



Generation Z willingness to pay for sustainable apparel: the influence of labelling for origin and eco-friendly material

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Abstract

The purpose of this study is to identify the willingness to pay (WTP) and trade-off that Vietnamese generation Z consumers could make when purchasing eco-friendly apparel. This research uses the Discrete Choice Experiment methodology to measure consumers' WTP and how consumers trade off among different attributes, including eco-friendly, origin, manufacturing technology, and materials. The results show that generation Z consumers are willing to pay for organic label products at a higher price of 21.22% and eco-friendly label items at a higher price of 37.72%. Consumers who have a higher level of corporate social responsibility (CSR) awareness and higher income are willing to pay more for organic and eco-friendly label apparel. They were least willing to purchase apparel that is made in China, while they see no difference between T-shirts made in Vietnam and in other countries except China. Consumers in the current study were more willing to purchase eco-friendly as compared to organic apparel. The findings suggest that enterprises should consider the language used when communicating with consumers. Also, consumers prefer products made in Vietnam, suggesting the promotion of domestic manufacturing through in-depth branding, product positioning, and promotions. The results also confirm that the application of CSR in enterprises is the right and necessary step to be taken for businesses to develop in a sustainable integration world.

Keywords: Eco-friendly apparel, Discrete choice experiment, Customer behavior, Sustainability

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1. Introduction

After more than 20 years of the “Green Consumer” campaign in the world, the first global survey of consumer expectations for businesses with the participation of 1,000 citizens from over 23 countries shows that environmental safety issues are some of the important factors affecting consumers before making a purchase (Boulstridge *et al.*, 2000). Nowadays, consumers are not only interested in green or eco-friendly products, but also tend to maintain eco-friendly consumption activities (Luzio and Lemke, 2013; Heikkurinen *et al.*, 2019; Pham and Tang, 2020). When consumers tend to consume green, they also expect companies to become eco-friendlier and tend to buy goods or services from brands committed to being environmentally friendly. According to Freeman's (1984) stakeholder theory, consumer is one of the key stakeholders that businesses need to pay attention to. As the end-user of goods and services of the business, shopping and consumption behavior of consumers will directly affect the existence and development of the business.

With the increasing awareness that their consumption decisions impact the environment, consumers are translating their buying decisions. The growing market segment of “ethical consumers” requires strategies to help sustainable apparel producers and retailers make strategic decisions that manage risks and enhance profits. One of the necessary steps is to establish valid information on profile of sustainable apparel consumers, consumer demand, including their willingness to pay (WTP) for eco-friendly produced apparel. WTP is a basic economic concept defined as the amount of money that individuals are willing to forgo to obtain a higher level of a particular attribute.

Vietnamese businesses still pay less attention to eco-friendly garments. Meanwhile, according to the Nielsen's market research, about 80% of Vietnamese consumers are willing to pay more to buy products of the brand "green" and "clean". Also, the awareness and information about brand names that are eco-friendly to Vietnamese consumers are not high. According to research by Bui (2010), from the perspective of consumers, they only name a few famous companies as eco-friendly garment brands. Research in Vietnam on eco-friendly apparel is still limited. Although there have been some studies that clarified the factors which might influence consumers' purchasing behavior and intentions, there is currently no research to quantify consumers' WTP for eco-friendly garments. The common path of the research in Vietnam currently is that it introduces new product attributes or new factors that affect consumers' awareness and intention to consume green products, however, there has not yet been research quantifying customers' intention to consume. Nguyen and Dekhili (2019) investigate the attributes that consumers

are most interested in when buying green consumer products as well as describes the motivations and barriers that shape green consumer behavior. Regarding the concept of green products, consumers who have been interviewed show that they are interested in attributes such as: non-toxic, natural, and biodegradable. The study also identifies barriers to green consumer behavior, including a lack of product information as well as a lack of motivation for consumers to use environmentally friendly products. In the research on consumer behavior, Nguyen and Nguyen (2016) determine five factors that influence the intention of green consumption, including attention to environmental issues, awareness of environmental issues, altruism, social influence and effectiveness. Dang (2017) analyses the readiness to buy domestic garments but has not yet assessed the WTP for environmentally friendly garments.

The primary objective of this research is to determine consumers' WTP for eco-friendly versus conventionally produced apparel. We use discrete choice experiment (DCE) methodology to elicit consumers' WTP for T-shirts produced using organic/eco-friendly and conventional materials and quantify the acceptable trade-off between eco-friendly attributes and other attributes including origin, production technology, and materials. T-shirts were chosen to represent general apparel since this product category is popular, staple and unisex. We also explore the role of apparel attributes, consumers' demographic characteristics, and awareness of CSR in apparel purchase decisions. CSR requires businesses to pursue the determination of balancing between financial performance and their positive impacts on society in terms of environment conservation, labor rights, personnel training, and community development (Pham and Pham, 2019). Consumers who care about CSR are expected to be willing to buy eco-friendly products. The research focuses on generation Z since they are expected to have responsibility to make society the better place.

The paper is organized as follows. First, we review the findings of previous studies related to sustainable apparel consumption. Next, the authors address methods used for eliciting consumers' WTP and trade off among apparel attributes and discuss our implementation of the experiment. We then present model results. Discussion of the results and their implications for the apparel industry are presented. Finally, the authors conclude the paper.

2. Literature review

2.1 Sustainable consumerism and profile of sustainable apparel consumer

The majority of research on the consumers of organic products focuses on food sector, while the number of studies focusing on the sustainable apparel is limited.

There is contradiction in the literature in identifying the impact of ethical issues on purchasing decision. While ethical issues are considered merely playing a role in consumer apparel buying decisions (Joergens, 2006), other researchers agree that ethical issues have a great impact on perceptions and buying intent of sustainable consumers who care about environment impacts and have ecologically conscious ethic. Researchers point out sustainable consumers pay more attention to product credentials than other attributes such as price (Gilg *et al.*, 2005; Peterson *et al.*, 2012; Cowan and Kinley, 2014; Hwang *et al.*, 2015; Ellis *et al.*, 2012). Researchers agree that price and quality play a vital role in consumer purchase decisions (Ellis *et al.*, 2012; Lori, 2017). Besides, other relevant attributes include material/texture, style, origin, and durability (Meyer, 2001).

Researchers find that typical consumers of sustainable apparel products are young, female, well-educated, and married (Arbuthnot, 1977; Banerjee and McKeage, 1994; Laroche *et al.*, 2001). In terms of gender, women are more likely to purchase organic apparel than men, and most women buy for children. However, women are not willing to pay more for the organic attribute (Gam *et al.*, 2010). There is little evidence that demographics such as gender, age, education level, and income have an impact on sustainable apparel purchasing decisions and WTP is reported (McGoldrick and Freestone, 2008; Wang, 2007; Lin, 2010). Nevertheless, attitudes toward environment and sustainable consumerism are reported of creating motivations for buying organic apparel (Lin, 2010). Sustainable consumers are expected to be willing to pay more for eco-friendly produced apparel.

2.2 WTP

Several studies have measured consumers' WTP for sustainable apparel. In Lin (2010), more than half of the participants state that they are willing to pay more for eco-friendly produced apparel. Ellis *et al.* (2012) show that consumers are willing to spend 25% more to own an eco-friendly T-shirt. Wang (2007) determines that customers are willing to pay additional 50 to 100% more for organic cotton. McGoldrick and Freestone (2008) find that consumers are willing to pay at least a 6% premium for ethically assured garments. Casadesus-Masanell *et al.* (2009) find that consumers are willing to pay 6.58 USD more for organic cotton shirts. Lori (2017) points out that consumers are willing to pay an additional 10 USD for an eco-friendly shirt. Except Casadesus-Masanell *et al.* (2009) using internal company data, all mentioned studies used stated WTP elicited from direct survey.

In the present study, discrete choice experiment (DCE) method is chosen to generate stated WTP. DCE is a quantitative methodology used to elicit preferences (Mandeville *et al.*, 2014). DCE bases on the assumption that an individual chooses

a good or service depends on the attributes of that good or service (Hensher *et al.*, 2005). Relative importance of the different attributes influences individual behavior (Lagarde and Blaauw, 2009). DCE provides researchers with trade-off information among the attributes that helps infer what dynamics actually drive the respondents' choices.

The DCE is based on random utility theory and consistent with the work of Lancaster (1966). The main content of random utility theory is that individuals choose goods and services that bring them the highest utility (McFadden, 1986). Lancaster's work proposes that the consumers demand a good or service because of a specific combination of attributes of that good or service (Lancaster, 1966). When people buy a product or service, they will consider the utility they might receive (Tran and Tieu, 2020). Consumers assign weights to each attribute and choose a good or service that has combined attributes to bring them the highest utility (Lancaster, 1966). As such, using random utility theory to examine what consumers derive from good or service attributes fits the context of generation Z consumers' choice toward T-shirt. Apparel consumers tend to choose the hypothetical T-shirt that combines the T-shirt attributes and attribute-levels that bring them the highest utility.

3. Methodology

The present study was conducted among generation Z consumers, generally defined as those born 1996 and onwards. In total, 169 consumers were surveyed. The participants were fairly divided among gender with 42.1% were male and 57.9% were female. The consumers' monthly income ranged from less than 50 USD (23.1%) and more than 50 USD (76.9%). In terms of average level of awareness of CSR, young consumers with high awareness of CSR account for 64.5% and those with low awareness of CSR account for 35.5%. Consumers' awareness of CSR was measured by questions in general survey, asking participants about their knowledge of CSR and CSR aspects. The high response rates and the rich diversity of respondents ensured adequate size for subgroup analysis.

3.1 Discrete choice design

In order to review context specific attributes and level from conceptual attributes, a number of retailers and retail websites were examined. Also, a focus group with consumers was conducted to refine factors which may influence buying decisions of generation Z consumers. Table 1 summarizes the final attributes that showed the highest influence on consumers' decisions and the attribute levels.

Table 1. Attributes and attribute levels

Attributes	Levels
Label	Organic
	Eco-friendly
	Ordinary
Material	Wrinkle-resistant
	Cooling
	Stretch recovery
Origin	China
	Imported (except China)
	Vietnam
Price	Increase 20%
	Increase 40%
	Increase 50%
	Unchanged

Source: The Authors' construction

Generic design was employed to elicit the trade-off between different attributes. The choice task profile was comprised of a binary choice which was deliberately label generic as Option A and Option B.

The total number of choice occasions was fixed to guarantee statistical power based on the number of selected attributes and attribute-levels. In pairs, the number of possible combinations of attribute-levels is 108 ($33 \times 41 = 108$). Each choice set is comprised of two scenarios. Given the wide range of possible choice sets, the inclusion of all hypothetical sets is not feasible. Therefore, STATA was employed to generate a manageable D-efficiency design that only features a fraction of all possible alternatives. The combination of attribute-levels in each choice task was conducted using the conjoint-related technique - which balances the frequency of appearance of each attribute-level in the overall design and excludes choice sets in which one was apparently superior or inferior in all attributes. Eventually, 14 choice sets (two blocks, 7 choice sets per block) were generated. Each respondent was randomly presented with one block with 7 choice tasks appearing in a random order. Respondents who have completed at least post-secondary education have the cognitive capacity to answer those 7 choice cards (Orme, 1998; DeShazo and Fermo, 2002). To evaluate the reliability of the information provided by respondents, two choice cards with similar content were placed among the seven

choice cards in each block. The similarity of how the respondents answer two identical choice cards ensures the reliability of responses.

A pilot study was carried out to evaluate the comprehension and coverage of shirt attributes and levels. Six respondents participated in this stage. Because the actual test aimed to include representatives from an array of subgroups, the pool of participants was diverse in terms of gender, income and CSR awareness. The results of the pilot test confirmed that respondents were not biased towards a specific attribute-level, hence no adjustments were required of the shirt attributes.

The survey mode was interviewer-administered. With this format, respondents could discuss their choices with enumerators. Following the completion of the supplement survey, each participant continues with discrete choice task.

3.2 Data coding

All attribute variables were dummy coded, with the exception of price that was coded as a continuous variable. Price was modelled as a continuous variable with actual attribute-level values input (no change, 20%, 40% and 50%). The estimate parameter of price was interpreted as the value of a percent change in price. For the dummy categorical attribute variables, preferences were modelled relative to some base cases. The base cases were coded as 0. The interpretation of the estimated parameters of dummy categorical variables is the marginal value of a movement from the base case to a defined level.

A total of 205 consumers were surveyed, 21 of which did not partake in the DCE test after completing the general survey and 15 failed the test of reliability. According to the rule-of-thumb of Johnson and Orme (1996), the sample must include a minimum of 72 respondents with seven choice sets per respondent, two scenarios per choice set, and two analysis cells per choice sets ($N \geq 500 * 2 / 7 * 2 = 72$). The final sample comprising 169 respondents was sufficient to guarantee appropriate estimation of the main effects. From each respondent, responses for seven choice sets were collected, two of which were identical in content - hence reducing collection to six choice sets per respondent, totalling 2028 observations (169 respondents x 6 choice sets x 2 options for each choice).

3.3 Discrete choice design analysis

In the present study, the authors aim to evaluate the extent of influence of the respondent n 's characteristic and characteristics of alternatives over the probability that respondent n opts for the i^{th} alternative. Hence, the mixed logit (MXL) model was selected since MXL allows heterogeneity of individual preferences for

attributes among respondents (Mandeville *et al.*, 2014). MXL can provide a high degree of accuracy as it can not only accommodate individual-specific independent variables (Mandeville *et al.*, 2014; McFadden and Train, 2000), but also allow the specified coefficients of attributes randomly distributed among respondents (Louviere *et al.*, 2000). The utility U_{ni} that a respondent n obtains from choosing alternative i in the MXL is computed using:

$$U_{ni} = \beta_i x_{ni} + \varepsilon_{ni}$$

in which, x_{ni} refers to alternative-specific independent variables of the i^{th} alternative relative to respondent n and the individual-specific independent variable characteristics of respondent n . The vector of alternative-specific parameters β_i is computed based on the mean utility estimate and the individual-specific deviation from that mean (Lancsar and Louviere, 2008).

4. Results and discussion

4.1 Entire sample analysis

Table 2 provides estimated results of the mixed conditional logit model, with Pseudo R^2 of 15.6% and reliability of 95%. Attributes including label, material, origin, and prices primarily influence consumers' choices of plain T-shirts. Organic and eco-friendly labels have a statistically positive impact on consumers' utility when buying T-shirts with regression coefficient of reaching $\beta_1 = 0,443$ and $\beta_2 = 0,787$, respectively at 1% level of significance. Two sub attributes taken into consideration are: wrinkle resistance and cooling effect. Wrinkle-resistant material has a negative effect on the regression coefficient $\beta_3 = -0,275$ and the cooling attribute has a positive effect on $\beta_4 = 0,367$ in terms of the consumer utility when buying T-shirt. Origin attribute is considered to be influenced by two subgroups which are "made in China" and "imported from countries other than China". Chinese origin has an opposite effect on consumers' utility in choosing T-shirt products with regression coefficient $\beta_5 = -0,766$, while origin of imports from countries other than China has no statistically significant impact (p-value = 0.800). In other words, Chinese origin negatively influences on utility function whereas consumers' perception regarding imported goods does not differ from those made in Vietnam. Price attribute has a statistically negative effect on consumers' utility for choosing T-shirt products with regression coefficient $\beta_6 = -0,020$.

Table 2. MXL model estimate

Attribute	Regression coefficient	Standard deviation
Label (ref: ordinary)		
Organic	0.443***	0.114
Eco-friendly	0.787***	0.154
Material (ref: stretch recovery)		
Wrinkle-resistant	-0.275**	0.133
Cooling	0.367***	0.109
Origin (ref: Vietnam)		
China	-0.766*	0.099
Imported	-0.028	0.110
Price	-0.0208895	0.003
ASC	0.140***	0.131
Observations made	2.028	
Pseudo R2	0.156	

Note: *, **, *** represent levels of significance of 10%, 5% and 1%, respectively.

Source: Authors' calculation

4.2 Subgroup analysis

In terms of gender

Organic and eco-friendly labels have more statistically significant influence on females than males. Male consumers see no different impact in terms of how organic label and normal label affecting their buying decision. Material attribute have different effects on the two sex groups, if the female gender group is affected by the material attribute with the coefficients $\beta_3 = -0.340$ and $\beta_4 = 0.431$ respectively; there was, again, no significant impact on the male gender group (p-value = 0.383 and p-value = 0.120) in terms of material attribute. The analysis results show that the female gender group is significantly affected by the material attribute of the T-shirt products, while the male gender group is not significantly affected by this attribute. The origin attribute of China has a negative effect on the utility of both sex groups while both male and female see no difference between the imported T-shirt and made in Vietnam T-Shirt.

Table 3. Subgroup analysis by gender, income, and CSR awareness

Attributes		Subgroup analysis by three different groups					
		Gender		Income		CSR	
		Male	Female	Under \$50	Over \$50	Low	High
Label (ref: normal)	Organic	0.284 (0.18)	0.538*** (0.15)	0.45 (0.182)	0.494*** (0.155)	0.302 (0.192)	0.517*** (0.143)
	Eco-friendly	0.564** (0.253)	0.917*** (0.199)	0.802*** (0.257)	0.794*** (0.195)	0.579** (0.262)	0.904*** (0.193)
Materials (ref: stretch recovery)	Wrinkle-resistant	-0.183 (0.21)	-0.340** (0.173)	-0.216 (0.196)	-0.374** (0.188)	-0.218 (0.223)	-0.309* (0.166)
	Cooling	0.262 (0.168)	0.431*** (0.143)	0.689*** (0.172)	0.075 (0.145)	0.398** (0.18)	0.346** (0.137)
Origin (ref: Vietnam)	China	-1.019*** (0.162)	-0.613*** (0.128)	-0.761*** (0.153)	-0.779*** (0.134)	-0.676* (0.162)	-0.818*** (0.127)
	Imported	-0.077 (0.173)	0.017 (0.146)	-0.152 (0.166)	0.189 (0.156)	0.262 (0.188)	-0.183 (0.138)
Price		-0.022*** (0.005)	-0.020*** (0.004)	-0.024*** (0.004)	-0.015*** (0.004)	-0.019*** (0.005)	-0.021*** (0.003)
ASC		0.244 (0.218)		0.231 (0.272)	0.103 (0.173)	0.19 (0.218)	0.105 (0.166)
Model diagnostics	Number of Observations	852	1176	948	1080	720	1308
	Pseudo R2	0.1894	0.1471	0.1708	0.1657	0.154	0.159

Note: The symbols *, **, *** respectively represent levels of significance of 10%, 5% and 1%. Numbers in parentheses indicate the standard deviation

Source: The Authors' calculation

In terms of income

Unlike the estimated results for the entirety of the surveyed subjects, the impact of each attribute varies according to income level. The influence of price on consumer behaviors is more remarkable among young consumers who earn less than 50 USD compared to those whose income exceeds 50 USD. Labels that reflect CSR towards environmental protection also influence both groups. Organic labels only have statistical significance impact on young consumers earning more than 50 USD, whereas eco-friendly labels have positive impacts on both groups.

In terms of CSR awareness

According to young consumers' perceptions of CSR, the authors considered dividing the group of young consumers to group with a high awareness of CSR and group with low awareness of CSR. The utility ascribed to each attribute varies according to level of awareness of CSR, in which organic and eco-friendly labels have a significant positive impact on young consumers who are acutely aware of CSR. In contrast, for young consumers with little CSR awareness, organic labels have no statistical significance impact whereas eco-friendly labels have less impact on them than on the other group.

4.3 WTP for subgroups

The magnitude of price young consumers willing to trade-off differed depending on different groups. In other words, WTP became higher or lower depending on the subgroup division. This implies that the WTP estimates may be heterogeneous across the respondents with different demographic and CSR awareness factors. Table 4 provides WTP estimates for each attribute of different subgroups. The MXL models in the subgroup analysis section provide coefficient estimates for each subgroup.

Table 4. Willingness to pay for subgroups

Sub-group	Attributes		Materials		Origin
	Label (ref: ordinary)		(ref: stretch recovery)		(ref: Vietnam)
	Organic	Eco-friendly	Wrinkle-resistant	Cooling	China
Gender					
Male		25.16 (6.69 43.62)			-45.434 (-65.30 -25.57)
Female	26.79 (11.49 42.09)	45.69 (28.38 63.01)	-16.96 (-36.86 2.94)	21.47 (7.42 35.52)	-30.531 (-45.12 -15.93)
Income					
Under \$50	18.25 (5.53 30.97)	32.516 (16.40 48.63)		27.94 13.47 42.24	-30.872 (-44.20 -17.54)
Over \$50	32.448 (7.82 57.08)	52.092 (25.39 78.79)	-24.534 (-55.21 6.14)		-51.083 (-80.56 -21.61)
CSR Awareness					
Low		29.789 (7.81 51.78)		27.94 (13.47 42.41)	-30.872 (-44.20 -17.54)
High	23.669 (11.09 36.25)	41.382 (26.51 56.25)	-24.54 (-55.21 6.14)		-37.449 (-51.59 -23.31)

Note: Numbers in parentheses indicate the standard deviation

Source: The Authors' calculation

The value consumers placed on T-shirt attributes varied considerably by gender

Organic and eco-friendly labels appeal more favorably to female young consumers than male young consumers. Female young consumers are more willing than their

male counterparts to pay higher prices for organic and eco-friendly labels. Also, female young consumers tend to be more selective regarding materials and origins compared to male young consumers.

WTP for each attribute slightly increases with income level while sensitivity to price drops marginally

In other words, those with higher income are less sensitive to fluctuations in prices and are willing to pay more for products with eco-friendly attributes that demonstrate strong CSR. For example, WTP of those earning less than 50 USD for eco-friendly labels averages 32.5% while that of those earning more than 50 USD approximates 52.1%.

Young consumers with acute awareness of CSR are remarkably more willing to pay for organic and eco-friendly labels

In other words, young consumers who are well-aware of CSR are willing to pay higher prices for organic and eco-friendly labels.

4.4 Predicted uptake

Each kind of change in attributes has different impacts on different subgroups. Table 5 displays the impact on each subgroup represented by the probability of purchase.

Table 5. Proportion of uptake for subgroups

Sub-groups	Attribute Uptake			Label Organic	Material Eco-friendly	Material Wrinkle-resistant	Origin Cooling China
	Price 20% increase	40% increase	50% increase				
Gender							
Male	-22	-42	-51		27		-47
Female	-20	-38	-46	26	43	-17	21.2 30
Income							
Under \$50	-24	-46	-55	22	38		33 -38
Over \$50	-15	-30	-36	24	38	-18	3.7 -37
CSR Awareness							
Low	-19	-37	-45		53		20 -33
High	-22	-41	50	25	42	-15	17 -39

Source: The Authors' calculation

Gender subgroups

As price increases, the probability of selecting products with higher prices is lower among males than females. While materials affect the probability of purchase among females, this is not the case for male consumers. In terms of Chinese origin, the probability of purchase is higher among females than males.

Income subgroups

For those with higher income, the probability of purchase when prices increase is higher than those who earn less. This discrepancy is further highlighted as prices climb. Increasing price by 20% decreases the respective probability of buying by 24 percentage points for consumers earning less than 50 USD and 15 percentage points for those earning more than 50 USD. Raising prices to 40% and 50% decrease the respective probability of buying by 46 and 55 percentage points for consumers earning less than 50 USD and 30 and 36 percentage points for those earning more than 50 USD.

CSR awareness subgroups

Young consumers with acute awareness of CSR are 25 percentage point more likely to purchase T-shirts with organic labels and 42 percentage point more likely to buy those with eco-friendly labels.

5. Discussion and implications

The price attribute is the attribute that young consumers are highly sensitive to. Consumers with higher income are willing to pay more for both conventional and organic/eco-friendly products. Since the participants in this study were generation Z, whose income is relatively low, the relationship between income, price, and WTP is unsurprising and supported by previous studies (Ellis *et al.*, 2012; Lori, 2017).

In recent years, advances in fabric technology have come to the forefront (Li *et al.*, 2014). Concerning the material properties, participants place a higher level of importance on cooling materials than non-wrinkle and stretch-recovery materials. The female group is significantly affected by the material properties of the T-shirt products.

In the sample, consumers are willing to pay 21.2% higher price for the 'organic' label products and 37.7% higher price for the 'eco-friendly' apparel, compared to products with ordinary labels. Although eco-friendly and organic are both preferred labels, it is helpful to know that consumers prefer the eco-friendly T-shirt over the organic T-shirt. This supports previous findings by Lori (2017) who indicates that in the long run 56 out of every 100 consumers would purchase the eco-friendly labelled products instead of the organic ones.

Where apparel is produced can be referred to as the social value of a product (Sheth *et al.*, 1991). Consumers associate country of origin with level of quality of a garment (Dickerson, 1987), which in turn affects consumer buying intention positively or negatively (Rashid *et al.*, 2016). Regarding the origin attribute, Chinese origin has a negative impact on consumers' utility, while imported origin does not show a significant difference compared to Vietnamese origin. When Made in Vietnam apparel is preferred it might be based on the respondents' intention to portray their social image that they support domestic products.

There is a big difference in the willingness to pay for T-shirts among groups with different level of CSR awareness. Label attributes related to CSR in protecting the environment have a positive impact on consumers' utility. The study finds that young consumers with a high level of CSR awareness are willing to pay more for organic and environmental labels. This supports previous findings that consumer knowledge is directly related to their sustainable buying intention (Kang *et al.*, 2013).

The research shows that the implementation of CSR is a wise and necessary strategy for businesses to advance in a world of integrated sustainability, especially in a developing country as Vietnam. As consumers' awareness increases, businesses that execute CSR properly gain a competitive edge in both domestic and international market. From the research results of the topic, consumers are aware of positive CSR, but not fully and accurately aware of CSR functions. Consumers have a higher degree of utility for the label 'environmentally friendly' than the 'organic' label while the two labels are of similar nature. Regulators need to increase the content of educating consumers about CSR so that consumers can make the right choice when buying goods, and at the same time protect their own interests through communication channels, television, newspapers, seminars, and exchange forums.

Consumers also have a negative attitude towards garments originating from China, as well as an indifferent attitude toward imported garments. This is an opportunity for Vietnamese businesses to develop eco-friendly garments, first of all on the domestic and then on the export market. The research results also show that the label 'environmentally friendly' has a greater influence on consumer satisfaction than organic labels, so businesses should pay attention to naming labels to suit consumers' preference.

In terms of education, it is advisable that educational content regarding CSR be integrated into the teaching program via conferences and field trips, thus raising awareness among youths-the next generation of consumers with potential for global integration or the would-be entrepreneurs.

6. Conclusion

The current study provides insight into willingness to pay and trade-off that generation Z consumers make when considering attributes for eco-friendly apparel. Young consumers placed more importance on sustainable apparel than conventional products. The findings also suggest that enterprises should consider the language used when communicating with consumers since eco-friendly apparel are preferred than organic ones. Also, consumers prefer products Made in Vietnam, suggesting the promotion of domestic manufacturing through in-depth branding, product positioning and promotions. The research also shows that the application of CSR in enterprises is the right and necessary step to be taken for businesses to develop in a sustainable integration world. The present study provides potential direction to apparel manufacturers and retailers, as this study suggests eco-friendly and made in Vietnam are important attributes to be addressed.

The paper has some limitations for further research. The authors use a sample of generation Z students; therefore, the results cannot be generalized to population of all age ranges. Furthermore, T-shirt was chosen since it is unisex and popular. However, it is a utilitarian product, which brings less emotion to consumers than several types of products, like jeans for example. Consumers might be willing to pay higher price for products which bring them more emotion. Thus, the results might not be generalized to all types of clothing.

There are numerous questions which need to be examined in greater detail for future research. These include the following: First, consumers prefer eco-friendly than organic apparel seen in the current study. Thus, more research on consumers' decision-making mechanisms when purchasing sustainable apparel is needed. Second, willingness to pay and trade-off made by not only young generation but also consumers of all age ranges could be elicited. Third, consumers' decision-making mechanisms toward other types of clothing should be studied. This would be valuable for manufacturers and retailers to know.

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