

THE INFLUENCE OF CULTURAL VALUES ON CONSUMERS' GREEN PURCHASE INTENTION IN SOUTH KOREA

Pham Ngoc Huong Quynh¹, Duong Thi Tra My¹, To The Nguyen¹, Phan Thi Thu Hoai² and Nguyen Van Phuong^{1,*}

¹VNU University of Economics and Business, Vietnam National University, Hanoi, Vietnam

²Faculty of Marketing, Thuongmai University, Hanoi, Vietnam

*Corresponding author: vanphuong@vnu.edu.vn

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ABSTRACT

With the aim of filling in such a research gap, this research was conducted to explore factors influencing consumers' green purchase intention. The Theory of Planned Behavior was employed as a theoretical framework to analyze the influences of cultural values on consumers' intention to purchase green products. The hypotheses were tested in South Korea, a previously low-income country that has successfully graduated to a high-income, developed status in Asia. By studying a sample of 394 South Korean consumers with collected data being processed via the SmartPLS software, it is concluded that both collectivism and long-term orientation significantly influence consumers' intention. In particular, collectivism exerts both direct and indirect effects on green purchase intention, in which the mechanism underpinning the latter path is via attitude, subjective norms, and perceived behavior control. Despite not having a direct impact, long-term orientation also imposes an indirect impact on green purchase intention through the same media as collectivism.

Key words: collectivism; long-term orientation; green consumption; PLS-SEM; theory of planned behavior

INTRODUCTION

In recent decades, environmental problems have become globalized in terms of their existence and impacts, arousing great public concern (Park et al. 2013; Chen et al. 2018). In response, governments tried to develop a global culture of respect for the environment, and sustainable development (Kinnear et al. 1974; Agan 2013; Zinoubi 2020). "Sustainable consumption" or "pro-environmental behavior" is therefore increasingly gaining traction along with the rise of sustainability-conscious customers (Arli et al. 2018; Nguyen et al. 2021; Kong et al. 2014), leading to a considerable increase in green growth and green consumption (Park et al. 2013). Many concepts of consumers' environmental ethics have been proposed, in which green purchase intention is considered to be among the most popular ones in the eyes of both academics and the public (Yadav and Pathak 2017; Biswas and Roy 2015).

Discussions about green product consumption have appealed a growing number of researchers worldwide (Zinoubi 2020; Emekci 2019; Kim et al. 2021; Mazhar et al. 2022). Furthermore, consumers are more and more concerned about environmental issues and green product attributes, so green consumption-oriented marketing activities become more and more effective in promoting brand images (Laroche et al. 2001; Emekci 2019; Chen 2013). Many studies have investigated the intention to purchase green products in various countries (Yadav and Pathak 2017; Zheng and Chi 2015; Wang et al. 2020, Nguyen et al. 2021), such as India, China, and Vietnam. Most studies successfully demonstrate the effects of different factors on consumers' green intention purchase, such as: attitude, subjective

norms, and perceived behavior control; nevertheless, no study has been conducted to investigate the impact of cultural values on green intention purchase in the context of South Korea recent years.

South Korea is an exemplar of the Asian economic growth model, which has successfully transformed from a low-income into a high-income economy (World Bank 2022). Nevertheless, with a period of rapid growth comes the economic growth-environment dilemma, which urged the Korean government to reconsider its economic development model (Kim et al. 2014; Lobo and Greenland 2017). Over recent years, the Korean government has implemented many apparent solutions to encourage green consumption (OECD 2012; Lim et al. 2019), resulting in an expanded market for green products despite the rate of consumer green consumption behavior still remaining fairly low (Park et al. 2013).

Many previous studies showed that governments in developed countries, including South Korea, have actively taken action to increase consumers' cognition of eco-friendly behavior and encourage indigenous firms to adopt sustainable consumption strategies (Liu et al. 2017; Lee 2017; Leonidou et al. 2013; Lobo and Greenland 2017). In particular, as part of its pledge in the five-year green development plan, the South Korean government spends 2% of GDP promoting public green purchasing programs and implementing a waste fee system, which results in a 14% reduction in municipal waste and a 50% increase in recyclable waste in last decade (Lim et al. 2019).

The theory of planned behavior (TPB) is applied to measure consumers' behavioral intentions since this theory has the power to explain human behavior in a wide range of fields, especially in the field of sustainable consumption behavior (Nguyen et al. 2021; Yadav and Pathak 2017). However, existing studies show diverse outcomes in explaining green purchase intention (Zhuang et al. 2021), which can be partly explained by their failure to capture the diversity in cultural backgrounds of observation samples (Ko and Jin 2017; Lobo and Greenland 2017). With the aim of filling in such a research gap, this research was conducted to explore factors influencing consumers' green purchase intention. The Theory of Planned Behavior (TPB) was employed as a theoretical framework to analyze the influences of cultural values on consumers' intention to purchase green products. The results are expected to help policymakers, businesspeople, and producers promote green products consumption in order to better satisfy Korean consumers' needs. Actually, TPB is considered one of the most influential psychological theories for predicting and understanding human behavior that ties together intentions and actions (Ajzen 1985; Al-Swidi et al. 2014). The TPB framework has three main distinctive variables that affect consumers' behavioral intentions, which are the amalgamation of attitude, subjective norm, and perceived behavioral control (Zhuang et al. 2021; Lim et al. 2019). In this research paper, attitude, social norm, and perceived behavioral control, the three core components of the TBP model, were analyzed to envisage customers' environmental-friendly intentions and a hypotheses was proposed based on three core variables of TBP on green consumption. Firstly, attitude can be reflected as one of the important contributors to assessing the effectiveness of pro-environmental behavior. Regarding the purchase of sustainable products, consumers are willing to buy environmentally friendly products if they have a positive attitude toward these goods (Al Mamun et al. 2018). If customers have favorable attention to environmentally friendly products, they must have a positive outlook on green purchases (Kim and Chung 2011; Panzone et al. 2016). From the findings above, the following hypothesis is developed: H1: Attitude has a positive impact on green purchase intention. Secondly, Subjective norms refer to the social pressure that an individual feel under the execution or non-execution of a certain behavior (Ajzen 1991). In relation to environmental consumption, subjective norms may be expected as a suggestion for people to act and contribute to pro-environmental intention toward sustainable products (Biel and Thøgersen 2007; Thøgersen and Zhou 2012). When individuals distinguish their referents' environmentally friendly behavior, they tend to follow it (Kim and Chung 2011). In other words, subjective norms had a positive influence on customers' eco-product purchase intention (Ko and Jin 2017; Wang 2014). Hence, the following hypothesis was formulated: H2: Subjective norms have a positive impact on green purchase intention. Thirdly, according to Ajzen (1991), perceived behavior

control is one important variable of the TBP model, which indicates people’s perception of their ability to carry out a certain behavior. In prevailing literature about green consumption intention, Bamberg (2003) states that individuals who recognize the importance of environmental issues tend to seek pro-environmental products and share green products with others. In addition, making purchase decisions is a sort of customer purchase behavior. Therefore, a person with positive perceived behavioral control can become a customer of a sustainable product (Zhuang et al. 2021; Joshi and Rahman 2015). Thus, the third hypothesis about sustainable consumption is developed: H3: PBC has a positive influence on the green purchase intention.

Furthermore, we also analyzed collectivism and long-term orientation which are cultural variables affecting green purchase intention. Collectivism refers to an individual’s membership in one or more groups, such as family, peers, and society (Triandis 1995). Individuals with high collectivism, who subordinate to group benefits, are concerned with others, and usually work with group pairs, tend to take action actively on environmental products (McCarty and Shrum 2001). Besides, collectivist people acquiring a high level of sustainable attitudes, subjective norms, and perceived behavior control are more likely to show consumers’ green behavior (McCarty and Shrum 2001). From the above discussion, the following hypotheses are proposed: H4: Collectivism has a direct effect on green purchase intention. H5: Collectivism has an indirect effect on green purchase intention via attitude, norms, and perceived behavior control. Finally, long-term-oriented individuals are generally described as careful money managers who seek opinions or advice from their primary referents when making decisions (Sharma 2010; Hofstede 2001). People with a long-term orientation usually create a long-range plan, respect families, regard both the past and the future, and consider prudently the impact of their long-term decisions and actions (Brigham et al. 2014; Lumpkin et al. 2010). Regarding environmental issues, long-term-oriented consumers have strong intention and attitude to defend the environment in order to enhance a better life for their families and themselves (Leonidou et al. 2013). Additionally, Lumpkin et al. (2010) asserted that there is a positive relationship between consumers’ long-term orientation and pro-environmental behavior. From that, the sixth hypothesis was developed: H6: Long-term orientation has an indirect effect on green purchase intention via attitude, subjective norms, and PBC.

Based on the above hypotheses, a theoretical model (Fig. 1) was developed:

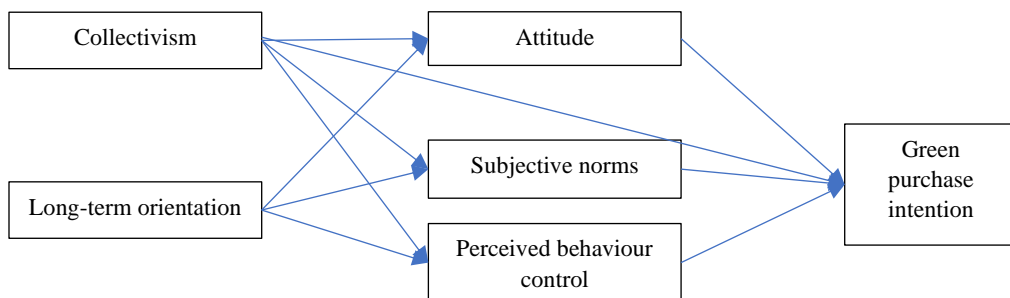


Fig. 1. Conceptual Model

METHODOLOGY

Questionnaire design. A self-administrated online questionnaire survey was created to gather data in South Korea, a developed country with the fourth largest economy in Asia (Table 1). The term of "green products" was explained at the begin of the questionnaire to the respondents. Green products in this study can be understood as products that meets one of these criteria: environmental friendliness; produced from natural ingredients or products that are nontoxic, energy and water-efficient, harmless to the environment, recyclable and biodegradable. The questionnaire consisted of six parts using core

variables based on the TBP model to examine how Korean people react to consumers' green purchase behavior (Ajzen 2006). Part 1 measures attitude towards green purchase, while part 2 assesses subjective norms and part 3 measures perceived behavior control of participants. The first three parts all include six items each. Part 4, 5, 6 respectively evaluate participants' green purchase intention, collectivism, and long-term orientation with the corresponding number of items being four, six, five. All six parts above are measured using a five-point Likert-type scale ranging from 1 to 5, on which 1 represents "strongly disagree" and 5 represents "strongly agree". To avoid misinterpretation by respondents, all questions are designed to be simple and easy to understand. Table 1 lists more specific measuring items for the constructs.

Table 1. The items used in this study and sources

Variables	Items	Explanation	Reference
Attitude towards the green purchase	ATT1	I care about the environment when purchasing.	Ajzen (2006); Yadav and Pathak (2017); Nguyen et al. (2021)
	ATT2	I understand what green purchase behavior is.	
	ATT3	I think green purchase behavior positively affects the environment.	
	ATT4	I think green purchase behavior significantly reduces natural resource exploitation.	
	ATT5	I love buying green products.	
	ATT6	If I have the opportunity, I am willing to buy green products.	
Subjective norms	SNO1	My acquaintances are very responsible for the environment.	Ajzen (2006); Dixon et al.(2015); Al Mamun et al. (2018); Zhuang et al. (2021)
	SNO2	My acquaintances think green purchase behavior is essential for the environment.	
	SNO3	My acquaintances advised me to implement green purchase behavior.	
	SNO4	My acquaintances introduce me to green products.	
	SNO5	My acquaintances support my green purchase behavior.	
	SNO6	My acquaintances' viewpoints influenced my decision to purchase green products.	
Perceived behavior control	PBC1	I believe in the quality of green products provided in the market.	Ajzen (2006); Lobo and Greenland (2017); Joshi and Rahman (2015)
	PBC2	I do not need much time to find information about green products.	
	PBC3	I can easily buy green products when I want.	
	PBC4	I have sufficient financial conditions to purchase green products.	
	PBC5	I can control my decision-making in any situation.	
	PBC6	I always carefully consider before I decide to buy a green product.	

Variables	Items	Explanation	Reference
Green purchase intention	INT1	I will consider purchasing green products.	Ajzen (2006); Han et al. (2010)
	INT2	I want to purchase green products.	
	INT3	I will purchase green products in my next shopping.	
	INT4	I would recommend other people to purchase green products.	
Collectivism	COL1	I am a sociable person when I participate in group activities.	Hofstede (2001); Laroche et al. (2001), Lee (2017)
	COL2	I think members of a group should stick together even if they are not in harmony.	
	COL3	Even if my contribution is not recognized, I still work hard for mutual goals.	
	COL4	I like to share ideas and spend time with groups.	
	COL5	Team members' happiness is important for me.	
	COL6	I always put mutual interest as a priority.	
Long-term orientation	LTO1	Financial management is essential to me.	Hofstede (2001); Sharma (2010); Brigham et al. (2014)
	LTO2	I work hard to achieve future successes.	
	LTO3	I tend to use my money wisely in the present to save for the future.	
	LTO4	Failure does not stop me from trying.	
	LTO5	I do not mind giving up today's joy for future successes.	

Data collection. The study hypotheses were tested using data on green consumption behavior collected in Seoul, Busan and Incheon in South Korea during July 2021 to March 2022. A self-completion online questionnaire using the random sampling method enabled respondents to quickly and effortlessly get access to the questionnaire and answer the questions in Korean. To ensure accuracy, this study collaborated with a team of graduate Korean students trained in survey data gathering. The students shared the questionnaire to social network and suggested their friends in three above cities sharing the questionnaire to others. As the result, a total of 394 questionnaires were collected among consumers. The questionnaire provided could be completed in 12-15 minutes and sent directly to the researcher after completion to test the study's hypotheses.

Analysis method. Structural equation modeling, a multivariate statistical analysis technique that is used to analyze structural relationships. In this study the partial least squares structural equation modelling (PLS-SEM) was utilized with the data processing software being SmartPLS 3.0, to examine the proposed hypotheses. PLS-SEM was used to “estimate complex cause-effect relationships in path models with latent variables” (Hair et al. 2019). To test hypothesis using PLS-SEM, the total sample must be more than 5 times items (Hair et al. 2022). In this analysis, we have 33 items; the total sample must be more than 165 observations, so 394 respondents is enough for analysis.

Cronbach's alpha, composite reliability (CR) and average variance extracted (AVE) were implemented to scrutinize the reliability of the measurement items. Cronbach's alpha is utilized to examine the reliability of items the questionnaire to identify the possible errors of a questionnaire, result to improve the reliability of the questionnaire. Cronbach's alpha value more than 0.7 is considered as

acceptable (Hair et al. 2022). The AVE and the CR coefficients are related to the quality of a measure. AVE is a measure of the amount of variance that is taken by a construct in relation to the amount of variance due to measurement error. To be specific, AVE is a measure to assess convergent validity. The value of AVE and CR ranges from 0 to 1, where a higher value indicates higher reliability level. AVE is more than or equal to 0.5 confirms the convergent validity (Hair et al. 2019). Furthermore, Hair et al. (2022) demonstrated that PLS-SEM use the nonparametric approach to modelling, which means that PLS-SEM makes fewer demands on the data in terms of normality distribution, and sample size.

RESULTS AND DISCUSSION

The demographic characteristics of the respondents are detailed in Table 2.

Table 2. Demographic characteristics of the respondents (N=394)

Variables	Scale	Count	Percentage
Gender	Male	193	48,98
	Female	201	51,02
Age	< 30	98	24,87
	> 30	296	75,13
Education	Under high school	21	5,33
	High school	104	26,40
	Undergraduate	217	55,08
	Post-graduate	52	13,20
Total		394	100

Smart-PLS has been used to examine the previously formed hypotheses (H1, H2, H3, H4, H5, and H6). Smart PLS also evaluates the psychological properties of the measurement model and estimates the parameters of the structural model. The reliability results of the experimental measurement models are shown in Table 3.

Table 3. Evaluation of measurement model

Items	Outer loading	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Attitude		0.881	0.910	0.629
ATT1	0.756			
ATT2	0.732			
ATT3	0.819			
ATT4	0.779			
ATT5	0.859			
ATT6	0.807			
Collectivism		0.847	0.891	0.621
COL2	0.776			
COL3	0.772			
COL4	0.835			
COL5	0.807			
COL6	0.747			

Items	Outer loading	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Green Purchase Intention		0.906	0.935	0.784
INT1	0.776			
INT2	0.920			
INT3	0.931			
INT4	0.906			
Long term orientation		0.835	0.883	0.603
LTO1	0.719			
LTO2	0.817			
LTO3	0.783			
LTO4	0.787			
LTO5	0.771			
Perceived behavior control		0.782	0.860	0.605
PBC3	0.777			
PBC4	0.823			
PBC5	0.769			
PBC6	0.740			
Subjective Norm		0.905	0.927	0.679
SNO1	0.727			
SNO2	0.810			
SNO3	0.890			
SNO4	0.864			
SNO5	0.831			
SNO6	0.813			

Cronbach’s alpha is a measure of the reliability of each project’s items, with an acceptable value ranging from 0.7 to 0.9 (Hair et al. 2022). All of our Cronbach's alpha measures qualify for the range. The results show that the measurements are robust in terms of their internally consistent confidence, as indexed by the reliability of their aggregation. The composite confidence values for all constructs ranged from 0.782 to 0.906, which exceeds the recommended cut-off value of 0.70 (Nunnally 1978). This indicates that the items used to measure all internal structures are highly consistent.

Different measurement models of reflected and formed structures were examined. This measurement is intended to ensure a representative set of all possible entries in the conceptual domain of the structure (Diamantopoulos et al. 2012), often using extracted mean variance (AVE) to evaluate the validity of the index (Fornell and Larcker 1981). Higher values generally indicate a higher level of confidence. An AVE value higher than 0.5 is considered acceptable in exploratory research (Hair et al. 2019). However, values of 0.95 and above are problematic because they indicate that the entries are redundant, thereby reducing the validity of the structure (Diamantopoulos et al. 2012). In our study, the AVE of all measures was from 0.603 to 0.784, respectively, supporting the measures.

The diagonal elements of the matrix, which represent the square root of the AVE, are always greater than the diagonal elements of their respective rows and columns (Table 4). This result supports the discriminant validity of the scales. All items load more favorably on their respective structures than

on other structures in effect. Most entries, with some exceptions, loaded above or near the 0.50 threshold (Hair et al., 2019). This suggests that all constructs are reliable and can be further analyzed to confirm the relationship between structures of dependent and independent variables.

Table 4. Discriminant validity test results

	Attitude	Collectivism	Green purchase intention	Long term orientation	Perceived behavior control	Subjective norm
Attitude	0.793					
Collectivism	0.555	0.788				
Green purchase Intention	0.724	0.508	0.885			
Long term orientation	0.534	0.485	0.419	0.776		
Perceived behavior control	0.504	0.465	0.541	0.512	0.778	
Subjective norm	0.549	0.500	0.468	0.415	0.536	0.824

Table 5 outlines the multi-group checking of the direct effects and indirect effects. The results of the first-order analysis in the structural model are described in Table 5 and Figure 2. The beta value of the path coefficient from attitude to green purchase intention has indicated a direct effect. The path coefficient of the attribute is 0.566, which means there is a positive relationship. The T value shows a statistically significant impact on the green purchase intention towards attitude ($p < 0.05$, $t = 10.458$). This result supports Hypothesis 1. However, the beta value of the path coefficient from subjective norm to green purchase intention is -0.005, showing that there is not a positive relationship ($p > 0.05$, $t = 0.110$). This result does not support Hypothesis 2.

Furthermore, the coefficient indicates of the relationship between perceived behavior control and green purchase intention has a beta value of 0.213, which explains the positive relationship between these two factors ($p < 0.05$, $t = 4.344$). Therefore, Hypothesis 3 is supported.

Next, the beta coefficient of collectivism for green purchase is 0.098 and the t-values indicate a statistically significant economic instability ($p < 0.05$, $t = 2.292$). Therefore, Hypothesis 4 is supported.

Besides, the beta value of the path coefficient underpinning the association between collectivism and green purchase intention is 0.277, which illustrates the indirect influence of the former on the latter. The T value shows a statistically significant impact on green purchase intention towards attitude ($p < 0.05$, $t = 8.350$). Therefore, Hypothesis 5 is supported.

Similarly, the coefficient indicates of the relationship between long-term orientation and green purchase intention has a beta value of 0.275 (with $p < 0.05$, $t = 6.571$), which also illustrates the indirect influence of the former on the latter. Therefore, Hypothesis 6 is supported.

Table 5. Path coefficient and total indirect effect of structural model

Path Coefficient	Original sample (Beta)	Sample mean (M)	Standard deviation (STDEV)	T Statistics (O/STDEV)	P values
Direct effects					
Attitude -> Green purchase intention	0.566	0.564	0.054	10.458	0.000
Collectivism -> Attitude	0.387	0.387	0.047	8.244	0.000
Collectivism -> Green purchase intention	0.098	0.097	0.043	2.292	0.022
Collectivism -> Perceived behavior control	0.283	0.285	0.045	6.293	0.000
Collectivism -> Subjective norm	0.390	0.390	0.049	7.980	0.000
Long term orientation -> Attitude	0.346	0.348	0.057	6.106	0.000
Long term orientation -> Perceived behavior control	0.375	0.376	0.050	7.429	0.000
Long term orientation -> Subjective norm	0.226	0.226	0.054	4.209	0.000
Perceived behavior control -> Green purchase intention	0.213	0.213	0.049	4.344	0.000
Subjective norm -> Green purchase intention	-0.005	-0.002	0.049	0.110	0.912
Total Indirect effects					
Collectivism -> Green purchase intention	0.277	0.278	0.033	8.350	0.000
Long term orientation -> Green purchase intention	0.275	0.275	0.042	6.571	0.000

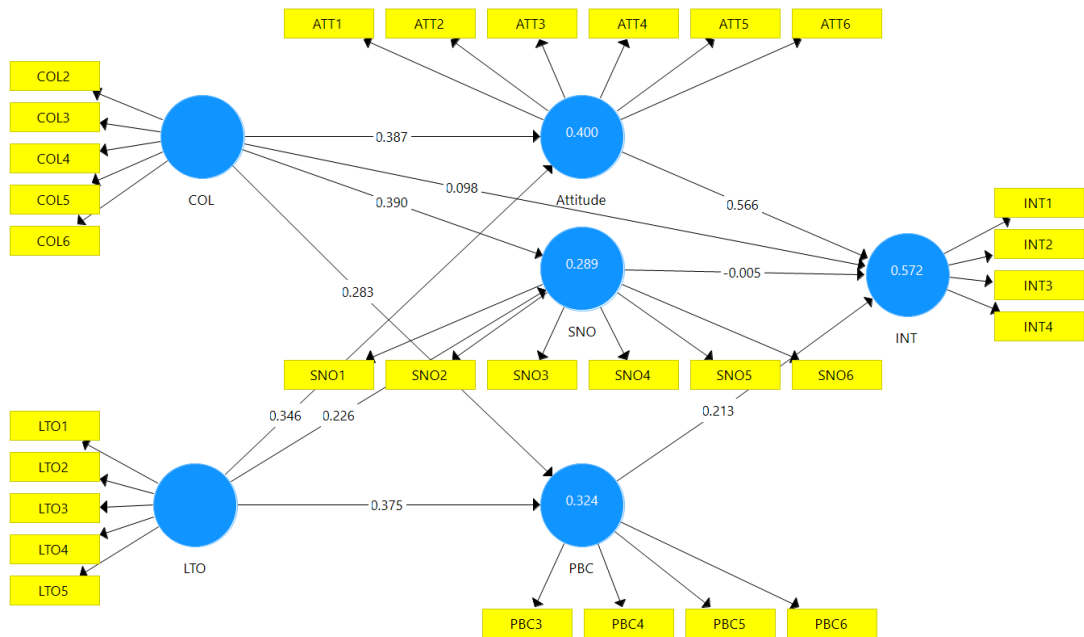


Fig. 2. Structural Model

Two factors (attitude and perceived behavioral control) significantly influenced consumers' intention to purchase green products. This result is consistent with the work of Han et al. (2010); Lee (2017); and Nguyen et al. (2021) who applied TPB to explain green consumption behavior. These results imply that in order to improve the attitude and awareness of green consumption to promote the green buying behavior of the people, it is essential that governments are able to facilitate stronger media and policy coverage of green consumption so that consumers become familiar with the concept and tend towards consumption. Governments should open short courses on sustainable consumption, green consumption, and launch the green consumption programs through organizations and unions. In addition, local and international marketers should highlight the outstanding benefits of their green products for the environment and society in their marketing campaigns to increase product preferences among consumers. For the sake of emerging green markets, governments and stakeholders need to join hands to raise public awareness of the benefits of green products and how green labels are defined. Secondly, the result of the perceived behavioral control factor showed that people tend to trust government agencies and manufacturers. Therefore, government agencies should issue regulations on strict quality control, develop an official legal framework for green consumption, and protect the interests of consumers. Similarly, the authorities need to put in place regulations on information transparency and the handling of false advertising of green products.

Of the three individual cultural values, only subject norm value did not impact positively green purchase intention and is consistent with the results of Al Mamun et al. (2018); Zhuang et al. (2021); and Biel and Thøgersen (2007). People in South Korea are quite independent and less influenced by their families, friends, professionals, or others around them when making decisions. Therefore, using social influence such as from celebrities may not be the right way to give advice on green product consumption. Businesses should focus on changing individuals' behavior rather than affecting those around them. For example, businesses should prioritize word-of-mouth marketing while also providing incentives on price, quality, and product maintenance to better convert behavioral intentions into actual actions (Zhuang et al. 2021).

Most importantly, the findings confirm the crucial role of cultural values in the formation of green purchase intention through two aspects, collectivism and long-term orientation. In terms of collectivism, this cultural value showed, based on this study results, to have positive affect on green purchasing intentions through TPB's broadest structures with the greatest impact on subjective norms, which is consistent with the results of McCarty and Shrum (2001) and Lee (2017). Collectivist consumers sacrifice individual goals for group goals and strive to make decisions that benefit society as a whole. It suggests that governments should actively utilize people's collective attributes to increase the intention to purchase green products (Arisal and Atalar 2016; Bae and Kim 2013), and companies should also build consumer groups to enhance communication within the group as a means of exerting a more significant influence on consumer intent. Obviously, collectivism may change because of advances in economic and social development. Economic development may promote collectivism, but in a different way, economic development may erode collectivism (Ball 2001). Whatever the impact of economic advances on collectivism, trust is still essential to establish. Therefore, governments and marketers need to focus on building collective trust in individualist groups so that they can increase the intention to buy eco-friendly products. This can be done by educating consumers about the social benefits of these products. In addition, marketers should also create consumer groups to improve communication within the group to have a more meaningful influence on consumer intent. Collectivist trust can also be built through greater coverage of films and advertisements highlighting family values, traditions, and the importance of relationships with members of a family.

The long-term orientation shows that indirect effects through all of TPB's construction activities have a great influence on consumer attitudes. Therefore, marketers should reach consumers with advertisements that emphasize the long-term benefits of green products in order to garner a better customer response. Good communication of corporate sustainability values can partly increase the perceived value of sustainable consumption and build consumer confidence (Brigham et al. 2014). Governments must ensure the dissemination of credible advertising and penalize manufacturers who provide false information about their products and services. Due to economic advances, long-term orientation may change. Therefore, enterprises should identify potential customer segments for each product in each time period, thereby proposing an appropriate strategy. Initially, businesses can focus on products that serve high-income customers. After green consumption becomes a popular trend, affecting other customer groups, businesses can begin to expand their products to serve lower segments.

CONCLUSION

In this study, cultural value is assessed on the basis of collectivism, long-term orientation, and subjective norm. Both collectivism and long-term orientation significantly influence consumers' intention. In particular, collectivism exerts both direct and indirect effects on green purchase intention, in which the mechanism underpinning the latter path is via attitude, subjective norms, and perceived behavior control. Despite not having a direct impact, long-term orientation also imposes an indirect impact on green purchase intention through the same media as collectivism.

It is recommended that policymakers, business people, and producers promote the consumption of green products in order to better satisfy consumers' needs and get the highest business efficiency, perhaps by strengthening communication and promotion to Korean consumers to enhance awareness of green products, and to preserve cultural values associated with encouraging green consumption. It would be interesting for future research to widen the sample and include other cultural groups in South Korea. Furthermore, this study was conducted based solely on the Theory of Planned Behavior Framework using PLS-SEM. In the future, researchers can use other theoretical models to test the hypotheses made in this study or other novel hypotheses.

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REFERENCES CITED

- Agan, Y., M. F. Acar and A. Borodin, 2013. Drivers of environmental processes and their impact on performance: a study of Turkish SMEs. *Journal of Cleaner Production*. 51: 23-33. <https://doi.org/10.1016/j.jclepro.2012.12.043>
- Ajzen, I. 1985. From intentions to actions: A theory of planned behavior. In *Action Control*, pp. 11-39. Springer, Berlin, Heidelberg.
- Ajzen, I. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. 50(2): 179-211.
- Ajzen, I. 2006. Constructing a theory of planned behaviour questionnaire: Conceptual and methodological consideration. Available online at: <http://www.people.umass.edu/aizen/pdf/tpb.measurement.pdf>. Accessed in Sep.17th 2022.
- Al Mamun, A., M. R.Mohamad, M. R. B. Yaacob, and M. Mohiuddin. 2018. Intention and behavior towards green consumption among low-income households. *Journal of Environmental Management*. 227: 73-86.
- Al-Swidi, A., S. M. R. Huque, M. H. Hafeez and M. N. M. Shariff. 2014. The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal*. 116(10): 1561-1580.
- Arisal, I., and T. Atalar. 2016. The exploring relationships between environmental concern, collectivism and ecological purchase intention. *Procedia-Social and Behavioral Sciences*. 235: 514-521.
- Arli, D., Tan, L. P., Tjiptono, F., and L. Yang. 2018. Exploring consumers' purchase intention towards green products in an emerging market: The role of consumers' perceived readiness. *International Journal of Consumer Studies*. 42(4): 389-401.
- Bae, J., and S. Kim. 2013. The influence of cultural aspects on public perception of the importance of CSR activity and purchase intention in Korea. *Asian Journal of Communication*. 23(1): 68-85.
- Ball, R. 2001. Individualism, collectivism, and economic development. *The Annals of the American Academy of Political and Social Science*. 573(1): 57-84.
- Bamberg, S. 2003. How does environmental concern influence specific environmentally related behaviors? A new answer to an old question. *J. Environmental Psychology*. 23(1):21-32.
- Biel, A. and J. Thøgersen. 2007. Activation of social norms in social dilemmas: A review of the evidence and reflections on the implications for environmental behavior. *J. Economic Psychology*. 28(1): 93-112.
- Biswas, A. and M. Roy. 2015. Leveraging factors for sustained green consumption behavior based on consumption value perceptions: testing the structural model. *Journal of Cleaner Production*. 95: 332–340.

- Brigham, K. H., G. T. Lumpkin, G. T. Payne, and M. A. Zachary. 2014. Researching long-term orientation: A validation study and recommendations for future research. *Family Business Review*. 27(1): 72–88.
- Chen, C. C., C. W. Chen and Y. C. Tung. 2018. Exploring the consumer behavior of intention to purchase green products in belt and road countries: An empirical analysis. *Sustainability*. 10(3): 854.
- Chen, L. 2013. A study of green purchase intention comparing with collectivistic (Chinese) and individualistic (American) consumers in Shanghai, China. *Information Management and Business Review*. 5(7): 342–346.
- Diamantopoulos, A., M. Sarstedt, C. Fuchs, P. Wilczynski and S. Kaiser. 2012. Guidelines for choosing between multi-item and single-item scales for construct measurement: A predictive validity perspective. *Journal of the Academy of Marketing Science*. 40: 434-449.
- Dixon, G. N., M. B. Deline, K. McComas, L. Chambliss and M. Hoffmann. 2015. Saving energy at the workplace: The salience of behavioral antecedents and sense of community. *Energy Research and Social Science*. 6: 121-127.
- Emekci, S. 2019. Green consumption behaviors of consumers within the scope of TPB. *Journal of Consumer Marketing*. 36(3): 410-417.
- Fornell, C., and D. F. Larcker. 1981. Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*. 18: 382-388. <http://dx.doi.org/10.2307/3150980>
- Hair, J. F., G. T. M. Hult, C. M. Ringle and M. Sarstedt. 2022. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). 10.1007/978-3-030-80519-7.
- Hair, J. F., J. J. Risher, M. Sartedt and C. M. Ringle. 2019. When to use and how to report the results of PLS-SEM. *European Business Review*. 31(1): 2-24.
- Han, H., L. T. J. Hsu, and C. Sheu. 2010. Application of the theory of planned behavior to green hotel choice: Testing the effect of environmentally friendly activities. *Tourism Management*. 31(3): 325-334.
- Hofstede, G. 2001. *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*, 2nd ed. Sage Publ. Co. Inc., Thousand Oaks, CA. 616 p.
- Joshi, Y., and Z. Rahman. 2015. Factors affecting green purchase behavior and future research directions. *International Strategic Management Review*. 3(2): 128-143.
- Kim, A., K. P. Kim and T. H. D. Nguyen. 2021. The green accommodation management practices: The role of environmentally responsible tourist markets in understanding tourists' pro-environmental behavior. *Sustainability*. 13(4): 2326.
- Kim, H. Y. and J. E. Chung. 2011. Consumer purchase intention for organic personal care products. *Journal of Consumer Marketing*. 28(1): 40-47.
- Kim, S. E., H. Kim and Chae. Y. 2014. A new approach to measuring green growth: Application to the OECD and Korea. *Futures*. 63: 37-48.

- Kinncar, T. C., J. R. Taylor and S. A. Ahmed. 1974. Ecologically concerned consumers: Who are they? Ecologically concerned consumers can be identified. *Journal of Marketing*. 38(4): 20-24
- Ko, S. B., and B. Jin. 2017. Predictors of purchase intention toward green apparel products: A cross-cultural investigation in the USA and China. *Journal of Fashion Marketing and Management: An International Journal*. 21(1) 70-87. <https://doi.org/10.1108/JFMM-07-2014-0057>
- Kong, W., A. Harun, R. S, Sulong and J. Lily. 2014. The influence of consumers perception of green products on green purchase intention. *International Journal of Asian Social Science*. 4(8): 924-939.
- Laroche, M., J. Bergeron and G. Barbaro-Forleo. 2001. Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*. 18(6): 503–520.
- Lee, Y. K. 2017. A comparative study of green purchase intention between Korean and Chinese consumers: The moderating role of collectivism. *Sustainability*. 9(10): 1930.
- Leonidou, C. N., C. S. Katsikeas, and N. A. Morgan. 2013. “Greening” the marketing mix: Do firms do it and does it pay off?. *Journal of the Academy of Marketing Science*. 41(2): 151-170.
- Lim, E., S. Arita, and S. Joung. 2019. Advancing sustainable consumption in Korea and Japan—from re-orientation of consumer behavior to civic actions. *Sustainability*. 11(23): 6683.
- Liu, Y., S. Segev and M. E. Villar. 2017. Comparing two mechanisms for green consumption: Cognitive-affect behavior vs theory of reasoned action. *Journal of Consumer Marketing*. 34(5): 442-454.
- Lobo, A. and S. Greenland. 2017. The influence of cultural values on green purchase behavior. *Marketing Intelligence and Planning*. 35(3): 377–396.
- Lumpkin, G. and K. Brigham and T. Moss. 2010. Long-term orientation: Implications for the entrepreneurial orientation and performance of family businesses. *Entrepreneurship and Regional Development*. 22: 241-264. <https://doi.org/10.1080/08985621003726218>.
- Mazhar, W., T. Jalees, M. Asim, S. H. Alam and S. I. Zaman. 2022. Psychological consumer behavior and sustainable green food purchase. *Asia Pacific Journal of Marketing and Logistics*. Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/APJML-05-2021-0317>
- McCarty, J. A. and L. J. Shrum. 2001. The influence of individualism, collectivism, and locus of control on environmental beliefs and behavior. *Journal of Public Policy and Marketing*. 20(1): 93-104.
- Nguyen, T. K. C., S. H. Pham, T. T. N. Nguyen, H. G. Do, and T. N. Ngo. 2021. Investigating the determinants of green consumption intention. *Journal of International Economics and Management*. 21(3): 73-90.
- Nunnally, J.C. 1978. *Psychometric Theory*. 2nd ed, McGraw-Hill, Inc., New York. 701 p.
- OECD. 2012. *Green growth in action: Korea*. Available online at: <https://www.oecd.org/korea/greengrowthinactionkorea.htm> Accessed in Sep.10th 2022.
- Panzone, L., D. Hilton, L. Sale and D. Cohen. 2016. Socio-demographics, implicit attitudes, explicit attitudes, and sustainable consumption in supermarket shopping. *Journal of Economic Psychology*. 55: 77-95.

- Park, S. M., E. H. Lee, K. J. Kim, H. J. Yoo and K. W. Cha. 2013. A study of green claims in Korean consumer market. *International Journal of Human Ecology*. 14(1): 13-27.
- Sharma, P. 2010. Measuring personal cultural orientations: Scale development and validation. *Academic of Marketing Science*. 38: 787-806.
- Thøgersen, J., and Y. Zhou. 2012. Chinese consumers' adoption of a 'green' innovation – The case of organic food. *Journal of Marketing Management*. 28(3-4): 313-333.
- Triandis, H. C. 1995. *Individualism and Collectivism*. Westview Press, Inc., New York. 259 p.
- Wang, L., P. P. Wong and E. A. Narayanan. 2020. The demographic impact of consumer green purchase intention toward green hotel selection in China. *Tourism and Hospitality Research*. 20(2): 210–222.
- Wang, S. T. 2014. Consumer characteristics and social influence factors on green purchasing intentions. *Marketing Intelligence and Planning*. 32(7): 738-753. <https://doi.org/10.1108/MIP-12-2012-0146>
- World Bank. 2022. The World Bank in Republic of Korea. Available at: <https://www.worldbank.org/en/country/korea/overview>. Accessed in Sep.10th 2022.
- Yadav, R. and G. S. Pathak. 2017. Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecological Economics*. 134: 114–122.
- Zheng, Y. and T. Chi. 2015. Factors influencing purchase intention towards environmentally friendly apparel: An empirical study of us consumers. *International Journal of Fashion Design, Technology and Education*. 8(2): 68–77.
- Zhuang, W., X. Luo and M. U. Riaz. 2021. On the factors influencing green purchase intention: A meta-analysis approach. *Frontiers in Psychology*. 12: 644020.
- Zinoubi, Z. G. 2020. Determinants of consumer purchase intention and behavior toward green product: The moderating role of price sensitivity. *Archives of Business Research*. 8(1): 261-273.