition and additional explanatory factors. Attitudes and intentions can also be influenced by a variety of factors

that are not outlined in this theory. Specifically, TPB largely dependent on rational processes (Mullen, Hersey, & Iverson (1987) and does not allow explicitly for the impact of emotions that might be relevant in behaviors such as those concerned with conservation.

Following these observations, this research augmented the TPB model with an emotion (anticipated guilt) as the motivation behind consumers' selection of green hotels. The data largely supported the relationships assumed and suggested by the general framework of consumer behavioral action. Additionally, and more contributory, this research deepened the TPB model by establishing that the notion of anticipated guilt in an integral part of consumer decision making. The results indicated that there is a positive relationship between attitude and consumer selection intentions of green hotels. Furthermore, the results indicate that attitude has both a direct and indirect relationship with intentions. The indirect relationship is mediated by guilt. The relationship between guilt and selection intention is positive and significant as well.

All the paths in the augmented model were both positive and significant, further confirming that the model explains consumer selection intentions properly. These findings are consistent with extant literature that applies the TPB (Ajzen, 1991). The present study, though, includes an exploration of the role of emotion in consumer intentions. The results reveal that, in situations where consumers foresee a sense of guilt after their actions, they are likely to elect to engage in different, socially responsible behavior. These results provide some insight into the research question.

This study indeed supported the proposed relationship between emotion and behavioral intention in a situation that involves the selection of green hotels. Thus, anticipated negative emotion or anticipated guilt was demonstrated to be a core part of the consumer decision-making process. This supports the proposition that emotions have a significant influence on consumers' decisions. Specifically, the mediating influence of anticipated guilt is established by this study. Thus, when

consumers have to engage in an action related to social responsibility, such as the selection of green over non-green hotels, attitude becomes a significant influence on intention, not only directly but through an indirect emotional mechanism as well: anticipated guilt. This finding supports the suggestion that decision-making involves an irrational perspective. Several authors (De Sousa, 2002; Wegner, 1999, 2002) have proposed and documented the significance of emotion in the decision-making process. Even though the results have tended to be inconclusive, there is mounting evidence that emotions are important aspect of decision-making. Loewenstein (1996), for example, states that, besides the cognitive aspect, visceral states, emotions and cravings can have a disproportionate effect on behavior. Further, Bagozzi, Gurhan-Canli and Priester (2009) proposed that the emotional aspects of consumer behavior have been neglected in the TPB literature, although the connection between emotions and behavior is stronger and more direct than between attitude and behavior.

These results have important implications for influencing consumer decisions. Companies can develop strategies aimed at encouraging consumers to select green hotels by influencing consumer emotional experiences, specifically, influencing consumer's anticipated guilt (appeals where advertisers attempt to induce guilt in consumers do not select green hotels). Several authors have discussed the influence of guilt appeals in communication and behavioral motivation (Collee, et al., 2005; Coutler & Pinto, 1995; Lindsey, 2005). These findings provide significant bases and guidelines for developing appeals that can encourage consumers to select green hotels. For example, hotels can embed guilt-arousing messages on their websites in order to stimulate selection of green hotels over the non-green ones. The influence of anticipated guilt has been discussed by Coulter and Pinto (1995) and Lindsey (2005). They warn, however, that guilt appeals in advertising and communication with consumers should be employed with caution, emphasizing that only low to moderate guilt appeal messages should be used:

Blatant attempts to manipulate the feelings of guilt spur anger. This anger then becomes the mediator between attitudes, attribution and consumer purchase intention. (Coutler & Pinto, 1995, p.22)

In summary, the current study contributes to the stream of research related to consumer behavioral motivation in the green buying context. This study remains unique as well. Much of the extant literature has focused on the antecedents of intention; most of the studies have added antecedent variables. This study goes beyond the TPB or traditional antecedents-intentions model. This study signifies why it is important to understand reasons some consumers are capable of making certain purchase decisions. It is also important to recognize the role of attitude in shaping consumer intentions where there is need to select between actions that gratify individuals versus those that contribute to the better of the greater society. Also, the findings not only contribute to better understanding of guilt in the consumer decision domain, but also provide general implications for consumer behavior research in general. Specifically, this research focuses on the paradigm of discrete emotions. It is worth noting that previous research has focused on other discrete emotions such as happiness and regret (Simonson, 1992; Zeelberg and Beattie, 1997).

The limitations of this study provide an opportunity to revisit the conceptual distinction between experienced and anticipated emotions. It should be noted that affective forecasting is different from experienced affect. Anticipated emotions are cognitions about how one is likely to feel in the future. Additionally, it should be noted that it is possible consequence of experienced guilt (e.g., motivation to undo the error) may exert less influence when anticipated. Future research should delve into this area.

Another limitation concerns the fact that we did not assess how much guilt consumers the respondents anticipated. The next study should examine the effect of inducing different levels

of guilt and its influence on the consumer decision-making. The results of this study also provide several opportunities for extension. Anthropologist Ruth Benedict (1946) classifies cultures according to whether they use guilt or not to regulate the social activities of their members. This author posits that some Asian cultures are considered shame cultures whereas European and modern American cultures are considered to be guilt cultures. Future research might investigate cross-cultural differences anticipating guilt has on self-control. The results of our study, while intriguing, are limited by virtue of the fact that self-control was not assessed. A stronger test would examine whether the effects we observe in this study are reflected in the context of actual choice.

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