

Important Factors that Affect Vietnamese Consumers' Green Purchasing Behavior

Gia-Tuong Tong, Gi-Du Kang

Abstract— *In the modern era of marketing, green marketing becomes the new strategy for companies and marketers to change customer purchasing behavior, becomes important because its both active and positive sides. So that, the drive of this research is to recognize important factors that affect Vietnamese consumers' green purchasing behaviour. The results suggest that defendants have a high optimistic approach about green products and are prepared to buy green products more frequently but as for as the effectiveness of green marketing tools are concerned. This research functions as a innovator study to recognize significant aspects in affecting consumers' green purchasing behaviour in the Viet Nam situation. It offers applied advices to international green marketers forecasting to aim the Southeast Asian markets.*

Keywords— *Consumer behavior, Green marketing, Environment concern, Social responsibility, Environmental behavior*

1. INTRODUCTION

One of environmental squalor signs was radically change in weather that influences all people on the earth no exception. The natural calamity became serious now. As per CNN News (2017), Tropical Storm Philippe, which is a significant storm, happened in Vietnam has devastated or harmed around 657,000 individuals destitute. Nowadays, many people around the world recognize the dangers, negative effects to their environment. They are educated very much about environment protecting through activities of government and ecology organization After understand the reality issues towards ecological issues, individuals from worldwide will actualize their own obligation to safe and ensure their environment since they trust their endeavors can enhance their life quality later on. The global economy worldwide 's growth has been connected with an increase in consumers' consumption. However, the more goods that people purchase, the larger is the impact upon the environment A few inquiries about have been led on green buying expectations. The numerous scientists have recognized the consumers' green purchase behavior. Scholastics and marketing experts are in a nonstop push to locate about green customers, from distinguishing them, to understanding their needs and creating green items that address such issues. In view of multifaceted in green purchase behavior of customers, green purchasing behavior is regularly not different under various social, demographical settings such as between western and eastern countries. Therefore, look into on the impacts of different factors on customers green purchasing expectations in developing Asian markets such as Vietnam is thought to be ideal. Vietnam also realized that investing in environmental

protection become increasingly important. In this way, this study expects to distinguish the Vietnamese consumers' purchasing behavior towards green products. The study additionally examinations how the elements (perceived seriousness of environmental problems, environmental concern and attitude, social influences) impact Vietnamese customers' green purchasing behavior.

2. LITERATURE REVIEW

There are numerous hypotheses to clarify human conduct by and large and purchasing conduct of buyers specifically. In which the intention to commit acts with Theory of Reasoned Actions (TRA) (Fishbein and Ajzen, 1975) and Theory of Planned Behaviour (TPB) Ajzen (1991). Two hypotheses are broadly utilized in disclosing the goal to submit demonstrations of man. Theory of Planned Behaviour (TPB) and with Theory of Reasoned Actions (TRA) demonstrate additionally valuable in foreseeing and clarifying consumers' green purchasing behaviour (Starts and Shepherd, 1992).

Green can be characterized and demonstrated in a wide range of implications. Green characterized by Prem and Daleen (1993) as natural and biological mindfulness or cognizance, corporate social obligation, feasible advancement, ecological assurance or preservation, and new commercialization.

Stanton and Futrell (1987) characterize green or natural advertising as activities planned to supplant current needs and needs with negligible destructive effect on our earth.

Green buy conduct (GPB) characterized by Mostafa (2008) as a specific sorts of natural amicable conduct that shoppers express their minding and regard for the earth. What's more, green buy conduct additionally alludes to the utilization of items that are recyclable or conservable, helpful or considerate to the earth, and delicate or receptive to environmental concern (Chan, 2002).

Embracing of Lee (2009) study that was utilized to look at the vital elements influencing green obtaining conduct in Hong Kong and their loads, four ecological variables of green buying conduct separated from her survey of western writings were picked. The four variables are:

Environmental concern and attitude (ECA): Natural concern and frame of mind is a complex mental state including convictions and qualities to carry on ecologically. As it were, it taps the shopper's subjective judgment regarding the estimation of ecological assurance and green living (Lee, 2009). Differentiating and ambivalent outcomes have been found among frames of mind and practices

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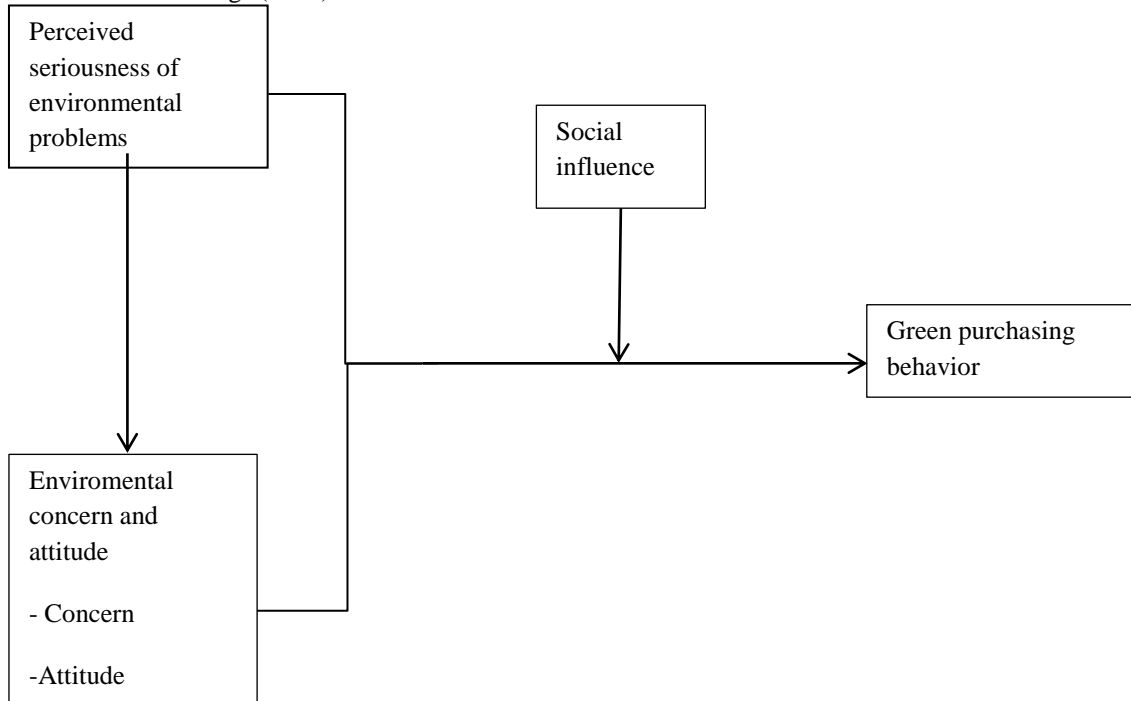
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(Harthman and Apaolaza Ibanez, 2006). Barely any current investigations found a positive connection between's ecological concern and frame of mind and green obtaining conduct (Mostafa, 2007), while other closed a moderate or support relationship (Lee, 2009).

Social influence (SI): In this investigation we are intrigued to analyze the impact of companions as a social gathering on the green conduct of people. Social impacts can be found inside friend weight, congruity consistence, and numerous others. Ewing (2001) recommended that

standards obtained socially can invigorate environmental customer conduct. Hoyer and Mac Innis (2004) contended that general utilization is affected by uplifting and affiliated reference gatherings. Without breaking a sweat to share data utilizing distinctive channels of long range interpersonal communication as Face-book, twitter, sites and messages, it is firmly evident that social impact will be a prevailing component influencing green buying conduct. .

2.1 Theoretical model and research hypothesis:



H1: There is a positive relationship between perceived seriousness of environmental problems and Environmental concern and attitude

H2: There is a positive relationship between perceived seriousness of environmental problems and green purchasing behavior

H3: There is a positive relationship between environmental concern and attitude and green purchasing behavior.

H4: Social Influences moderates the relationship between Perceived seriousness of environmental problems and green purchasing behavior

H5: Social Influences moderates the relationship between environmental concern and attitude and green purchasing behavior

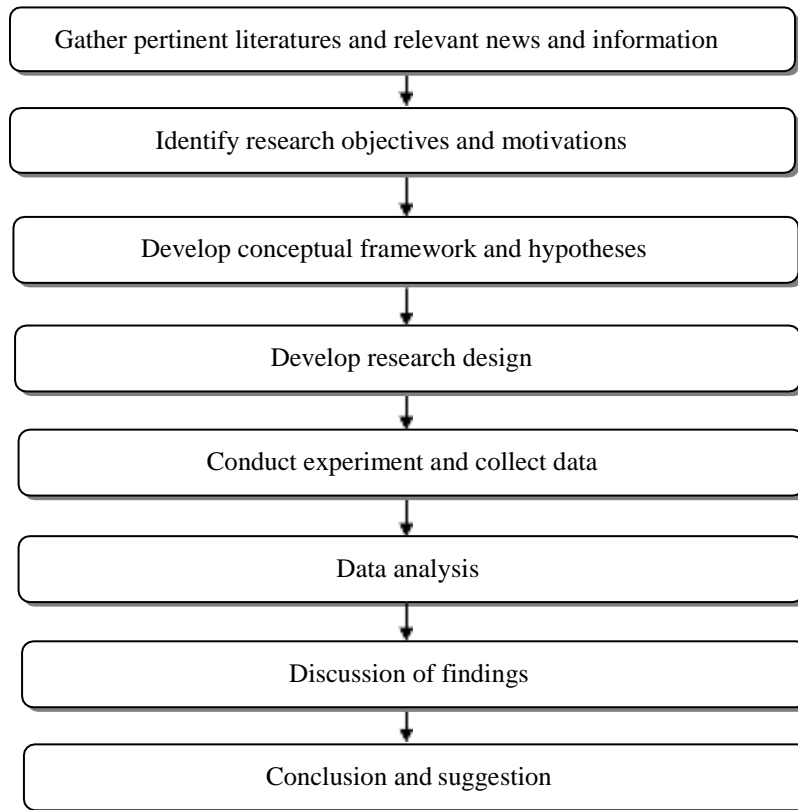
3. METHODOLOGY

3.1. Subject

A total of 276 (101 males and 175 females) people in Viet Nam took part in the present examination. Almost respondent have Bachelor Degree (79,9%) and 76.4% of them were single. The mean age of respondent was 23 years old with a standard deviation of 2.25 years.

3.2 Procedures

This study commenced from the gathering of pertinent literatures and other relevant news and information. Then, literatures were reviewed to identify the research objectives and motivations and taken after by the improvement reasonable system which is balanced from the related before models of different analysts. Simultaneously, hypotheses and research design were also developed. Next, the experiment was conducted and data was systematically collected. A short time later, the diagnostic procedures would be utilized to investigate those gathered information took after by the came about discussion. Lastly, conclusion and proposal for this investigation are accounted for. The research procedure is shown in Figure under.



3.3 Measures

This study proposed 4 research constructs and assessing the relationships among constructs. These construct are EP, ECA, SI, GPB. The 3 independent factors: EP, ECA, SI and 1 independent factor: GPB. All the items will be measured by five –point Likert scale to measure from 1=strongly disagree to 5=strongly agree. We used five items to measure EP; eleven items to measure ECA; six items to measure SI. We also used four items to measure Green purchasing behavior. The customer are requested to give some essential characteristics data in sixth section.

4. FINDINGS

To verify the dimensionality and reliability of the constructs, several data purification processes are conducted in this research, including factor analysis,

correlation analysis, and coefficient alpha analysis. Coefficient (Cronbach’s) alpha assesses the internal consistency of each variable: perceived seriousness of environmental problems ($\alpha=.867$), environmental concern and attitude ($\alpha=.901$), social influence ($\alpha=.919$) and green purchasing behavior ($\alpha=.834$).

Structural Equation Modeling (SEM) used to test the theoretical model proposed in above. There are several criteria which must be followed in linear structural model (SEM) to assess overall Model Fit. The result shows that model is totally good with 583 degrees of freedom, Chi-squared = 790.038 and p-value = .000. Besides, we can consider other criteria such as GFI, TLI, CFI and RMSEA. The result show indicators of GFI = 0.864, TLI = 0.948, CFI = 0.952 (most of index greater than 0.9), and RMSEA = 0.036 (less than 0.08), so this model is fit with the market data.

Relations	Standardized Coefficients	C. R.	p-value
Variables			
EP \square ECA (H1)	0,276	3,999	***
EP \square GPB (H2)	0,231	3,411	***
ECA \square GPB(H3)	0,25	3,604	***
Chi-Square (p-value)	790.038 (.000)		
Degree of freedom (d. f)	583		
Chi-Square/ d. f.	1.355		
GFI	0.864		
AGFI	0.844		
RMR	0.065		

Hypothesis H1: “Perceived seriousness of environmental problems will positively affect to



Environmental concern and attitude” has standardized coefficients = 0.276, cr = 3.999. It is accepted at the level of significance $p = 0.000$. That means Perceived seriousness of environmental problems has significant with Environmental concern and attitude.

Hypothesis H2: “Perceived seriousness of environmental problems will positively affect to Green purchasing behaviour” has standardized coefficients = 0.231, CR = 3.411. It is accepted at the level of significance $p = 0.000$. That means Perceived seriousness of environmental problems has significant with Green purchasing behaviour.

Hypothesis H3: “Environmental concern and attitude will positively affect to Green purchasing behaviour” has standardized coefficients =0.25, CR = 3.604. It is accepted at the level of significance $p = 0.000$. That means Environmental concern and attitude has significant with Green purchasing behaviour.

The research also uses hierarchical regression analysis to test the research hypothesis which is focusing on the moderating effects of Social influence in the relationship between Perceived seriousness of environmental problems and Green purchasing behaviour; in the relationship between Environmental concern and attitude and Green purchasing behaviour.

The result shown in table 1 indicate that Perceived seriousness of environmental problems ($\beta=0.212$, $p<0.001$) is positively and significantly affected to Green purchasing behaviour.

As shown in Table 1, this research uses hierarchical regression analysis checking the moderating effect of Social influence

As shown in Table 2, this research uses hierarchical regression analysis checking the moderating effect of Social influence

Table 2 Moderating Test of Social influence among Environmental concern and attitudes and Green purchasing behaviour

Independent variable	Model 1	Model 2	Model 3
	GPB	GPB	GPB
Environmental concern and attitudes (ECA)	0.197***	0.202***	0.188***
Moderating variables			
Social influence (SI)		-0.131*	-0.119*
Interaction variable			
ECA*SI			0.177*
R ²	0.039	0.056	0.087
Adj-R ²	0.035	0.049	0.077
F-value	11.050	8.102	8.628
Durbin-Watson			1.786
VIF	1.000	1.001	1.010

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$

The result in Model 2 shows that independent variable (Environmental concern and attitudes, $\beta=0.202$, $p<0.001$) is significantly affected to dependent variable and moderating variables (Social influence, $\beta= -0.131$, $p<0.05$) is not significantly affected to dependent variable (Green purchasing behaviour). In addition, Model 3 shows the interaction effect ($R^2 =0.087$, $\beta=0.177$, $p<0.05$) of Environmental concern and attitudes and Social influence is partially significant to Green purchasing behaviour.

5. DISCUSSION AND IMPLICATIONS

Green marketing is a generally new field in Vietnam, so it is important to examine hypothetically to situate for down to earth exercises. This examination has contributed further a logical writing in green promoting territory, through the advancement of a hypothetical model to clarify the variables that influence the green acquiring conduct in Vietnam.

Through the identification of factors that influence the green purchasing behavior of consumer in Vietnam, this examination has accommodated the green stages, a look in more insight concerning the perspectives on customer in this new field. In the meantime the green marketing stage can consider through the examination recommendations to improve the intensity of its items to all the more likely address issues of clients.

This investigation likewise recommends another examination bearing for the green stage in doing comparable investigations with explicit courses, for example, business, delicate abilities, management... At that point further build up this new adapting route with regards to Vietnam specifically and developing countries in general.

6. CONCLUSION

This study investigates to find out the factors affecting consumers’ green purchasing behavior in Vietnam. And through the study result understand deeply the factors

Table 1 Moderating Test of Social influence among Perceived seriousness of environmental problems and Green purchasing behaviour

Independent variable	Model 1	Model 2	Model 3
	GPB	GPB	GPB
Perceived seriousness of environmental problems (EP)	0.212***	0.214***	0.232***
Moderating variables			
Social influence (SI)		-0.128*	-0.119*
Interaction variable			
EP*SI			0.179*
R ²	0.045	0.061	0.093
Adj-R ²	0.042	0.054	0.083
F-value	12.922	8.917	9.305
Durbin-Watson			1.841
VIF	1.000	1.000	1.013

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$

The result in Model 2 shows that independent variable (Perceived seriousness of environmental problems, $\beta=0.214$, $p<0.001$) is significantly affected to dependent variable and moderating variables (Social influence, $\beta= -0.128$, $p<0.05$) is not significantly affected to dependent variable (Green purchasing behaviour). In addition, Model 3 shows the interaction effect ($R^2 =0.093$, $\beta=0.179$, $p<0.05$) of Perceived seriousness of environmental problems and Social influence is partially significant to Green purchasing behaviour.

The result shown in table 2 indicate that Environmental concern and attitude ($\beta=0.197$, $p<0.001$) is positively and significantly affected to Green purchasing behaviour.

affecting consumers' green purchasing behavior. And afterward can improve the structure and advancement capacities and administrations appropriate to purchasers' need in Vietnam. As the result, Vietnamese consumers have positive attitudes to green product and are affected by many factors. Consumer willing protects their life through the effectiveness of real action toward environment. However, green product price, quality and service must be concern more. This study is useful for many makers who want to comprehend green purchase behaviour among Vietnamese consumers.

7. LIMITATIONS & FUTURE RESEARCH

In terms short of time, budget, human resources, support tools,... research conducted sampling by convenient sample method should be representative of the total be not high. Then again the example estimate isn't generally enormous, so the emotional appraisal the gathering of respondents can give false investigation results. Thus future research may be conduct with more samples to increase the generalizability of the study.

Future researchers can test alternate features in the statistical characteristics of respondents, for example, age, income and living area to investigate there is a noteworthy distinctive amongst characteristics and buying green product or not.

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