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## RESEARCH ARTICLE

# EXTENDING THE THEORY OF PLANNED BEHAVIOR ON GREEN CONSUMER BEHAVIOR IN URBAN FAST-MOVING CONSUMER GOODS MARKET IN SRI LANKA

**\*Dinesh Hamangoda, Dr. Ajith Medis and Dr. Nalaka Wickramasinghe**

Faculty of Commerce and Management Studies, University of Kelaniya, Sri Lanka

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Green Purchase Intention, Green Purchase Behavior, Green Functional Value, Eco-Literacy, Subjective norms, Eco-Trust, Willingness to pay a premium.

### ABSTRACT

**Background:** The contribution of Fast-Moving Consumer Goods (FMCG) to environmental depletion is surprisingly high. Green consumption of the Fast-Moving Consumer Goods (FMCG) sector would be an effective way to reduce the global environmental footprint. Studies related to FMCG's green consumer behavior in developing countries such as Sri Lanka are few and far between. **Objectives:** Considering the above, researchers in the study have tried to comprehend the factors affecting green consumerism in urban Sri Lankan in the FMCG sector. Hence the objective of this study is to scientifically research the factors affecting green consumer behavior and to promote the concept in developing nations. **Methods:** This research has applied the Theory of Planned Behavior (TPB) & Theory of Consumption Value. Researchers have used the value and attempted to introduce another factor affecting green behavior: Green Functional value, into the study. All the above variables were measured its appropriateness in influencing FMCG green purchase Intention and Behavior. A sum of 522 usable sets of responses was extracted with the help of a scientifically prepared questionnaire using a Proportionate stratified random sampling approach. SEM (Structured Equation Modelling) was applied to measure the strength of the relationships that existed among constructs. **Results:** The research findings reported that TBP supported the Green consumer purchase intention, which influenced the green buying behavior Subjective norms, which is a prominent construct of the TPB, was not supported as an influence on Green FMCG Buying intention. In contrast, new extensions like Eco literacy, Green functional value, WPP were supported with a statistical significance. It was proven that the addition of new variables improved the predicting power of green purchase intention and green purchase behavior in the TPB framework. Amongst others, WPP had the highest effect on the green buying intention with very high  $Q^2$  and  $f^2$  values. Related implications and a discussion are embedded at the end. **Conclusions:** Subjective norm's influence on green buying intention is not accepted in Sri Lankan FMCG green market. At the same time, Green trust also seems not influencing Sri Lankans' green buying intentions. The new dimension introduced, called green functional value, seems substantially influencing the green buying intention of Sri Lankan Green consumers. The willingness to pay a premium (WPP) has a very significant positive influence on Green Consumer Intention for FMCG products. The basic stem of TPB, their positive relationship between Green Purchase Intention and Green Purchase behavior, is significantly validated in this research.

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## INTRODUCTION

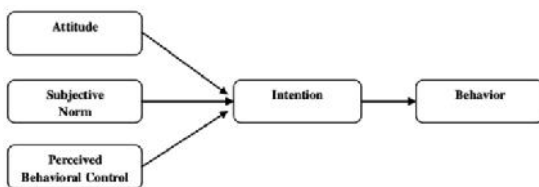
FMCG products basically low involvement products, with a high frequency of purchase and predominantly have low unit value. On the other hand, these products have relatively low levels of loyalty and comparatively biased for impulsive buying (Karthikeyan & Panchanatham, 2013; Landschützer et al., 2015; Patil, 2007). Nowadays, environmental integrity and ethics have been recognized as crucial issues among firms, governments, and individual consumers.

**\*Corresponding author: Dinesh Hamangoda,**  
Faculty of Commerce and Management Studies, University of Kelaniya, Sri Lanka.

The constant depletion of the natural environment has provoked the issue of shielding the sterile environment, which, on the other hand, leads to ethical consumption of goods recognized as green consumerism (Moisander, 2007). The growing attention on protecting the environment, environmental morals cum ethics have also transformed the buying preferences of consumers (Kim & Chung, 2011). Gradually the shoppers have started displaying ethical behavior by selecting green eco-friendly products (Nimse, Vijayan, Kumar, & Varadarajan, 2007) and liking eco-conscious companies (Han & Kim, 2010). Eco-friendly consumption is categorized as one of the broad segments of ethical consumption (Carrington, Neville, & Whitwell, 2010).

The concept of green consumerism has grown progressively in the developed countries, but with time this model is also finding its foothold in developing countries like India (Raghavan & Vahanti, 2009). Hence, studying and understanding the consumers' viewpoint on "Intention to buy" green products is very important for the marketing professionals (Chan & Lau, 2002) as it facilitates to devise proper strategies for creating markets for eco-friendly products. Understanding the factors of consumer environmentally friendly buying behavior may also help in removing the barriers to green consumption (Welsch & Kühling, 2009). In the Sri Lankan context, being a developing country, there are very few surveys that have concentrated on the consumer purchase behavior towards green products FMCG products. Bridging the above gap, the present study attempts to examine the perspective of eco-friendly purchasing behavior in the context of a developing land (Sri Lanka). This research study is one of the first attempts to identify the FMCG consumer green buying behavior applying the TPB model in the Sri Lankan context. This study has extended the TPB model by involving constructs i.e, Willingness to pay a premium, Green functional value, Green Trust, Eco literacy with the TPB for assessing its influence on consumer green purchase intention and behavior

**Theoretical framework and Literature review:** Theories established in behavioral psychology like Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1975) and Theory of Planned Behavior (TPB) (Ajzen, 1991) are being frequently used by many authors to understand and articulate the behavior among green consumers (Albayrak, Aksoy, & Caber, 2013).



Source: Ajzen and Fishbein, (1980)

Figure 1.

Thus, the author will be using the TPB as the base theory for this article. Once green consumer behavior is applied to the TPB, the Green Purchase Intention positively influences the Green purchase Behavior while the green purchase intention is positively influenced by Attitudes, subjective norms, and perceived behavioral controls. associated with the green purchase

**Attitudes affecting green purchase intention:** In the subject of eco-friendly consumer behavior, attitudes towards environmentally friendly goods, perceived and deemed as the extent to which performance of green sustainable buying behavior is or negatively or positively reviewed by consumers (K. Chen & Deng, 2016). The theory of planned behavior firmly suggests that attitude is a powerful influencing factor on behavioral intention (Ajzen, 1991). Irland (1993) discovered that environmental attitudes are the main element for creating intentions for sustainable green buying. Attitude positions as number one, establishing the intentions for green buying intentions (Tsen, Phang, Hasan, & Buncha, 2006).

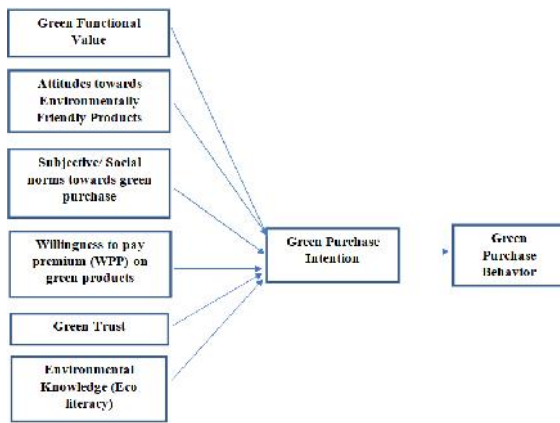
Based on the study completed by Mostafa (2007), the positive association between green buying intention and attitude toward green products has been observed in many cultures. Zhou, Thøgersen, Ruan, and Huang (2013), has emphasized attitude on environmentally friendly consumer product have a superior impact on purchase intention, especially, e.g., Organic food products. In contrary, some scholars have noticed that attitudes toward green products have no impact on green purchase intention (Ramayah, Lee, & Mohamad, 2010).

**Hypothesis 1 (H1):** Attitudes towards eco-friendly products has a positive and significant positive effect on green purchase intention of green environmentally friendly FMCG products

**Subjective Norms affecting green purchase intention:** Subjective norm is termed as the perceived social pressure to act or not to act specific behaviors (Han, Hsu, & Sheu, 2010). This will fundamentally encourage someone to perform in such a way as he is getting a "perceived social pressure "to do so. Han *et al.* (2010), discovered that social norms could greatly impact green consumption behavior. According to Wiriyapinit (2007), not even social norms but family norms would significantly influence buying behaviors. Most researchers who have researched green consumer purchase behavior have recurrently pointed out that positive thoughts (subjective norm) on green products of important people like friends, teachers, parents have great positive influence on buying intention of the green products (Teng, Wu, & Huang, 2014). An empirical study performed in India, which has a comparable retail environment, has revealed that subjective norms of green purchase have a very positive holding on the purchase intention of green ecologically friendly products (Yadav & Pathak, 2017).

**Hypothesis 2 (H2) -** Subjective norms towards green purchase has a positive and considerable positive impact on green buying intention of green environmentally friendly products

**Willingness to Pay a Premium as Perceived Behavioral Controls affecting green purchase intention:** Agreeing to Norman (2004), the perceived affordances were perceptual cues that consumers possessed and used to assess products before buying. In general, green goods will be priced much higher than the traditional non-green products due to the higher manufacturing cost encountered in the processes, raw material, and to a certain extent, the cost involved in getting a certified eco-label on the goods. Corresponding to Ling (2013) in the green buying context, Willingness to Pay Premium (WPP) is the major perceived behavioral factor for green purchasing intention.. Therefore, there we observe a gap in the TPB in the green buying context. Some authors have identified price as a reasonable obstacle to green consumption (Gleim, Smith, Andrews, & Cronin Jr, 2013; Nasir & Karakaya, 2014). A different study performed in the West Indies indicates that customers who are passionate about green consumer goods are insensitive to price, and it does not impact the purchases of green purchases (Cronin, Smith, Gleim, Ramirez, & Martinez, 2011; Grankvist & Biel, 2001). In the Indian subcontinent, the discoveries are mixed in nature: Corresponding to Jauhari and Manaktola (2007), customers who preferred eco-friendly hotels were unwilling to pay a premium price for that.



**Figure 2. Conceptual Framework Source: Designed by the author**

Due to the high production cost normally, green products are relatively high priced to traditional non-green products (Ling, 2013). Based on a survey conducted in the US, it was discovered that most of the time, purchasers are not willing to pay anything extra for an eco-friendly product (Choi & Parsa, 2007). Corresponding to Ling (2013), willingness to pay a premium was positively correlated to green buying intention.

**Hypothesis 3 (H3):** Willingness to pay a premium has a significant positive influence on green buying intention of green environmentally friendly products.

**Eco literacy affecting green purchase intention:** Eco-literacy or Ecological knowledge or is defined as one's capacity to identify ecological behaviors, signs, symbols, articulations, notions, etc. (Laroche, Bergeron, & Barbaro Forleo, 2001). Permitting to research performed using a massive sample of 1388 Rokicka (2002), Eco literacy has been recognized as the main factor stimulating pro-environment mindset and behaviors. Watson, MOORE, and MURPHY (1992), has proven via the survey he had conducted on water conservation that there is no correlation between ecological knowledge and pro-environment behavior and intention. Corresponding to Hill and Lynchehaun (2002), knowledge of the environment has a major impact on environmental problems and complications. When customers get more informed and educated on the environment, there will be a greater possibility of expanding the green purchase intention (Mahesh & Ganapathi, 2012).

**Hypothesis 4 (H4):** Eco Literacy has a positive and considerable positive influence on green purchase intention of green environmentally friendly products

**Trust affecting green purchase intention:** Trust is produced via three beliefs, Benevolence, ability, and integrity. Trust is an expectation held by one group that the pledge, word statement of an alternative party can be trusted upon (Schurr & Ozanne, 1985). Trust formed at customers heart it ought to be an important determinant of long-term consumer behavior relationship. (Lee, Park, & Han, 2011). Thus we can determine that trust influences consumer buying intentions. We have observed that many companies are exaggerating the performance of their eco-friendly products; hence some consumers tend to doubt and reluctant to trust such products any longer (Kalafatis, Pollard, East, & Tsogas, 1999). All these firmly indicate that producing firms

must keep their "Green Trust" at its best possible to generate green purchasing intention.

**Hypothesis 5 (H5):** Green Trust has an important positive influence on green purchase intention of green environmentally friendly products

**Theory of Consumption Value:** According to the theory or concept of consumption values Sheth, Newman, and Gross (1991), it is proposed that environmental attitude and sustainable consumption behavior are affected by functional, social, emotional, and epistemic consumption values through place identity. The theory of consumption values assumes that choice behavior is affected by multiple, independent consumption values, with each value contributing differentially to various choice situations. These values are derived from the individual's experience and interaction with the service or product and decide the intensity and direction of the relationship between the customer and the product (Woodall, 2003). Functional value is 'the perceived utility assimilated from an alternative's capacity for functional, physical or utilitarian performance' Sheth *et al.* (1991), customarily perceived as the primary driver of selection.

**Hypothesis 6 (H6):** Green Functional Value has a significant favorable influence on green purchase intention of green environmentally friendly products

#### **Green Purchase intention and Green Purchase Behavior**

As explained in the main base theory (the Theory of Planned Behavior), behavioral intention is the main factor affecting the behavior (Fishbein & Ajzen, 1980) and act as the main antecedent of the behavior (Ajzen, 2002). Corresponding to Ha and Janda (2012), the studies performed using energy-efficient products shown the predictiveness of the pro-environmental purchasing behavior via green buying intention. In another study performed using green consumer products, the same outcome has been discovered (Chan & Lau, 2002).

**Hypothesis 7 (H7):** Green purchase intention has a significant positive influence on green purchase behavior

## **RESEARCH METHODOLOGY**

**Research Philosophy and Methodology:** As the researchers found literature in sound quality to build hypothesis, the deductive (quantitative) method was mainly used. In this study, researchers are planning to use theoretical models and current literature to construct the conceptual model and research framework. Then planning to gather primary data in order to authenticate the applicability of the model for the context. Hence, the research domain will be Empirical. Further research method will be quantitative and correlational.

**Measurement Scales:** Each scale that investigators are planning to propose was extracted from the thorough literature survey conducted.

#### **Sample design and Sample size**

**Data collection:** As this research is empirical in nature, mainly primary data will be used to analyze the respective areas.

The key target audience of this survey is consumers who make purchase decisions of FMCG products for their households. Investigators used a structured questionnaire to gather the primary data.

**Sample pan:** The total population structure for this study will be the total number of urban households who purchase an FMCG product. It is a well-known truth that any urban household consumes at least one or a few FMCG products every month. Therefore key decision-makers (Unit of analysis) who take the buying decision on FMCG purchases in Sri Lankan Urban households will be the perfect target population for the research. In Sri Lanka, there are 905,000 urban households (Household Income and Expenditure Survey, Sri Lanka - 2016). Based on the in-depth study performed by the investigators, it was disclosed that only urban sector customers would have affordability, interest, basic knowledge on green FMCG goods and that's was the underpinning rationale behind choosing urban FMCG consumers.

The sample size would be 382 for a population of 750,000 respondents and 384 for any population of 1000,000 and above (Krejcie & Morgan, 1970). As the population of the survey is 905,000, it was agreed to maintain a sample size of 384 and will be extended to 522 in order to obtain a better output from the statistical assessment and considering the drop probability due to respondents' error. Based on the ratio of the district-wise urban population, the sample of 522 was apportioned into districts applying Proportionate Stratified Random Sampling.

## RESULTS

**Scale reliability:** Corresponding to Westergaard, Noble, and Walker (1989) Cronbach's alpha value range between 0.7 to 0.8 is identified as "acceptable" and the range from 0.8 – 0.9 as "good." The Cronbach's alpha values of the final study were retained from 0.701 to 0.880.

The composite reliability can range between 0 and 1, with greater values exhibiting higher stages of reliability. While values of 0.60 to 0.70 are sufficient and appropriate in quantitative research. The composite reliability of the final research was arrived with a range beginning from 0.819 to 0.912; therefore, it was decided that the composite reliability of all the scales of this particular research is extremely satisfactory and appropriate

### Convergent validity

**Indicator reliability (Outer loadings):** A common rule of thumb is that the standardized outer loadings should be 0.708 or higher. The According to the loading outcome sheet, all the items have achieved or gone beyond the threshold point of 0.708. The two items (environment attitude 1 and GFV 2,4 ) have almost very close to 0.7, but investigators did not want to remove them as the exclusion of any of these did not make a sizable upsurge Cronbach's alpha, Composite reliability, AVE of the variables.

**Average Variance Extracted (AVE):** As per above table AVE values are noticeably more threshold of 0.5 (Hair Jr, Sarstedt, Ringle, & Gudergan, 2017). Therefore, all variable has statistically established convergent validity

### Discriminant Validity

**Fornell-Larcker criterion:** Corresponding to the above results sheet, the square-root of the AVE values are more significant than any other square-root of the AVE values of other corresponding relationships; therefore, all variables have proven validated discriminant validity (Hair Jr et al., 2017)

**Cross-loadings:** All cross-loading indicators display high levels above the other corresponding loadings; all items and variables have attained statistically verified discriminant validity.

**(HTMT) heterotrait-monotrait Ratio:** Since all (HTMT) heterotrait-monotrait Ratio signifies below 0.90, all variables have appropriate discriminant validity (Henseler, Ringle, & Sarstedt, 2015)

### Evaluation of the Evaluation of the Structural Model

**Asses the structural model for Collinearity issues:** As VIF values are visibly under the threshold of 5. (Hair et al., 2017) model has no Collinearity issues

**Assess the significance and relevance of the structural model relationships -Size and significance of path coefficients:** As per the results only two paths have gone above the *P* value of 0.05 and not been statistically proven (Hair et al., 2017) and other five paths are statistically significant.

### Significance Effect Size ( $f^2$ values)

Rules for assessing  $f^2$  impact sizes are that values of 0.02, 0.15, and 0.35, respectively, correspond to small, medium, and larger effects (Cohen, 1988) of the independent latent constructs.  $f^2$  Effect size values of less than 0.02 indicate that there is no influence. (Benitez, Henseler, Castillo, & Schubert, 2020; Hair Jr et al., 2017). In our sample, the  $f^2$  values for the hypothesized relationships range from 0.252 to 0.362 (medium to large) and can be factually acceptable (Zhao, Lynch Jr, & Chen, 2010).

**Coefficients of determination ( $R^2$  values):** As per the Bootstrapping Results of Coefficient of determination /  $R^2$  Value, all  $R^2$  values are showing very strong explanatory powers and all statistically significant claiming *p* values below 0.05 (Hair Jr et al., 2017). This indicates that selected variables are appropriately described by the dependent constructs.

**Model Fit:** As SRMR values of both Saturated and Estimated models are less than 0.085 (Hair Jr et al., 2017) .It's assumed that the proposed model has a statistically validated model fit .

## DISCUSSION

Results clearly indicated that most of the core elements of the TPB is fully applicable in the green FMCG market in urban Sri Lanka. Even though most of the studies in the globe have proven the applicability of the subjective norm's influence on green buying intention is not accepted in Sri Lankan FMCG green market.

**Table 1. Summary of definitions of the constructs and references**

	Variable	Definition	Reference
1	Attitudes towards Environmentally Friendly Products	The degree to which performance of green purchase behavior is positively or negatively valued by individual	Chen and Deng, 2016
2	Subjective/ Social norms towards green purchase	Perceived social pressure coming via Positive perception of significant others like friends, family, peers and relatives toward purchasing green products.	Dean et al., 2012 Teng et al., 2014
3	Environmental Knowledge (Eco literacy)	One's ability to identify ecological symbols, concepts, behavior, etc.	Laroche et al. 2001
4	Green Trust	Willingness to depend on a product, service, or brand based on the belief or expectation resulting from its credibility, benevolence, and ability about its environmental performance	Chen, 2010
5	Willingness to pay premium (WPP) on green products	Clearance to pay even a cent more for an environmentally friendly product in contrast to a same product which is non-environmentally friendly	Developed by author using Chaudhari and Bisai, 2018
6	Green Purchase intention	Motivation to perform a behavior such as the willingness to perform and the intensity of effort an individual is ready to exert for green purchase	Chaudhari and Bisai, 2018
7	Green Purchase Behavior	Purchasing and consuming products that are benign toward the environment which can facilitate the long-term goal of protecting and preserving our natural habitat.	Mainieri et al., 1997
8	Green Functional Value	Perceived value of green goods and services to obtain utilitarian and/or physical performances, resulting from extra benefits such as price, quality and convenience.	Sangroya and Nayak. 2017

**Table 2. Summary of measurement scales used**

	Variable	No of Items	Proposed Measurement Scale	Cronbach's alpha
1	Attitudes towards Environmentally Friendly Products	4	Mamun et al. (2018)	0.92
2	Subjective/ Social norms towards green purchase	4	Chaudhary and Bisai (2018)	0.88
3	Environmental Knowledge (Eco literacy)	4	Mamun et al. (2018)	0.97
4	Green Trust	5	Chen and Chang (2012)	0.92
5	Green Purchase intention	5	Chaudhari and Bisai (2018)	0.92
6	Green Purchase Behavior	3	Moser (2015)	0.75
7	Willingness to pay a premium (WPP) on green products	3	Chaudhari and Bisai (2018)	0.89
8	Green Functional Value	4	Woo and Kim (2018)	0.92

At the same time, Green trust also seems not influencing Sri Lankans' green buying intentions. This novel factor called "Green Functional Value" is very rarely tested and discussed in green consumer behavior, especially on FMCG products, even in developed markets. The new dimension introduced, called green functional value, seems substantially influencing the green buying intention of Sri Lankan Green consumers. The willingness to pay a premium (WPP) has a very significant positive influence on Green Consumer Intention for FMCG products, and that indirectly indicates the relationship of price over green buying. The basic stem of

TPB, their positive relationship between Green Purchase Intention and Green Purchase behavior, is significantly validated in this research.

**Take-out for The Marketing community:** Marketers must develop marketing campaigns that will explore and expand the WPP factor, which has a very substantial positive bearing on FMCG green product purchase intention. They can innovate green campaigns, which will drive emotions on environmental protection, which eventually boosts their willingness to pay extra for green FMCG products even though they have enough financial strength to afford green products.





**Table 5. Average Variance Extracted (AVE) Results of the initial model**

Construct	Average Variance Extracted (AVE)	Thumb Rule (> 0.5)
Environment Attitude	0.575	Met
Environmental Knowledge	0.653	Met
Green Functional Value	0.522	Met
Green Purchase Behavior	0.676	Met
Green Purchase Intention	0.676	Met
Green Trust	0.606	Met
Subjective Norms	0.686	Met
WPP	0.751	Met

**Table 6. Fornell-Larcker criterion Results**

Variable	Environment Attitude	Environmental Knowledge	Green Functional Value	Green Purchase Behavior	Green Purchase Intention	Green Trust	Subjective Norms	WPP
Environment Attitude	0.758							
Environmental Knowledge	0.481	0.808						
Green Functional Value	0.262	0.318	0.722					
Green Purchase Behavior	0.298	0.406	0.369	0.822				
Green Purchase Intention	0.571	0.485	0.471	0.538	0.822			
Green Trust	0.290	0.331	0.579	0.234	0.316	0.779		
Subjective Norms	0.598	0.482	0.390	0.376	0.498	0.426	0.828	
WPP	0.504	0.423	0.465	0.398	0.679	0.339	0.461	0.867

**Table 7. Cross-Loading results sheet**

Item	Environment Attitude	Environmental Knowledge	Green Functional Value	Green Purchase Behavior	Green Purchase Intention	Green Trust	Subjective Norms	WPP
EnvironAttitude1_1	0.682	0.395	0.156	0.279	0.381	0.168	0.464	0.358
EnvironAttitude2_2	0.778	0.359	0.177	0.251	0.450	0.180	0.463	0.392
EnvironAttitude3_3	0.749	0.359	0.188	0.137	0.432	0.245	0.425	0.357
EnvironAttitude4_4	0.817	0.353	0.266	0.244	0.464	0.279	0.465	0.420
GFV1_21	0.289	0.336	0.797	0.350	0.474	0.387	0.355	0.488
GFV2_22	0.118	0.140	0.673	0.203	0.249	0.336	0.283	0.285
GFV3_23	0.129	0.228	0.735	0.235	0.260	0.497	0.263	0.262
GFV4_24	0.154	0.150	0.678	0.231	0.294	0.493	0.197	0.219
GPB1_30	0.217	0.314	0.215	0.767	0.433	0.118	0.288	0.286
GPB2_31	0.246	0.342	0.311	0.866	0.427	0.233	0.318	0.311
GPB3_32	0.270	0.344	0.379	0.830	0.463	0.225	0.321	0.378
GPI1_25	0.444	0.345	0.408	0.342	0.749	0.231	0.360	0.466
GPI2_26	0.518	0.420	0.330	0.421	0.848	0.268	0.415	0.555
GPI3_27	0.437	0.402	0.443	0.501	0.835	0.298	0.420	0.695
GPI4_28	0.484	0.384	0.368	0.419	0.853	0.261	0.415	0.534
GPI5_29	0.469	0.433	0.386	0.505	0.820	0.236	0.430	0.517
Knowledge1_9	0.441	0.868	0.325	0.352	0.451	0.287	0.431	0.412
Knowledge2_10	0.313	0.805	0.211	0.328	0.323	0.207	0.367	0.290
Knowledge3_11	0.394	0.746	0.218	0.304	0.382	0.298	0.364	0.306
SubjectiveNorms1_5	0.495	0.386	0.326	0.323	0.400	0.383	0.850	0.383
SubjectiveNorms2_6	0.496	0.427	0.359	0.371	0.421	0.352	0.883	0.409
SubjectiveNorms3_7	0.556	0.416	0.326	0.354	0.453	0.325	0.854	0.416
SubjectiveNorms4_8	0.422	0.364	0.277	0.182	0.369	0.357	0.716	0.309
Trust1_13	0.209	0.231	0.412	0.223	0.257	0.768	0.305	0.261
Trust2_14	0.274	0.307	0.447	0.238	0.307	0.839	0.380	0.307
Trust3_15	0.231	0.238	0.470	0.144	0.234	0.824	0.321	0.262
Trust4_16	0.146	0.212	0.436	0.168	0.165	0.706	0.329	0.214
Trust5_17	0.239	0.286	0.505	0.123	0.236	0.748	0.324	0.259
WPP1_18	0.424	0.352	0.417	0.337	0.529	0.259	0.386	0.863
WPP2_19	0.452	0.372	0.372	0.324	0.605	0.257	0.389	0.886
WPP3_20	0.433	0.374	0.421	0.370	0.624	0.359	0.420	0.851

**Table 8. HTMT Results**

Variable	Environment Attitude	Environmental Knowledge	Green Functional Value	Green Purchase Behavior	Green Purchase Intention	Green Trust	Subjective Norms	WPP
Environment Attitude								
Environmental Knowledge	0.642							
Green Functional Value	0.321	0.397						
Green Purchase Behavior	0.397	0.543	0.474					
Green Purchase Intention	0.703	0.592	0.554	0.651				
Green Trust	0.353	0.411	0.767	0.287	0.356			
Subjective Norms	0.751	0.609	0.486	0.464	0.575	0.509		
WPP	0.636	0.530	0.560	0.497	0.782	0.396	0.545	

**Table 9. Inner VIF values /Collinearity Results**

Variable	Environment Attitude	Environmental Knowledge	Green Functional Value	Green Purchase Behavior	Green Purchase Intention	Green Trust	Subjective Norms	WPP
Environment Attitude					1.833			
Environmental Knowledge					1.486			
Green Functional Value					1.740			
Green Purchase Behavior								
Green Purchase Intention				1.000				
Green Trust					1.633			
Subjective Norms					1.882			
WPP					1.655			

**Table 10. Path Coefficient Results**

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Threshold<0.05
Environment Attitude -> Green Purchase Intention	0.235	0.238	0.060	3.939	0.000	Met
Environmental Knowledge -> Green Purchase Intention	0.131	0.131	0.040	3.230	0.001	Met
Green Functional Value -> Green Purchase Intention	0.196	0.194	0.042	4.703	0.000	Met
Green Purchase Intention -> Green Purchase Behavior	0.538	0.539	0.039	13.932	0.000	Met
Green Trust -> Green Purchase Intention	-0.073	-0.070	0.038	1.908	0.056	Not Met
Subjective Norms -> Green Purchase Intention	0.059	0.060	0.047	1.271	0.204	Not Met
WPP -> Green Purchase Intention	0.412	0.408	0.049	8.424	0.000	Met

**Table 11. Effect Size Results**

Relationship	f <sup>2</sup> Values	Thumb Rule
Environment Attitude -> Green Purchase Intention	0.071	Sufficient
Environmental Knowledge -> Green Purchase Intention	0.027	Sufficient
Green Functional Value -> Green Purchase Intention	0.052	Sufficient
Green Purchase Intention -> Green Purchase Behavior	0.407	Sufficient
Green Trust -> Green Purchase Intention	0.008	NO
Subjective Norms -> Green Purchase Intention	0.004	NO
WPP -> Green Purchase Intention	0.242	Sufficient

**Table 12. Coefficients of determination (R<sup>2</sup> values) Results**

Dependent Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Threshold<0.05
Green Purchase Behavior	0.289	0.293	0.041	6.993	0.000	Met
Green Purchase Intention	0.576	0.585	0.037	15.729	0.000	Met

**Table 13. Model fit results**

Model Fit Measure	Saturated Model	Estimated Model
SRMR	0.062	0.065
d_ ULS	1.900	2.122
d_ G	0.601	0.616
Chi-Square	1857.083	1891.760
NFI	0.771	0.767

To drive the green functional value, marketing community must essentially highlight their perceived green utility values in their marketing programs as any consumer would like to have a tangible benefit. Most green marketers focus on leveraging social norms to induce green buying, but this research indicates that FMCG green products cannot be promoted via social norms or influence.

Any green marketer must include elements to enhance environmental knowledge in their marketing strategies, at least in the long run, to see sustainable positive growth because that triggers green buying intention. Direct trust-building activities are not prescribed via this model as that has no impact on green buying.



**Limitations and Future Research directions:** The study was done with the scope of FMCG products, and the outcome may vary for non FMCG products. The sample was developed with respondents from the Urban sector, and results may not be applicable for the whole of Sri Lanka. In most consumer behavior literature, Subjective norms support TPB but in the Sri Lankan Urban FMCG market, this was not statistically proven. Future research must be conducted to see the reason why the result is contradictory. Future academics must investigate why green trust does not influence green purchasing intention.

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