Customer Attitude towards the Purchase Behavior of Green Apparel Products Consumers; with Special Reference to the Sri Lankan Government University Students

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Authors' contributions

Original Research Article

ABSTRACT

Aims: People are steadily more attentive to unsustainable consumption patterns due to severe environmental issues in the world. The study examines the factors that may affect the attitude towards green apparel products with particular reference to Sri Lankan university students' families and analyze the attitude that affects green apparel products' purchasing behavior.
Methodology: Three hundred and eighty complete questionnaires were used to analyze the study. Descriptive statistics and simple and multiple regression analysis utilized for data analysis of the study. Three independent variables, namely environmental apparel knowledge, environmental consumer beliefs, and subjective norms, except the environmental apparel knowledge, shows a positive significant effect on green products' attitudes.
Results and Conclusions: Moreover, the study shows a positive impact on the attitude to purchase green apparel products. Producers should consider changes in the unsustainable consumption pattern of the young generation.

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1. INTRODUCTION

Nowadays, people are more concerned about the environment. They are gradually increase aware of unsustainable consumption patterns due to severe environmental issues such as climatic changes, global warming, and disastrous pollution, including air, water, and land [1]. There has been an irreversible shift in consumer preference towards environment-friendly consumption and behavior [2] even in developing countries [3]. A global cultural identity is also found to moderate the relationship between materialism and consumers' tendencies toward environment-friendly behaviors in emerging and developed markets [4]. Therefore, it is meaningful to examine the purchase behavior toward green apparel products in the context of Sri Lanka and an important emerging market in South- Asia with both remarkable expansion record and various challenges, including unsustainable consumption and environmental degradation [5]. Although green apparel products have attracted increasing consumer interest and a trend of consuming these products, a number of studies have examined consumer purchase behavior toward green apparel products [6]. Green apparel products were defined as a particular apparel product type made of natural and (or) recycling materials that use different fabrics with less waste to protect our natural environment. Green apparel purchases may vary for different countries because of differences in terms of development level and culture.

In the marketing field, the terms related to environmental, sustainable and green consumption behaviors has given considerable research attention from both scholars and experts [7], (Narula & Desore, 2016). Further, some studies [8-9] examined relationships among purchasing behavior, expectation and consumers' perception for green product. However, research on the green purchase behavior among young consumers and green apparel product has received little attention in the context of developing countries, especially in Asia [10]. In addition, the inconsistent research findings pertaining to factors influencing green purchase behavior such as the role of materialistic values calls for further investigation [11-12,4].

Green apparel sector is one of the branches under the emerging industry of Green products and services. Though the green products and services are a still an emerging area in a country like Sri Lanka, most of the European countries are more towards both the green products and services. The identified research problem is that the Sri Lankans has less motive towards the green products including the green apparels. So during the study researcher would like to identify the factors which leads to the attitude towards the green apparel products in the Sri Lankan context and how the attitude can make a significant effect on the purchasing behavior of green apparel products.

According to the literature, it is clear that green apparel products are more prominent in the foreign markets such as in United States of America, United Kingdom and China etc. But with compared to the Sri Lankan context it is much clear that Sri Lankans do not have that much of concern towards green apparel products. But the well renowned Sri Lankan apparel companies do produce green apparel not for the local market but to export. Further, it has presented shortcomings within the research carried out on understanding the apparel consumer and his/her attitudes and behavior towards the purchase of green apparel. There is limited research available about the profile of green apparel consumer and to find out the linkage between the attitudes towards the actual purchase of green apparel products. Moreover, the research aims to dig deeper into the mindset of such consumers to understand their product needs and their purchase intentions which will provide valuable marketing implications. The two specific research objectives were to (1) identify important predictors that influence to the attitude towards green apparel products in the Sri Lankan context and (2) further investigate the impact of attitude on the purchasing behavior of green apparel products.

1.1 Conceptual Framework and Hypotheses Development

In the literature, although green consumption has been used with various terms such as ecologically conscious, environmentally responsible, environmentally friendly, and socially responsible consumption, the common theme is a desirable consumption goal to minimize environmental consequences [13]. Green consumption may consist of various

behaviors, counting purchase and post-purchase ones, of which purchase behavior can be considered the first among a chain of green behaviors. Green purchase refers to the purchase of green products that are defined as those that have less impact on the environment. Those are less damaging to human health, are formed or part-formed from recycled components, are produced in further energy conservative method, or provided to the market with less packaging [14].

1.2 Consumer Beliefs and Attitude

According to the Theory of Reasoned Action (TRA), attitudes do not predict habitual behaviors or behaviors performed repeatedly without thought. Fishbein and Ajzen [15] propose that beliefs are consisted of behavioral beliefs and normative beliefs. Although beliefs are thought to affect the behavior and behavior of each individual, behaviors often have an impact on the individual's values for behavior [16]. Using critical knowledge or belief, practice or policy influences its intentions and other practices. Variables external to the model are assumed to influence intentions only to the extent that they affect either attitudes or subjective norms [15]. While commonly used as a predictor of behavior, some researchers have considered the variables included in the TRA to not sufficiently predict behavior in every case. The lack of balance between the predictive ability of attitudinal and normative components was noted by Ajzen [17] in his overview of the Theory of Planned Behavior (TPB). Thus, hypothesis is proposed as below:

1.3 HYPOTHESIS 1

1.3.1 Environmental consumer belief influences attitude towards green apparel products

1.3.1.1 Environmental apparel knowledge and attitude

In the environmental domain, the Theory of Planned Behavior (TPB) has been well applied in the literature [18,6]. In this study, the extended TPB theory with the addition of materialism construct is used as a theoretical framework to examine the antecedents of intention to buy green apparel products. Previous studies have sought to extend the TPB model by adding the new variables to accept better the behavior in the precise research context [19-20]. Han and

associates [21] meta-analysis on TPB and organic consumption find that moral norm, self-identity, and environmental concern are the most popular additions. However, these variables only explain a portion of the impact on intention because of contextual reasons. For example, Asian markets for green products are smaller; thus, the effect of PBC tends to be more robust; our collective culture in Asia would emphasize the impact of the social norm more than that of other variables on purchase intention [21]. Among many promising antecedents, materialism is a substantial consumer value increasing in developing countries such as Vietnam, especially amid young consumers [22] [20]. Under the ongoing globalization and international integration process, materialistic values have been becoming more trendy and have stretched into emerging economies [22,4]. In green consumption, materialism has also been considered an essential and promising factor influencing purchase behavior [23,12] Thus, hypothesis is proposed as below:

1.4 HYPOTHESIS 2

1.4.1 Environmental apparel knowledge influences attitude towards green apparel products

1.4.1.1 Subjective norms and attitude towards green products

Subjective norms can be considered to be the perceived pressure imposed by different parties such as friends, peers, neighbors etc. who perform the behavior of attention and such action have either directly or indirectly effect on respondent's behavior [24]. Social influences may create result from subject norms, which link to consumers' perception of the beliefs (Talal, Charles and Sue, 2011). Thus, hypothesis is proposed as below:

1.5 HYPOTHESIS 3

Subjective norms influences attitude towards green apparel products

Attitude and purchase behavior: Empirically, materialistic values have been significantly investigated as predictors of consumer behaviors [22,12]. Further, past study has explored the role of materialism in explaining consumer behaviors, including green buying behavior. However, the literature on the relationship between materialistic values and green behaviors also

provides inconsistent and mixed findings [23,25,12,4]. In general, the negative side of materialism has often been found when it comes to environment-friendly behaviors (Kilbourne and Pickett, 2008; [26] More materialistic consumers are found to be less likely to engage in environment-friendly behaviors [13].

On the other hand, a study by Strizhakova and Coulter [4] has examined the effect of materialism on environment-friendly tendencies in both contexts of emerging and developed markets. Thus, hypothesis is proposed as below:

1.6 HYPOTHESIS 4

Attitude towards green products influence purchase behavior of green apparel.

2. METHODOLOGY OF THE STUDY

As per the literature review done in the study, the conceptual framework has been developed. The research's ultimate goal is to identify the potential for consumer purchasing behavior of green apparel products. It is considered the dependent variable of the study. Three independent variables have been used: environmental apparel knowledge, environmental consumer beliefs, and subjective norms. As the next step of the research, attitude towards green apparel products and their buying behavior has been identified.

Below conceptual framework consisted three independent variables namely environmental

apparel knowledge, environmental consumer beliefs, and subjective norms base on D'Souza et al. (2007), Mohr et al. (1998) and Wang, 2006 respectively. Attitude towards green apparel products and their buying behavior were measured base on the scales developed by Hustvedt (2006) and Bello, Pitz, and Etzel (1983).

The undergraduates who are studies in the state universities' management faculties have been selected as a population. Accordingly, approximately 23,000 undergraduates follow management-related degrees at 13 State Universities in Sri Lanka. The sample size of the study was determined by using the Morgan sample size table. A structured questionnaire was used for the primary data collection. It consists of two parts; demographic factors are in the first of the questionnaire. The second part of the questionnaire includes the questions on the independent variables namely environmental consumer beliefs, Environmental Apparel Knowledge, subjective norms and asked five and four question each for rest of the two variables. Attitude and purchase behavior were measured using five questions each. The questionnaire was distributed through email and online platforms. Four hundred and five questionnaires were collected from management faculty under-graduate students, but three hundred and eighty complete questionnaires were used to analyze the study. For data analysis, descriptive statistics and regression analysis utilized using SPSS 23 software.
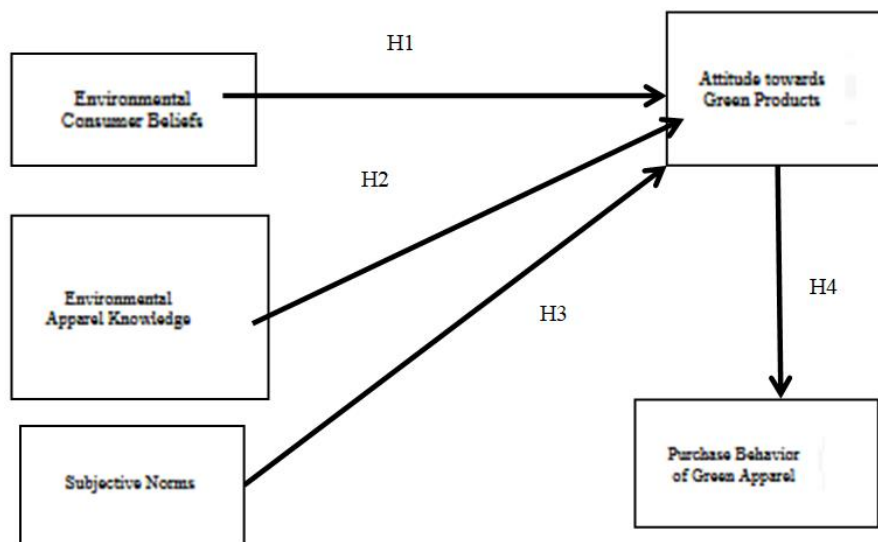

Fig. 1. Conceptual framework of the study

3. RESULTS AND DISCUSSION

For Cronbach alpha, the generally approved upon measures for scale reliability is its cut-off rate 0.7 [27]. However, there are some workers viz. Moss et al. (1998) who have also maintained the view that Cronbach alpha value above 0.6 is generally suitable.

Table 2 shows the descriptive analysis of the study gender, Household (family) income level of the student, and the age of the student can be considered. Three demographic factors were identified by the researcher and according to the literature the demographic factors were tested. The three demographic factors were gender, household income and age of the student.

Under the category of gender 268 were female students, representing 70.5% of the sample. The rest of the 112 of the sample considered male students, which contributes to a percentage of 29.5%. Household income of the students were categorized into four sections and out of them 3.7% was allocated for the income group of Less than LKR 15,000, 11.3% for the income between

LKR 15,001 to LKR 35,000. Twenty-Three point seven percent was grabbed by the household income level in between LKR 35,001 to LKR 60,000 and the remaining 61.3% was allocated for the household income level of LKR 60,001 and above.

According to the students' age categories, three distinct categories were identified and 93.7% of the students were considered to be in the age group of 18 years to 23 years and 3.9% of the students were categorized under the age group in between 24 to 28 years. The rest 2.4% was reordered from the age group above 28 years old.

3.1 Factors Influence on Attitude to Purchase Green Apparel

The study, Environmental Consumer beliefs, Environmental Apparel knowledge, and Subjective Norms were considered independent variables while the attitude was considered the dependent variable. Accordingly, the Table 3 shows the model summary of the regression analysis.

Table 1. Cronbach Alpha Values of independent and dependent variables

Item	Cronbach Alpha
Environmental Consumer Beliefs (ECB)	0.847
Environmental Apparel Knowledge (EAK)	0.832
Subjective Norms (SN)	0.700
Attitude (ATT)	0.789
Purchase Behavior (PB)	0.769

Table 2. Descriptive statistics

Demographic Factor		Frequency	Percentage	Cumulative Percentage
Gender	Female	268	70.5	70.5
	Male	112	29.5	100.0
Household Income	Less than LKR 15,000	14	3.7	38.7
	In between LKR 15,001 and LKR 35,000	43	11.3	11.3
	In between LKR 35,001 and LKR 60,000	90	23.7	35.0
	LKR 60,001 and above	233	61.3	100.0
Age	18-23	356	93.7	93.7
	24-28	15	3.9	97.6
	28 Above	9	2.4	100.0

Table 3 shows the model summary of influence on attitude to purchase green apparel. The model adjusted R2 value is 0.525(52.5%) with an R square change of 0.003, which means that the independent variables explain 52.5% of the dependent variable of attitude towards green apparel purchasing behavior.

According to Table 4, the two independent variables, Environmental Consumer Beliefs (VECB) and Social Norms (VSN), are significant as the recorded significance or the P values are 0.000 and 0.002 respectively and which are less than 0.005. Environmental Apparel Knowledge (VEAK) shows an insignificant due 0.677 p-value, and this value is greater than 0. 005.

As the Environmental Consumer Beliefs of green apparel industry initiatives and increase, the attitude to purchase green apparel increases, indicated a significant estimate (t=5.794, p=0.000). The corresponding beta coefficient indicated a positive effect (β=0.559). Therefore, the test supports the proposed hypothesis that as environmental consumer beliefs increases, the attitude to purchase green apparel also increases.

As Environmental Apparel Knowledge of green apparel industry initiatives and increase, the attitude to purchase green apparel decreases, indicated a significant estimate (t=-0.416,

p=0.677). The corresponding beta coefficient indicated a negative effect (β=-.089).

Therefore, the test supports the proposed hypothesis that as environmental Apparel Knowledge increases, the attitude to purchase green apparel also decreases. The result shows that the Environmental Apparel Knowledge (EAK) has a negative impact on green apparel products' attitude.

As subjective norms of green apparel industry initiatives and increase, the attitude to purchase green apparel increases, indicated a significant estimate (t=3.057, p=0.002). The corresponding beta coefficient indicated a positive effect (β=0.650). Therefore, the test supports the proposed hypothesis that as Subjective Norms increases, the attitude to purchase green apparel also increases.

3.2 Attitude towards the Purchasing Behavior of Green Apparel Products

According to model 2 of the study, attitude was considered the independent variable, while purchasing behavior was considered the dependent variable. Table 5 shows the model summary of the regression output.

The model adjusted R square records a value of 0.4555(45.5%), and R square adjusted with a standard error of estimate of 0. 43143. Table 6 shows the coefficient values of the model.

Table 3. Model summary of multiple linear regression

R	R Square	Adjusted R Square	Change Statistics				
			R Square Change	F Change	df1	df2	Sig. F Change
.733[e]	.537	.525	.003	2.426	1	369	.000

a. Predictors: (Constant), VECB, VEAK, VSN
b. Dependent Variable: VATT

Table 4. Coefficients of the multiple linear regression

Variable	Standardized Coefficients		
	Beta	t	Sig.
(Constant)	-	-1.365	0.013
VECB	0.559	5.794	0.000
VEAK	-0.89	-0.416	0.677
VSN	0.650	3.057	0.002

Table 5. Model summary of simple linear regression

R	R Square	Adjusted R Square	Std. Error of the Estimate
.678[a]	.460	.455	.43143

Table 6. Coefficients of the simple linear regression

Model	Standardized Coefficients		
	Beta	t	Sig.
(Constant)	-	2.390	.017
VATT	.083	.829	.040

According to the above Table 6 of model summary, the significant value was recorded as 0.040. So it emphasizes that attitude has a positive influence on purchasing behavior. As Attitudes towards the green apparel industry initiatives increase, green apparel's actual purchase behavior rises, indicating a significant estimate (t=0.829, p=0.040). The corresponding beta coefficient indicated a positive effect (β=0.083). Therefore, the test results support the proposed hypothesis that green apparel's purchase behavior also increases as positive attitudes towards green apparel increase.

4. CONCLUSION

The study was conducted to achieve two aims; the first objective is to examine the influence of environmental apparel knowledge, environmental consumer beliefs, and subjective norms on the attitude towards green apparel products in the Sri Lankan context. The second objective is analysis the attitude effects on purchasing behavior of green apparel products. The proposed regression analysis model result indicates; the independent variables, except the Environmental Apparel Knowledge (EAK), showed a significant positive effect on the attitude on the green apparel products. It means environmental consumer beliefs and s subjective norms on the attitude present a significant positive impact on attitude towards green apparel products. The Environmental Consumer Beliefs doesn't significantly influence the attitude towards the apparel product, and it shows a negative effect on the attitude towards the apparel product. The attitude on the green apparel products increases it leads to increases the purchasing behavior of the green apparel products. The results confirmed a positive effect of attitude towards the actual purchase behavior on purchasing green apparel.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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