

## GREEN ATTITUDES AND BEHAVIOR GAP: OBSTRUCTION TO BE GREEN

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**Abstract:** *Understanding green consumption behavior is critical for any marketer and it is clear that there are many different motives drive for green consumer behavior. However, the higher levels of public awareness of environmental concerns do not directly translate into actual buying and consumption in regard to environmental friendly products and services. The emerging picture of green consumption behavior is a process that is strongly influenced by consumer attitudes, but demands for green products have been remained controversial, complex, and vary in different cultural contexts. This study examines the attitudes and obstacles of being green from the Sri Lankan consumers' perspective. The objective of the study is to investigate from the motivational aspect of how individual values, behavior specific beliefs and moral norms affect attitudes and intention towards green consumption behavior in a developing country perspective and to explore the some insights into why there is an attitude-behavior gap and examines the obstacles to being green in the Sri Lankan culture specific. Then the research is used 'interpretive mixed-method' research approach in order to strategically achieve this research objective. A survey strategy has been subjected to test attitude-behavior relationships and then the 'thematic analysis' followed by in-depth interviews to justify its significance in capturing uncovered reality. The findings emerged the several important themes from the study: green means practice of Buddhist Philosophy or religious teaching; green is government responsibility; green is doubt and not for everybody; personal commitments restrict to be green. This research would be directly significant and benefited to government policy designers and marketers in Sri Lanka and other Asian countries as well.*

**Key Words:** *green consumption behavior, green consumer, green attitudes, green intention, actual green behavior.*

### INTRODUCTION

Developing green production and consumption systems depend upon consumer willingness to engage in the environmental friendly or green consumer behavior. Most research have been attempted to identify characteristics of 'green consumer.' However, the emerging picture of green consumption is highly impacted by consumer values, norms and habits (Peattie, 2010). He is also mentioned that the green consumer behavior is also highly complex, divers and context depend. Therefore, today, it has become a further research opportunities to provide a

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multidisciplinary research agenda for all consumer societies in the world. In this context, Sri Lanka is aiming to become 'green economy' by the year 2020 and its some of the major activities are cleaner produced, eco-design and greening supply chain which expects to develop national eco-label program (Central Environmental Authority (CEA) environmental Agenda, 2014-2020).

Sri Lanka as one of the developing economies in Asia is given more priority to enhance the environmental friendly living standards with sustainable consumption practice. This creates an increasing demand for green stuffs to activate green behavior thereby creating need for consumers to provide environmental disclosure. Further, implementing Sri Lankan government new laws and regulations to identify as sustainable development propose such as, organic farming, new pollution controlling method, recyclable packaging materials, eco-testing for vehicles etc. Many Sri Lankan industries are also introduced ISO standards as voluntary action to create green management systems. Although many green marketing initiatives introduced by Sri Lanka it is still in the infant stage of implementing the green strategies and also consumer acceptance of green products and outcomes are still questionable. Lack of research carried out to investigate in Sri Lankan context. Therefore, Sri Lankans knowledge and attitudes towards consumption aspects of green products are essential research gap to introduce effective green marketing strategies for the country specific. Thus, the present focus of the research would be directly significant and benefited to government policy designers and marketers in Sri Lanka and other Asian countries as well.

Researchers argue that environmental awareness and concern have increased since the early 1970's; there still exists a large gap between peoples' attitudes and their green purchasing behavior (Jansson *et al.*, 2011; Kim & Chung, 2011; Barker & Ozaki, 2008; Mostafa, 2007; Garling *et al.*, 2003). Despite the motivation of consumers to act eco-friendly, much smaller percentage of people actually engages. Many academic works are developed with the intent to understand how can motivational drivers convert into actions, but definite results are still inconclusive and vary in different cultural contexts. Therefore, a more thorough understanding of the factors affecting the relationship between green attitude and behavior is important from the marketing perspective from culture specific.

Green product is one of the great solutions which reflect to prevent or reduce of harmful environmental impacts on consumer life, yet the higher level of environmental concerns does not necessarily translate into actual purchasing of green brands (Kilbourne & Pickett, 2008; Barker & Ozaki, 2008; Rios, Martinez, Moreno, & Soriano, 2006). Rex and Baumann (2007) noted that although a great amount of effort has been invested in making the green brands of more effective and efficient, their market share is still low. Some evidence suggested that consumers do not seem to show any consistent preferences for green brands in their purchasing behavior (Kilbourne & Pickett, 2008; Rios *et al.*, 2006); sales of the

environmentally friendly products have not reflected a progressive level of concern (Kilbourne & Pickett, 2008) and also weaker relationships than expected. Further, the literature demonstrates, consumers' self-reported behavior were highly concerned about environmental issues and had the intention to buy green brands, but were slow to translate such concerns into actual green behavior (Young, Hwang, McDonald, & Oates, 2009). Accordingly, numerous public opinion surveys indicate an increased public awareness of environmental concern, but there is doubt whether this awareness and concern is translated into the right behavior (Ottman, 1994; Peattie, 2010). These findings implied that there is a wider gap between consumer attitude and behavior (Bleak in 1999 describes it as a value-action gap). In fact, the green consumers and demands for green products (organic) have been also inconclusive and controversial. Consequently, there has been ongoing debate around the world on what possible factors effect on consumer green consumption behavior. Although there were plenty of empirical research conducted developed countries a few from in developing countries. Contemporary literature has been indicated, that need to embark on the comprehensive research on green consumer behavior from the developing country perspective (Peattie, 2010). *Thus, the objective of this research paper is to identify the major explanatory factors/drivers in VBN theory for the attitude-behavior gap analysis and to examine how these drivers impact of the green purchase intention and actual green behavior in Sri Lanka.* Accordingly, the following specific research questions are addressed to achieve the main research objective; 1) What is the present extent of consumer's green/environmental value orientations (e.g., egoistic, social-altruistic, biospheric values), green beliefs (e.g., inward and outward beliefs / awareness consequences and responsibility of environment) and green norms as attitudinal components? 2) Does consumer's green values, beliefs norms and intention consequence leads to actual green behavior? If not, why? Therefore, the following section attempts to describe the appropriate underpinning literature, in order to provide a theoretical framework for the research.

## **LITERATURE REVIEW**

In theoretical literature, it has always been emphasized that people's behavior can be predicted by their attitudes. People's attitudes regarding the green values, beliefs and norms of the different aspects of the full cycle of environmentally friendly purchasing, using and disposing behavior have become an important consideration in consumer decision making. Hence, people's behavior that is undertaken with a chain of attitudinal components to change or protect the environmentally responsible consumption behavior. Many social psychological theories and frameworks have been developed to explain the gap between consumer attitude and behavior, i.e. Ajzen's (1991) Theory of Planned behavior; Ajzen & Fishbein (1980) Theory of Reasoned Action (TRA); Schwartz's (1992) Value Theory & his (1997) Norm-Activation Theory; Stern's (2000) Value-Belief-Norm (VBN) Theory;

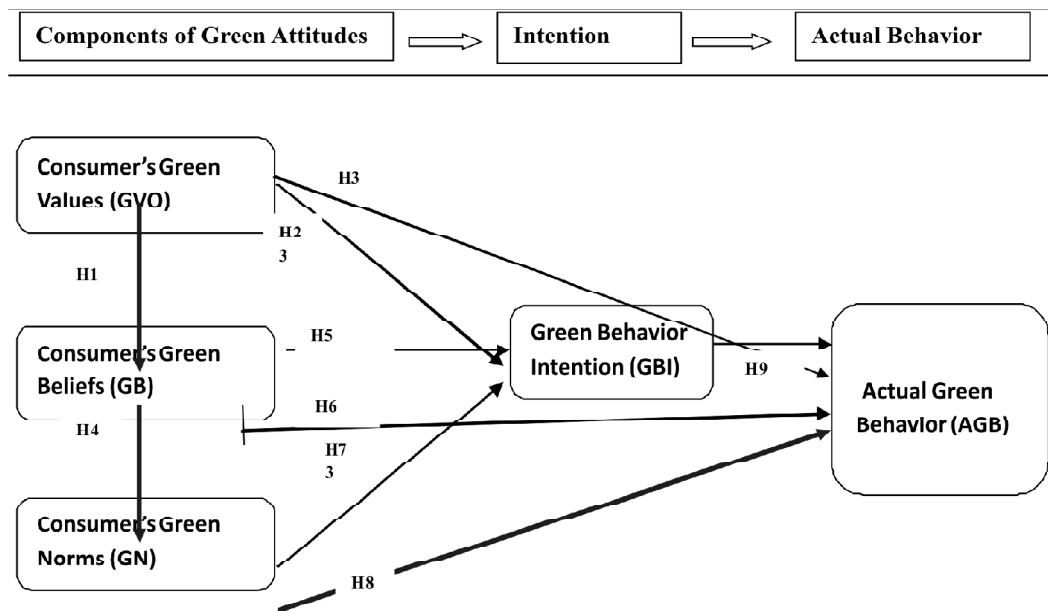
These models explain the intent and impact on the antecedents (i.e. value, attitude, beliefs and norms) of the green consumer behavioral intention towards the actual green behavior. In this has been referred values, beliefs and norms (Stern, 2000) as attitude formation factors and intention (Ajzen, 1991) toward behavior.

The notion of green consumer behavior has been applied quite interchangeably, such as “ethical or moral consumption”, “social responsible buying behavior”, “pro-environmental behavior” and “sustainability consumption”. In turn, the nature of the green consumer behavior and the motivations underlying it are quite different from the general or most other types consumer behavior (for e.g., direct or purchasing behavior and indirect or post consumption behavior). It has been also so difficult to understand and predict green behavior because the nature of the benefits of green consumer/pro-environmental behavior and their assessment relative to their costs may be different from those of other consumer behaviors. Hence, the benefits that add from green consumer behavior are future oriented and unlikely to benefit directly the person performing the behavior. It is likely that the fundamental concepts that relate to people’s attitudes about their ability to influence future outcomes and their desire to provide benefits for others may influence pro-environmental attitudes and behaviors (Thøgersen, 2000; McCarty & Shrum, 2001). It is worth taking into account that green consumer behavior differs from the general consumer behavior in the level of commitment, which is an expression of taking an ideological standpoint on consumption (Stern 2000). General consumer behavior most probably looks at personal benefits and costs while green consumer behavior is unlikely to deliver instant personal benefits or pleasure, but rather a future oriented outcomes (e.g., a cleaner environment) that often benefits society as a whole (McCarthy and Shrum, 2001).

Accordingly, consumer psychologists argue that individual’s values, beliefs and personal norms need to be considered when examining the influences that affect purchasing decision (Stern *et al.*, 1995, Stern, 2000, Nordlund & Gravill, 2002; Hoyer & MacInnis, 2004). Values are typically conceptualized as an important life goal which serves as “*guiding principles important in a person’s life*” (Rockeach, 1973, p. 40) and therefore, Schwartz (1992) in his Value Theory described consumer’s ecological values play a primary role in green behavior. Furthermore, the VBN Theory explains that the causal sequence proceeds beginning with the values levels, proceeding to general beliefs, specific beliefs to personal norm and ending with different behaviors. As such, Stern (2000) in his VBN theory further implies that values affect people’s beliefs, which then have an influence on personal norms that lead to consumers’ pro-environmental behaviors. The VBN theory further, argues that ‘personal norms’ are as key determinant that bridges the attitude-behavior gap and personal norms as moral obligation go beyond the behavioral intention and activate the actual behavior. However, most of the empirical studies used the “Theory of Planned Behavior” (Ajzen, 1991) and the “Theory of Reason

Action” (Ajzen and Fishhbein, 1980) that conceptualizes intention as the most immediately relevant predictor of corresponding behavior. Therefore, this study addresses this deficiency by applying mainly ‘the VBN theory’ to examine consumer green attitude-behavior gap with modification of behavioral intention to develop the theoretical study framework (see Figure 1).

Figure 1: The Study Model



### HYPOTHESES DEVELOPMENT

The hypotheses of this study are derived based on the research objectives and the theoretical path is shown in proposed study model. Various studies have been demonstrated that the relationship between values, general & specific beliefs, intention and green/environmental significant behavior (Stern & Dietz, 1994; Karp 1996; Schultz & Zelezny, 1999; Stern *et al.*, 1999; McCarty & Shrum, 2001; Nordlund & Garvill, 2002, 2003; de Groot & Steg, 2008; Cherian & Jacob, 2012). Stern (2000) argues that attitudinal factors consisting of values-beliefs-norms have a causal relationship with environmental significant behaviors. Thus, values may be a good predictor to activate environmental beliefs toward green behavior intention and actual behavior. The study therefore, has proposed the following hypotheses;

- H1: Consumer's green values directly and positively associate with green beliefs.
- H2: Consumer's Green values directly and positively influence the green behavior intention.
- H3: Consumer's Green values directly and positively influence the actual green behavior.

Further, socio-psychologists argue that consumer's green/environmental beliefs have become effective contributors to activate green norms and to motivate consumers to engage in green behavior. According to the Stern (2000), beliefs have been conceptualized as individual's awareness of the environmental consequences (AC) of a certain behavior and ascription of responsibility (AR) to themselves for taking prevention actions, develop a pro-environmental norms which have a high potential to affect actual behavior. Research indicates that the environment has had an explicit impact on consumer behavior according to their environmental beliefs (D'Souza *et al.*, 2007), environmental consequences and ascription of responsibility were positively associated with green norms and green consumer behavior, e.g., recycling behavior (Guagnano *et al.*, 1995), willingness to reduce car use (Nordlund & Garvill, 2003). The study has proposed the following hypothesis to test the causal relationship between green beliefs and norms in hypothesis four.

Further, in theoretical literature, Consumer's green beliefs have become effective contributor to identify green behavior intention. For example, Ajzen & Fishbein (1980) in their Theory of Reasoned Action and Ajzen (1991) the Theory of Planned Behavior makes a direct relationship between belief and attitudinal behavior intention. Hence, research propose that fundamental beliefs people hold that pertain to their interaction with the world around them and with other people influence the formation of their beliefs about environmental issues and their propensity to engage in green/pro-environmental behavior (McCarty & Shrum, 1994; Stern & Dietz, 1994; Stern 2000; Nordlund & Garvill, 2002). Schlegelmich *et al.*, (1996) have investigated how environmental attitudes - deemed to stem from beliefs are formed. Some other findings reveal that consumers' pro environment beliefs were not translated in to action/behavior (Hume, 1991; Mandese, 1991). These empirical studies show inconclusive findings between beliefs and behavior in different context. However, consumer's beliefs may be a good predictor of attitudes toward green behavior and therefore the study proposed the following hypotheses;

H4: Consumer's green beliefs directly and positively associate with green norms.

H5: Consumer's Green beliefs directly and positively influence the green behavior intention.

H6: Consumer's Green beliefs directly and positively influence the actual green behavior.

Based on value theory (Schwartz, 1992), norm-activation theory (Schwartz, 1977), and the new ecological paradigm (Dunlap *et al.*, 2000), Stern (2000) argues that personal norms (PNs) are a key determinant that bridges the attitude behavior (value- action) gap as personal norms as a moral obligation go beyond the behavioral intention and activates the actual behavior. Research indicates that personal norms (Personal norms in attitude-behavior research cover person's feeling of moral/ethical obligation to green behavior) may be a good predictor for

green consumer behavior intention and actual behavior in many contexts. For example, PNs positively influence of purchasing of organic wine (Thogersen, 2002), environmentally friendly travel mode (Nordlund & Garvill, 2003), consuming healthy food (Van den Berg *et al.*, 2000). Thus, the study proposed the following hypotheses;

H7: Consumer's green norms directly and positively influence to green behavior intention.

H8: Consumer's green norms directly and positively influence to actual green behavior.

In consumer behavior literature, it has become very important to predict the actual purchase behavior of customers. However, due to the practical difficulty in measuring the actual behavior, the purchase intention has been used as the most immediate proxy to predict the actual behavior (Ajzen and Fishhbein, 1977; Ajzen and Fishhbein, 1980). Literature demonstrates a positive relationship between environmental purchase intention and behavior. Although above mentioned theories attempt to explain the gap between consumer's attitudes and behavior, still there is a doubt about the different empirical domain that these attitudes do not always results in actual behavior. For e.g., according to a survey by McKinsey (2007), 87% of people from various nations like Brazil, Canada, China, France, Germany, India, UK, and the USA have shown an interest in reducing their impact on the environment. However, he found that showing interest and actual behavior on the interest are two different deeds. This finding is proved by a BBC World (2009) survey that was conducted on a global scale, which showed that not a lot of people were actually doing something to move their lifestyle to a green lifestyle. Therefore the study proposed the following hypotheses;

H9: Sri Lankan consumers with a stronger green behavioral intention are positively influenced towards actual green behavior.

## **RESEARCH METHODOLOGY**

Research Philosophy of the study is based on neo-positivistic research tradition and interpretive '*mixed-method*' research approach is employed in order to strategically achieve this research objective. It has been conducted in two phases; the first stage used a large scale consumer survey (dominant quantitative methodology) followed by the second phase of qualitative in-depth interviews (less dominant qualitative). The survey sample was composed of 318 consumers in Colombo district who are main decision makers or buyers of household products attending the main supermarket chains in Sri Lanka. Self-administered questionnaire was used to collect the data. SPSS version 16.0 software package is used for descriptive statistics, while SmartPLS 2.0 package is used for Structural Equation Model (SEM). Basically, the SEM technique is applied to develop the measurement model, and establish causal relationships predicted in the research model and hypotheses testing. Principal components analyses and internal

reliability analyses were conducted in SPSS whilst confirmatory factor analyses were conducted in SmartPLS 2.0. Initially, the study was calculated Cronbach's Alpha Reliability ( $\pm$ ) to measure the internal consistency of the measurement scale before forwarded to the Confirmatory factor analysis (i.e. all study variables were high and well above the cut-off point of 0.70 (Hair *et al.* 1998) and the Kaiser-Meyer-Olkin (KMO) values for all constructs are reported to be above 0.5, fulfilling sample adequacy.

Then the study proceeded to use SmartPLS 2.0 package to test the model using Structural Equation Model (SEM) which is comprehensive approach to test hypotheses among observed and latent variables (Ringle *et al.*, 2005). PLS analysis does not require data to be multivariate normal (Fornell & Bookstein, 1982; Fornell & Robinson, 1983; Johansson & Yip, 1994) and PLS is most appropriate when sample sizes are small (Birkinshaw *et al.*, 1995; Fornell & Bookstein, 1982; Graham *et al.*, 1994). According to Fornell & Bookstein, (1982) PLS is far superior to traditional multiple regression, firstly because PLS combines regression model, path analysis and confirmatory factor analysis together whilst multiple regression requires a factor analysis to be conducted prior to the regression analysis. Secondly, the latter method does not consider the error associated with observed versus latent variables, where as in the former method the relationships between latent variables are analyzed through measurement model. Thirdly, the traditional multiple regression analysis computes statistics for validity and reliability separately whilst in the PLS these statistics are produced within the context of the measurement model. Thus the PLS is used in the study for data analysis in contrast to traditional multiple regression analysis due to its superiority as an analysis technique (Howell *et al.*, 2007).

Next, the in-depth interviews were conducted with 20 selected respondents from the same survey sample, where the respondents will ready to be engaged in interactive in-depth discussions about their free feeling to environmental friendly behavior in the real life context. Hence, these in-depth interviews and observations highlighted the uncovered realities in relation to green consumption behavior in Sri Lanka. In order to analyze the qualitative data, a thematic analysis was used and emerging themes will be identified green consumer behavior in Sri Lanka.

## RESULTS AND DISCUSSIONS

### Results

Table 1 provides summary of descriptive statistics of green consumer behavior constructs. It reveals that consumers attitudes ( $M=3.64$ ), all the attitudinal variables and green behavior intention ( $M= 3.37$ ) have moderated mean scores, but actual green consumption behavior ( $M= 2.59$ ) shows the least value of mean.



Next, this study is applied SamrtPLS to test the conceptual study model with hypotheses testing (Ringle *et al.*, 2005). The bootstrapping procedure in PLS graph was used to test the significance of the regression coefficients. Bootstrapping is a method for testing the reliability of the dataset and it is based on a random re-sampling of the original dataset to create new samples of the same size as the original dataset for the purpose of estimating the error of the estimated path coefficients (Chin, 1998). First a confirmatory factor analysis (CFA) in SEM was conducted to test the reliability and validity of the items used and then the study proceeded with the full structural model testing. The average variance extracted (AVE) by the construct representing its items was calculated to test the convergent validity and the discriminant validity of the measured constructs. The AVE represents the average squared loading (i.e. average communality) of the items representing a construct as obtained from the PLS analysis. In order for a measure to have acceptable convergent and discriminant validity, it should have an AVE greater than 0.5 and share more variance with its items than with other constructs in the model (Chin, 1998). The AVEs for the measured constructs are presented in Table 2 and show that the AVE was greater than 0.5 for all of the constructs, and therefore all of the constructs had acceptable convergent and discriminant validity.

**Table 1**  
**Summary of Descriptive Data Analysis**

<i>Dimension</i>	<i>Mean</i>	<i>Std. Deviation</i>
Total Green Attitude	<b>3.64</b>	<b>0.608</b>
Total Green Value	<b>3.41</b>	<b>0.509</b>
Egoistic Value	2.52	0.742
Altruistic Value	3.87	0.907
Biospheric Value	3.85	0.972
Total Green Beliefs	<b>3.8</b>	<b>0.791</b>
Inward Green Beliefs	3.65	0.792
Outward Green Beliefs	3.94	0.918
Total Green Norms	<b>3.72</b>	<b>0.776</b>
Personal Norms	3.78	0.782
Social Norms	3.66	0.847
Total Green Behavior Intention	<b>3.37</b>	<b>0.613</b>
Green Purchase Intention	3.53	0.702
General Green Behavior Intention	3.21	0.641
Total Actual Green Behavior*	<b>2.59</b>	<b>0.567</b>
Actual Green Purchasing Behavior	2.88	0.562
Actual General Green Behavior	3.02	0.721
Valid N (listwise)		318

*Note:* - 1- 5-point Likert scale was used. 1 = Strongly Disagree; 5 = Strongly Agree

\*- 1- 5-point scale was used to measure the respondent's level of agreement from the last year behavior: 1 = Never No; 5 = Yes, Regularly

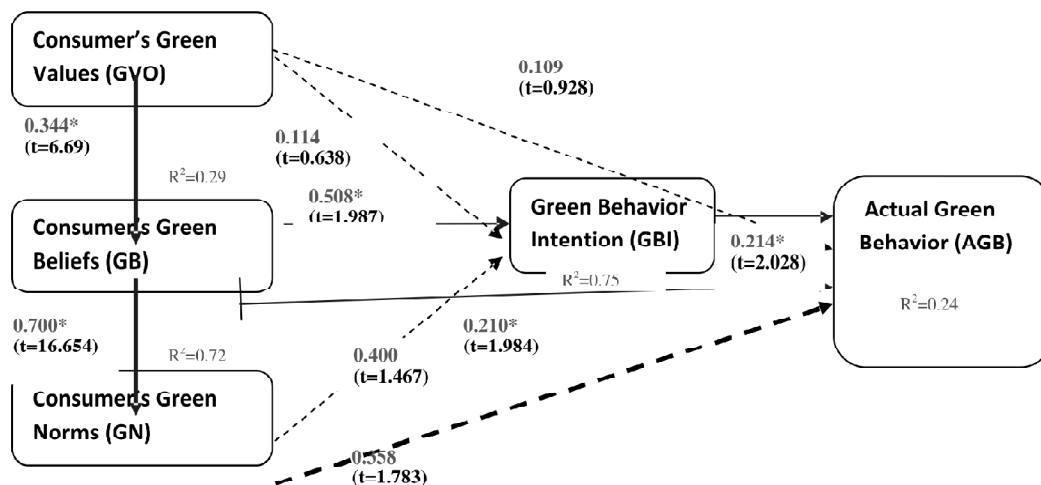
**Table 2**  
Results of Reliability & Validity Measures

Construct	AVE	Composite Reliability	Cronbachs Alpha
Actual Green Behavior (AGB)	0.5856	0.8486	0.7880
Green Belief (GB)	0.5349	0.9257	0.9107
Green Information Orientation (GIO)	0.5083	0.8603	0.8170
Green Behavior Intention (GBI)	0.5108	0.9209	0.9082
Green Norm (GN)	0.5721	0.9361	0.9245
Value Orientation Green (GVO)	0.5909	0.8905	0.8258

Source: Survey Data 2013

Structural equation model (SEM) using SmartPLS software package with samples to test the underlying dimensions of the five constructs, namely consumers green values, green beliefs, green norms, green behavior intention and self reported actual green behavior and PLS results were in Table 1 and graphically present it in Figure 2.

**Figure 2: Results from PLS Analysis**



The statistical summary of the results of the first structural model of PLS path modelling is depicted in Table 3 which includes the path coefficients and the t-statistics. The construct column represents the relationship between the independent variable and the dependent variable for each association. Further, R square value of the green behavior intention is 0.75. It demonstrates that 75% of the total variance explained by components of attitudes as independent variables. However, R square value of actual green behavior is appeared to be rather low

( $R^2=0.24$ ). It indicates that 24% of the total variance in actual green behavior is explained by independent variables of the model. Accordingly,  $R^2$  of green behavior intention ( $R^2=0.75$ ) for endogenous latent variables in the inner path model are described as substantial, but  $R^2$  of actual green behavior ( $R^2=0.24$ ) for endogenous latent variables in the path model are described as weak (Chin, 1998, p. 323). It can be concluded that although consumers' have high favorable attitude towards green behavioral intention, they would not act those in actual situations. Thus, the endogenous latent variable relies on several exogenous latent variables.

**Table 3**  
Summary of PLS Results with All Variables

<i>Path Models</i>	<i>Path Coefficient</i>	<i>t-Statistic</i>	<i>Significant at 0.05 Confidence level</i>
$GV \rightarrow GB$	0.344	6.689*	Significant
$GV \rightarrow GBI$	0.114	0.638	Not Significant
$GV \rightarrow AGB$	0.109	0.928	Not Significant
$GB \rightarrow GN$	0.700	16.654*	Significant
$GB \rightarrow GBI$	0.508	1.987*	Significant
$GB \rightarrow AGB$	0.210	1.984*	Significant
$GN \rightarrow GBI$	0.400	1.467	Not Significant
$GN \rightarrow AGB$	0.358	1.783**	Not Significant
$GBI \rightarrow AGB$	0.214	2.028*	Significant

Note: \* $p < 0.05$

\* Significant at 0.05 Confidence level

\*\* Significant at 0.10 Confidence level

Source: Survey Data 2013

Based on the structural equation model results in Table 3 and individual item loadings, the summary of the hypotheses testing results is given in Table 4.

## DISCUSSION OF FINDINGS AND QUALITATIVE INSIGHTS

According to the SEM output, It can be concluded that although consumers' have high favorable values, beliefs, norms towards green behavioral intention, they would not act those in actual situations ( $R^2=0.24$ ). Thus, the endogenous latent variable relies on several exogenous latent variables. Consumers' green beliefs seem to be played more substantial role on green behavioral intention and actual behavior.

Mean values and standard deviation was applied for obtaining descriptive analysis of each study construct. The results also demonstrate that the majority of Sri Lankan consumers have positive/favorable green attitudes ( $M=3.64$ ) followed by green values ( $M=3.41$ ), green beliefs ( $M=3.80$ ) and green norms ( $M=3.72$ ). However, within the components of green attitude egoistic values reports below

**Table 4**  
**Results of Hypotheses Testing**

<i>Hypotheses</i>	<i>Results (Accept/Reject)</i>
H1 Consumer's green values directly and positively associate with green beliefs.	Accepted
H2: Consumer's Green values directly and positively influence the green behavior intention.	Rejected
H3 Consumer's Green values directly and positively influence the actual green behavior.	Rejected
H4 Consumer's green beliefs directly and positively associate with green norms.	Accepted
H5 Consumer's Green beliefs directly and positively influence the green behavior intention.	Accepted
H6 Consumer's Green beliefs directly and positively influence the actual green behavior.	Accepted
H7 Consumer's green norms directly and positively influence to green behavior intention.	Rejected
H8 Consumer's green norms directly and positively influence to actual green behavior.	Rejected
H9 Sri Lankan consumers with a stronger green behavioural intention are positively influenced towards actual green behavior.	Accepted

mean score ( $M=2.52$ ) and all the other dimensions are above the average mean score ( $M=3.0$ ). A green attitude implies the highest mean value when compare with the other constructs. This seems to be that Sri Lankan consumers' favorable attitudes toward the environment may impact to their green behavior intention ( $M= 3.37$ ). Qualitative insights of in-depth interviews present some supportive facts about favorable green attitudes of consumers. Data gathered from in-depth interviews reflected the themes such as "*green is not a new concept to Sri Lanka; green means practice of Buddhist philosophy; green means Sri Lankan cultural heritage*". At this point, the respondents perceive that Buddhist cultural values and ancient history are the pre-requisites for their positive green attitudes.

However, majority of consumers attitudes have significant impact on green behavior intention ( $M= 3.37$ ), that would not lead on actual green consumption behavior ( $M= 2.59$ ). This is the least value of mean. All standard deviations reflect a moderate level of responses (a moderate level of data dispersion). There is a barrier to being green according to the qualitative findings. Although respondents carry intention of buying environmentally friendly products, the resistance that exist in the market place such as high price of green products, lack of money, time, trust, personal commitment, lack of space, in adequate government rules and regulations and lack of availability of green products have become key barriers to actual green behavior. These facts demonstrated under two themes generated by

qualitative data analysis such as “*green is doubt and not for everybody*” and “*Personal Commitment Restrict to be Green*”. Accordingly, insights of the in-depth interviews reveal many barriers between green attitudes and intention towards actual green behavior. It is clear that consumers in Sri Lanka have aware and conversant about the environment and their core values imply intention towards favorable values and norms to pro-social behavioral attitude. Research is also claimed that people in poorer countries care less about the environment and their environmental friendly behavior is more complicated (Diekmann & Franken, 1999; Kollmuss & Agyeman, 2002). Diekmann & Franzen (1999) used data from two different surveys and showed that when people from poorer countries pay less attention to the environmental issues (concern) and give more priority to economic factors.

Although attitude is viewed to be a good predictor of behavior according to the theory (i.e. the theory of planned behavior, the theory of reasoned action, and the VBN theory), the relationship between green attitude and actual green behavior has been a controversial one. That is, consumers’ positive attitudes about the environment do not necessarily translate in to actual green purchasing behavior (e.g., Gupta & Ogden, 2009; Pickett-Barker & Ozaki, 2008, Chatzidakis *et al.*, 2004). Then the descriptive findings of this study is also consistent with the above findings, i.e. the majority of Sri Lankan consumers have positive/favorable green attitudes (M=3.64) but these consumers have no significant impact on actual green consumption behavior (the least value of mean M= 2.59). Further, these findings are consistent with some more global findings. Compared with these findings, researchers observed that environmentally concerned (e.g. green attitude) consumers do not seem to show consistent preferences for green products in their purchasing behavior and sales of the environmentally friendly products have not reflected progressive level of concern (Kilbourne & Pickett (2008). Moreover, Chatzidakis *et al.*, (2004) mentioned that “from the 1990s consumers started to become more environmentally concerned consumers, however, the actual percentage of green consumers almost remains the same today at between 15%-20%. Carrington *et al.*, (2010) explains that consumers do not always “walk their talk” in the case of green and ethical consumerism.

## **CONCLUSION AND SUGESTIONS FOR FUTURE STUDIES**

In conclusion, it is clearly evident that Sri Lankan consumers have moderate level of values, beliefs and norms tendency towards green consumption behavioral intention to safe environment but those would not be adequately influence to actual green behavior. However, Sri Lankan consumers’ have strong beliefs about the green attitudes, but the responsibility (moral obligation) towards prevention action is low. Those ideas supported to the poor mean value (M=2.59) and low regression value ( $R^2=0.24$ ). of actual green consumption behavior in data analysis with supportive evidence from qualitative insights.

This research has been used survey strategy as dominant quantitative methodology over a less dominant qualitative methodology. Researches in social sciences are always restricted by various limitations such as nature and the complexity of social phenomena. This study is investigated green consumer behavior in general. Future research would be best conducted through long-term studies on a specific set of behaviors (i.e., food consumption behavior, energy consumption behavior) that have high environmental impact.

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