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THE MODERATING ROLE OF GENERATION DIFFERENCES DETERMINANT FACTORS OF SUSTAINABLE APPAREL BEHAVIOR INTENTION

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Abstract: Consumer awareness of the negative impacts of fast fashion has driven a shift towards sustainable apparel. This study aims to understand the determinants of consumer intention to engage in sustainable buying behavior. A conceptual model is developed to examine the relationship between internal factors (consumer characteristics such as shopping value, sustainability consciousness, perceived consumer effectiveness, and environmental knowledge) and external factors (advertising perspective focusing on sustainable clothing product criteria) that influence clothing consumption intention across different generations. An online survey was conducted with 150 X Generation, 150 Y Generation, and 150 Z Generation consumers in Indonesia. Data analysis using Partial Least Square-Structural Equation Modeling (PLS-SEM) revealed that various consumer characteristics and marketing perspectives positively impact sustainable clothing consumption intention. Notably, significant disparities were found in consumer characteristics and marketing perspectives across generational cohorts. These findings offer valuable recommendations for fashion industry practitioners to develop targeted marketing strategies considering sustainability issues, aiming to increase consumer trust and address current and future crises related to the environment and social aspects.

Keywords: generation cohorts, moderating variable, consumers sustainability, behavioral intention, sustainable apparel products

Abstrak: *Kesadaran konsumen terhadap dampak negatif fast fashion mendorong pergeseran menuju pakaian berkelanjutan. Penelitian ini bertujuan untuk memahami faktor-faktor yang memengaruhi niat konsumen untuk melakukan pembelian berkelanjutan. Model konseptual dikembangkan untuk menguji hubungan antara faktor internal (karakteristik konsumen seperti nilai belanja, kesadaran keberlanjutan, persepsi efektivitas konsumen, dan pengetahuan lingkungan) dan faktor eksternal (perspektif periklanan yang berfokus pada kriteria produk pakaian berkelanjutan) yang memengaruhi niat konsumsi pakaian melintasi generasi yang berbeda. Survei online dilakukan dengan 150 konsumen Generasi X, 150 konsumen Generasi Y, dan 150 konsumen Generasi Z di Indonesia. Analisis data menggunakan metode Partial Least Square-Structural Equation Modelling (PLS-SEM) mengungkapkan bahwa karakteristik konsumen dan perspektif pemasaran berpengaruh positif terhadap niat konsumsi pakaian berkelanjutan. Terdapat perbedaan signifikan pada karakteristik konsumen dan perspektif pemasaran antara kelompok generasi. Temuan ini memberikan rekomendasi berharga bagi praktisi industri fashion untuk mengembangkan strategi pemasaran yang ditujukan kepada kelompok generasi dengan mempertimbangkan isu keberlanjutan, guna meningkatkan kepercayaan konsumen dan mengatasi krisis saat ini serta untuk generasi mendatang.*

Kata kunci: *kelompok generasi, variabel moderasi, konsumen berkelanjutan, niat perilaku, produk pakaian berkelanjutan*

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INTRODUCTION

Fast fashion concept refers to garments that move fast from the catwalk to stores which relies on low prices, masthe dominant business model leading most contaminating industry worldwides production and sales, in line with sophisticated fashion trends and its short production possibility that leads into the consumption (UN Today, 2020) has impact on environment for years (Nature Climate Change, 2018). Fast fashion becomes the dominant business model leading most contaminating industry worldwide (Villemain, 2019) which leads to clean water and ecosystem contamination (Ellen MacArthur Foundation, 2017; European Parliament, 2020).

Emerging concerns on climate change potential risks emerges consumer awareness on sustainability (Kuchinka et al. 2018; Kumar et al. 2019; Singh & Pandey, 2018). Environmental and awareness issues play a crucial role in consumer decision-making (Septalisa, 2022). Sustainable and slow fashion movements have emerged, leading companies to adopt environmentally friendly production practices (Kang, Liu, & Kim, 2013). The sustainable apparel industry, particularly in developing markets, has the potential to raise consumer awareness about the negative impacts of fast fashion manufacturing (Kutsenkova, 2017). Analyzing consumer values, beliefs, attitudes, and behaviors can help businesses devise effective strategies to influence purchasing decisions for goods and services (Kuchinka et al. 2018).

In this study, we used generation cohorts differences and attitude-behavioral conditions to investigate their green consumption beliefs, attitudes, and behaviors through their assessment about products purchase on its environmental impact (Follows & Jobber, 2000). Generational cohorts allow coincident attitudes, which significantly affect their purchasing and consumption behavior (Parment, 2013). Based on marketing view, the generational cohorts facilitate market segmentation and more effective marketing strategies development (Parment, 2013). Several studies have demonstrated that generational cohorts exhibit different consumption behaviors based on their distinct environmental and cultural backgrounds (Brand, Rausch, & Brandel, 2022; Dabija & Băbut, 2019; Hwang, Lee, & Diddi, 2015; Ivanova et al. 2018; Lissitsa & Kol, 2016). However, there is a lack of research that explores the consumer characteristics, including shopping values, attitudes, and consumption behaviors, specific to sustainable apparel from a marketing perspective. Furthermore, the impact of product attributes, such as green attributes and brands, on consumers' green purchase behavior has not been thoroughly examined (Coderoni & Perito, 2020). While Jung, Oh, & Kim (2021) have investigated consumer characteristics and marketing framework determinants for encouraging sustainable apparel consumption behaviors, their study only considered country differences and did not analyze the samples based on demographic factors such as age, social background, and income levels.

In addition to internal factors like psychological traits and sustainability consciousness, external situational factors, including marketing perspectives and product criteria, are crucial determinants of pro-environmental behavior, such as green purchase behavior (Zhang & Dong, 2020). This study investigates how consumer characteristics (e.g., shopping values, sustainability consciousness) and marketing perspectives (e.g., product criteria) influence sustainable apparel behavior intentions. It also examines the moderating effect of generational differences on these relationships. By addressing research gaps, it provides insights for academia, practitioners, and policymakers, guiding future sustainable apparel initiatives based on distinct generational perspectives. The study aims to shed light on the determinants of sustainable apparel behavior intention, offering valuable guidance to leverage emerging potentials in the field.

METHODS

This study using survey which all multi-item questionnaire instruments were measured by a six-point Likert scale. The respondent’s criteria were sustainable apparel consumers in Indonesia from generations cohort X (1960-1979), Y (1980 -1994), and Z (1995-2010). A total of 450 valid responses were obtained between September and November 2022 and used for statistical analysis. The independent variables were utilitarian, hedonic, differential, and social value (Jung et al. 2014; Lin & Huang, 2012), pro-environmentalism, social responsibility (Jung & Oh, 2019), perceived consumer effectiveness (Ellen, Wiener, & Cobb-Walgren, 1991), environmental knowledge Kim & Damhorst, 1998), aesthetic criteria, functional criteria, sustainable criteria and brand criteria (Ghalachyan & Karpova, 2021) with generation cohort as moderator variable.

While the dependent variable was behavioral intention of sustainable apparel (Ajzen & Fishbein, 2000; Kumar et al. 2021).

SPSS 26.0 was employed in validity and reliability test analysis. PLS-SEM were performed adopting SmartPLS 3.0 for data analysis. The total number of respondents obtained for the research study was 450, consisting of 150 respondents from Generation X (33.3%), 150 respondents from Generation Y (33.3%), and 150 respondents from Generation Z (33.3%). The sample size for each generation was intentionally made equal to ensure equivalence and obtain representative results.

According to Bei & Simpson (1995), consumers consider recycled products price and quality, this finding in line with Finch (2005) which discovered that functional values (including pricing) were incorporated into consumer's purchase decision towards organic food. Jung, Oh, & Kim (2021) found that utilitarian values sturdily impacted sustainable apparel products intention behavior. Hedonic shopping reflects shopping's potential entertainment and emotional value (Babin et al. 1994). Bei & Simpson (1995) reported that most respondents experienced environment preservation when at the time they purchased some recycled products. The result in line with Finch (2005) which shown that emotional values incorporated into consumer's organic food purchase decision. Lin & Huang (2012) found that consumer green products selection behavior primary determinants were psychological benefit, knowledge eagerness, novelty seeking and particular circumstances. Sweeney & Soutar (2001) indicated emotional value on consumer's durable product purchase willingness relates to self-image enhancement that impact green consumer's behavior (Finch, 2005). Figure 1 shows this study conceptual model.

According to empirical relationship between shopping values and sustainable product choices consumption behavior (Stern, Dietz, Abel, Guagnano, & Kalof, 1999), the following hypothesis are proposed:

H1. Utilitarian value positively affects behavioral intentions of sustainable apparel.

H2. Hedonic value positively affects behavioral intentions of sustainable apparel.

H3. Differential value positively affects behavioral intentions of sustainable apparel.

H4. Social value positively affects behavioral intentions of sustainable apparel.

A socially responsible apparel and textile business comprising the environment, people, and value chain orientation such as its process, ethics-profitability balance seeking and little negative impact on society yearning (Dickson & Eckman, 2006). Socially responsible consumer behavior is people`s desire to lessen any hazardous impact and optimize the long-term useful influences on society through product acquisition, usage, and disposition (Mohr, Webb, & Harris, 2001). Pro-environmental behavior refers to behavior that suppress neighborhood damages (Steg & Vlek, 2009). Based on Pew Research Center survey conducted by Tyson, Kennedy, & Funk (2021), Millennial and Z Generation showed their climate change issue substantial engagement degree. Compared with older adults, Z and Y Generations are discoursing more about action needed for climate change through climate change online content viewing, volunteering and protests actions. The following hypothesis is proposed:

H5. Social responsibility positively affects behavioral intentions of sustainable apparel.

H6. Pro-environmentalism positively affects behavioral intentions of sustainable apparel.

Perceived Consumer Effectiveness (PCE) is subject's judgment measurement in individual consumers capability to influence environmental matters (Webster, Jr., 1975). PCE measure was sturdily connected to socially conscious consumer and this indicates that socially conscious consumer feels strongly that they could do some actions about pollution and manage considering their purchases for social impact (Webster, Jr., 1975). The following hypothesis is proposed:

H7. Perceived consumer effectiveness positively affects behavioral intentions of sustainable apparel.

Environmental knowledge is information that individual has about reciprocal relationship between people and the environment which leads them to environmental behavior based on their responsibilities (Lin & Niu, 2018). Environmental knowledge has a multifaceted role impacting behavior. Jung, Oh, & Kim (2021) found insignificant impact of apparel environmental knowledge on SAP purchase intention behavior. The following hypothesis is proposed:

H8. Environmental knowledge positively affects behavioral intentions of sustainable apparel.

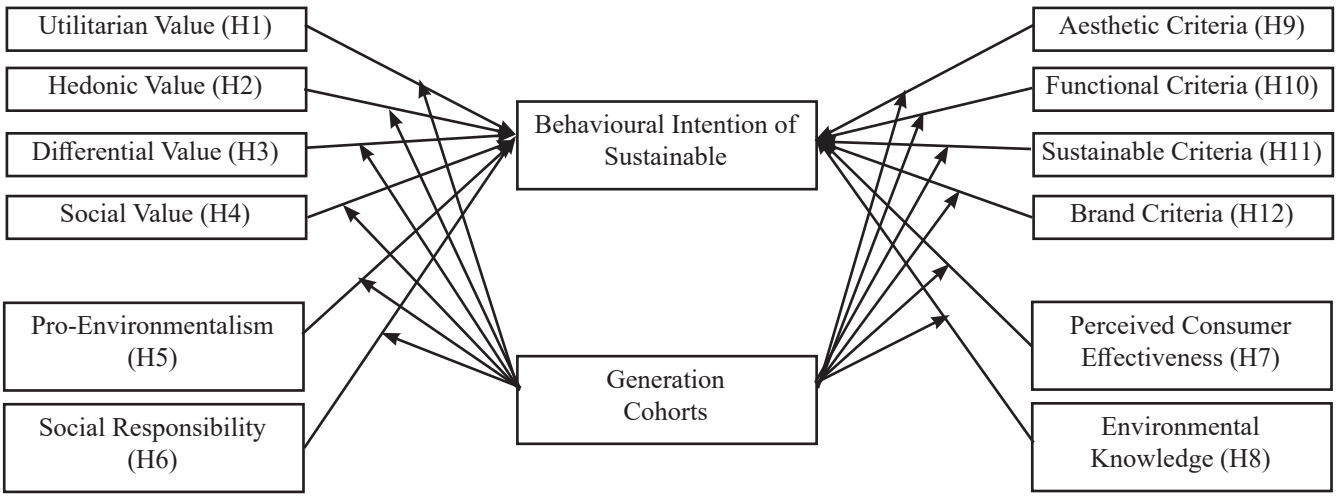

Figure 1. Conceptual model

Style, color, pattern, fabric, and appearance are observable compositional characteristic called as intrinsic criteria aesthetic have more major effect on garments trial preference that leading into its purchase (Dickson & Eckman, 2006). Y Generation indicated that fit, looks, and styles n apparel selection are the most essential attributes consideration (Taylor & Cosenza, 2002). Fabric functional performance is garment components usefulness and durability (Dedhia & Gupta, 2009). Brand criteria is consumers` orientation towards brands they purchase (Jung et al. 2021). This reputation conveys information that is beneficial for consumers` decision making pre-purchase process (North et al. 2003). Based on Situmorang et al. (2021), their findings indicate that fast fashion brands such as Zara, H&M and Uniqlo have capability to create brand awareness for millennial consumers so that they can identify, remember the attributes and characteristics of these fast fashion clothing brands. Sustainability is a complex concept in apparel shopping (Ghalachyan & Karpova, 2021). For example, consumers should allow materials sustainability, products disposal and retailer sustainable practices such as charitable donations and climate change action. The following relationship is proposed:

H9. Aesthetic criteria positively affect behavioral intentions of sustainable apparel.

H10. Functional criteria positively affect behavioral intentions of sustainable apparel.

H11. Brand criteria positively affect behavioral intentions of sustainable apparel.

H12. Sustainable criteria positively affect behavioral intentions of sustainable apparel.

Putative groups of individuals who were born in the same period and experienced the same external events in their adolescence (ie, late adolescence and early adulthood (ages 17–23)) called “cohorts” (Meredith and Schewe, 1994). Economic, social, and political transformations (Noble & Schewe, 2003) are external phenomenon impact individual cohort values, attitudes and beliefs (Reisenwitz & Iyer, 2007). Each cohort would commit similarly in different life aspects, especially in consumer resolution making (Fernández-Durán, 2016). Branding is quested by X Generation (Francis & Hoefel, 2018). De Pelsmacker, Driesen, & Rayp (2005) found that X Generation, particularly with supreme education, tend to prefer brands. Ivanova, Flores-Zamora, Khelladi, & Ivanaj (2019) revealed that for X Generation, the relationship between PCE and sustainable products purchase intention is stronger compared to Y Generation. Studies found that Y Generation Y with greater sustainability labels` consciousness leads to product purchase intentions (Hwang et al. 2015). Nielsen Global Sustainability Report (2015) revealed that Y Generation have more agreement for sustainable brands. Hinzmann & Stark-Nässlin (2020), even though still fairly low ranked, compared to Z Generation, Y Generation are more nourishing their products environmental impact (Lehmann, Arici, & Martinez-pardo, 2019). Good conscious sustainability consumers in garments industry value corporations` business practices transparency (Park & Kim, 2016), so that fast fashion enterprises should notice this phenomenon. Especially fifty percent of Z consumers plan to shift for greener brand alternatives (Lehmann et al. 2019). Dabija, Bejan, & Pușcaș (2020) discovered that Z Generation

tend to prefer retailers with preservation and environmental protection. Chaturvedi, Kulshreshtha, & Tripathi (2020) uncovered that Z Generation have great moral values toward environmental preservation, which affect their buying intentions. Brand et al. (2022) revealed that compared to X Generation, Z Consumers tend to nourish more sustainable sides than prices in their online garments purchase. Valendia & Purwanegara (2022) found that Gen-Z in Indonesia still has the intention to buy bottled drinking water after knowing the term greenwash marketing by looking at the mediating effect of environmental concern and perceived quality. For Z Generation who reported greater level of environmental awareness, social labels are more valueable compared to X Generation.

H13. Significant differences exist among Generation X, Y, and Z in the moderating effects of generation cohort on the impacts of (a) consumer characteristics (shopping values, sustainability consciousness, perceived consumer effectiveness, and environmental knowledge) and (b) marketing perspectives (product criteria of sustainable apparel) on sustainable apparel behavior intentions.

RESULTS

Table 1 shows the validity through factor analysis and reliability through Cronbach Alpha. The result shows that all variables are valid and reliable. Using the algorithm of bootstrapping in PLS, Figure. 2 shows path coefficient significance assessment. Additionally, Figure. 2 illustrates structural model results and shows the significant and insignificant path in the hypothesized relationship.

Table 1. Measurement model evaluation results

Constructs and Items	Factor Loading	Cronbach's α	CR	AVE
Utilitarian Value				
UV1 I ponder product strength and safety in its selection	0.843	0.853	0.902	0.696
UV2 I suggest that products' usefulness is essential	0.876			
UV3 I examine product`s value to price ratio prominent in its choose	0.763			
UV4 I judge products' consistent caliber.	0.852			
Hedonic Value				
HV1 I release more time in new products observation because I concern.	0.768	0.850	0.899	0.691
HV2 I like to thoroughly shop around various stores for product purchase.	0.879			
HV3 Shopping around stores is a fun leisure period to me.	0.854			
HV4 Green product purchase instead of conventional products would seem like creating a better personal contribution to something good	0.819			
Differential Value				
DV1 When shopping, I allow whether products could reveal my own personality.	0.842	0.859	0.905	0.703
DV2 I prefer peculiar and dissimilar products.	0.843			
DV3 Products that are new and never been seen are prominent in the selection.	0.856			
DV4 I would search essential information about product`s distinct and models before its purchase.	0.814			
Social Value				
SV1 Green product purchase would assist me to sense worthiness.	0.838	0.892	0.925	0.756
SV2 Green product buying would build my great image on others.	0.877			
SV3 Buying green products would grand its owner social consent.	0.906			
SV4 Green product purchase would enhance the manners that I am viewed.	0.855			

Table 1. Measurement model evaluation results (continue)

Constructs and Items	Factor Loading	Cronbach's α	CR	AVE
Pro-Environmentalism				
PE1 We should determine products purchase through environmental impacts consideration.	0.823	0.896	0.928	0.763
PE2 Even though they cost a bit more, I ponder that we should purchase sustainable products.	0.882			
PE3 Pondering environmental damages, we should lessen apparel purchase.	0.914			
PE4 Manufactures should be constrained by recycled fabrics utilization in their production.	0.873			
Social Responsibility				
SR1 Products sale created by underage manpower should be prohibited.	0.835	0.879	0.917	0.734
SR2 Workforces care in corporates should be government-regulated.	0.871			
SR3 Socially responsible products offered by enterprises should be labelled by sustainable marks, so that consumers could savvy this.	0.870			
SR4 I ponder that we should purchase fairly-traded products for our prosperity.	0.851			
Perceived Consumer Effectiveness				
PCE1 It could be useful to maintain our ecosystem trough consumption by animal welfares consideration.	0.796	0.841	0.893	0.677
PCE2 Individual behavioral attempt could transform society.	0.814			
PCE3 It could be worthwhile to tackle environmental matters.	0.865			
PCE4 I perceive that I could assist natural resource problem solving by water and energy reservation.	0.815			
Environmental Knowledge				
EK1 Apparel chemical washing powder damage water pollution.	0.778	0.827	0.885	0.658
EK2 Manufacturing process such as polyester could impact neighborhood defilement.	0.831			
EK3 Air contamination could happen in some garments dyeing processes.	0.845			
EK4 Dyeing and finishing processes utilize heaps of water.	0.790			
Aesthetic Criteria				
AC1 This product`s designs are prominent for me.	0.842	0.772	0.868	0.686
AC2 Tis product`s colors are notable for me.	0.793			
AC3 Product`s fabrics are essential for me.	0.850			
Functional Criteria				
FC1 This product function such as wrinkle free, anti-soil and durability is necessary for me.	0.818	0.888	0.922	0.749
FC2 This product maintain simplicity is significant to me.	0.891			
FC3 This product`s quality is a key for me.	0.881			
FC4 Product mildness is important for me.	0.869			
Sustainable Criteria				
SC1 This product`s non-hazardous impact on environment is prominent for me.	0.813	0.849	0.898	0.688
SC2 Enterprise`s social responsibility which manufactures this product is notable for me.	0.785			
SC3 This product's animal worthwhile contribution is essential for me.	0.897			
SC4 Product's recyclability is significant for me.	0.818			

Table 1. Measurement model evaluation results (continue)

Constructs and Items	Factor Loading	Cronbach's α	CR	AVE
Brand Criteria				
BC1 This product`s brand name is a key for me.	0.857	0.872	0.921	0.796
BC2 This product`s brand awareness is prominent for me.	0.923			
BC3 This product`s brand image is significant for me.	0.896			
Behavior Intention				
BI1 I have this product consumption intention.	0.753	0.839	0.893	0.677
BI2 I have this product purchase intention.	0.879			
BI3 I have store visit intention that sells this product.	0.863			
BI4 Compared to traditional garments, I have an intention to spend more effort on ecological apparels.	0.789			

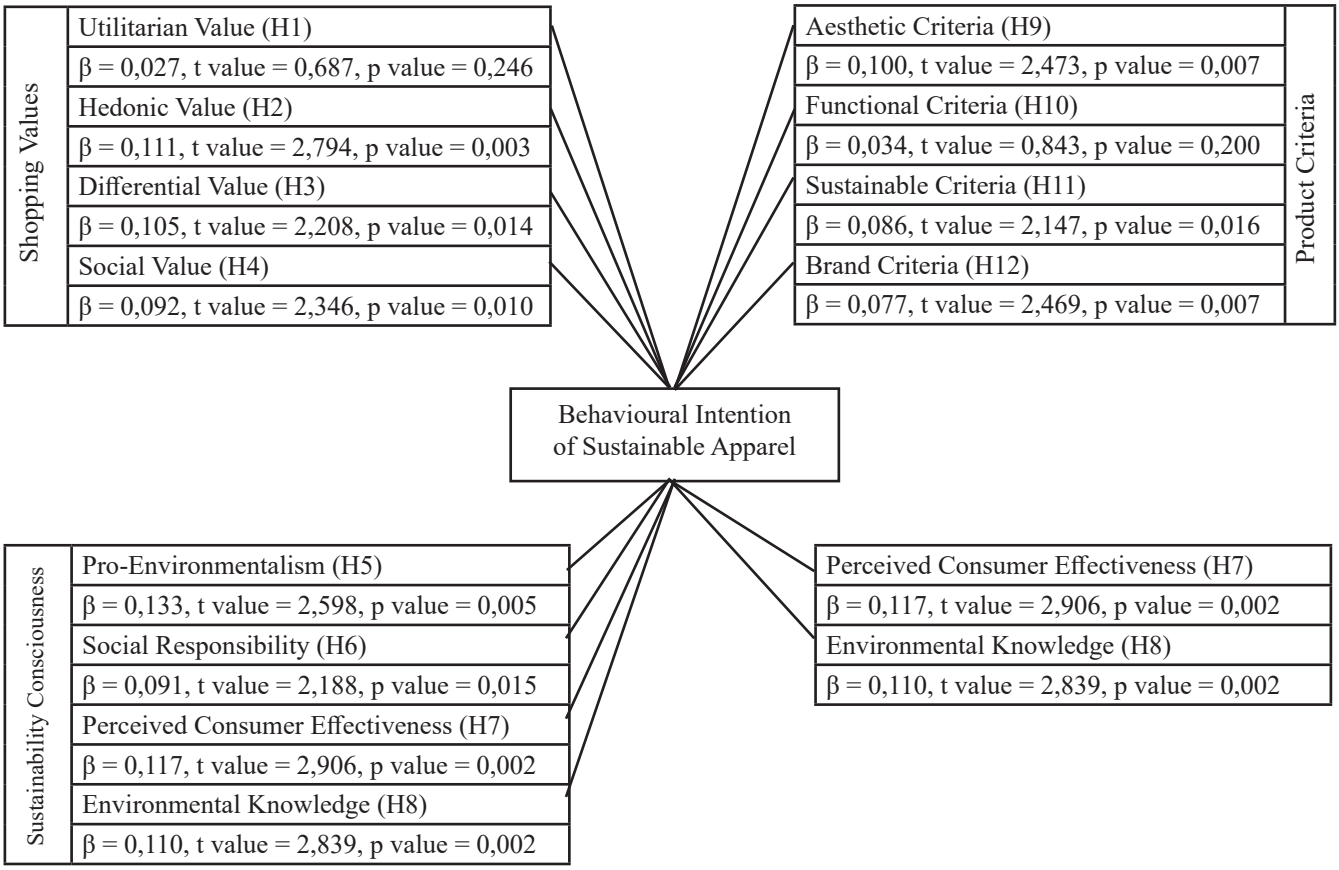

Figure 2. Result of structural model

Table. 2 shows multiple group analysis results, while Table. 3 provides path analysis results which showed the differences and significance among three generations cohorts. Results indicate that hedonic, differential, and social values strongly impacted sustainable apparel behavioural intention, while there was no significant impact of utilitarian values on behavioural intention. These results are consistent with Adnan, Ahmad, & Khan (2017), Biswas & Roy (2015), Jung et al. (2021), P. C. Lin & Huang (2012), and Suki (2016)especially in the understudied areas of cross-cultural research. This study, which includes respondents from the UK, US, and China (total n = 711 studies that investigated hedonic, differential, and social values impact on green purchase intention. Study found that people have more willingness to pay for green products (Laroche et al. 2001). The willingness mentioned reflects a desire to strike a trade-off between one's environmental well-being and the associated price. It is found that the price and quality are not main consumer preference behavior determinants. The findings also found that consumers prefer hedonic value, differential, and social shopping behaviors encouraging positive buying intention behavior. It could be caused by sensory pleasure consideration that becomes more essential than practical benefits for sustainable apparel products purchase (Jung et al. 2021)especially in the understudied areas of cross-cultural research. This study, which includes respondents from the UK, US, and China (total n = 711 Green products epistemic value impacts consumer selection behavior positively caused by consumers knowledge urge and curiosity (P. C. Lin & Huang, 2012).

Table 2. Results of multigroup analysis

	Path Coeff-diff (Gen x – Gen Y)	Path Coeff-diff (Gen X – Gen Z)	Path Coeff-diff (Gen Y – Gen Z)	p-Value new (Gen X vs Gen Y)	p-Value new (Gen X vs Gen Z)	p-Value new (Gen Y vs Gen Z)
Consumer Characteristics (Internal Factors)						
Utilitarian Value → Behaviour Intention	0.232	-0.141	-0.373	0.017*	0.077	0.000*
Hedonic Value → Behaviour Intention	0.107	0.138	0.031	0.159	0.082	0.372
Differential Value → Behaviour Intention	-0.096	0.190	0.286	0.240	0.026*	0.010*
Social Value → Behaviour Intention	0.038	-0.188	-0.225	0.352	0.015*	0.011*
Pro-Environmentalism → Behaviour Intention	-0.166	0.065	0.231	0.126	0.311	0.071
Social Responsibility → Behaviour Intention	0.030	-0.026	-0.056	0.409	0.404	0.329
Environmental Knowledge → Behaviour Intention	0.141	-0.143	-0.284	0.095	0.069	0.005*
Perceived Consumer Effectiveness → Behaviour Intention	-0.045	0.075	0.120	0.342	0.253	0.138
Marketing Perspectives (External Factors)						
Aesthetic Criteria → Behaviour Intention	-0.036	0.026	0.062	0.354	0.418	0.277
Functional Criteria → Behaviour Intention	0.044	-0.008	-0.052	0.344	0.478	0.351
Sustainable Criteria → Behaviour Intention	-0.268	-0.062	0.206	0.008*	0.303	0.047*
Brand Criteria → Behaviour Intention	0.099	0.101	0.002	0.116	0.105	0.484

*) Signicant (≤0.05)

Table 3. Results of moderating effect of generation cohorts

	Gen X			Gen Y			Gen Z		
	β Coeff.	T Stat.	P Values	β Coeff.	T Stat.	P Values	β Coeff.	T Stat	P Values
Consumer Characteristics (Internal Factors)									
Utilitarian Value → Behaviour Intention	0,060	0,717	0,237	-0,172	2,447	0,007*	0,202	3,501	0,000*
Hedonic Value → Behaviour Intention	0,171	2,090	0,019*	0,063	0,868	0,193	0,033	0,551	0,291
Differential Value → Behaviour Intention	0,134	1,847	0,033*	0,230	1,972	0,025*	-0,056	0,825	0,205
Social Value → Behaviour Intention	0,044	0,698	0,243	0,006	0,080	0,468	0,231	3,380	0,000*
Pro-Environmentalism → Behaviour Intention	0,128	1,454	0,073	0,294	2,644	0,004*	0,063	0,597	0,275
Social Responsibility →Behaviour Intention	0,087	1,159	0,123	0,057	0,658	0,255	0,113	1,282	0,100
Environmental Knowledge → Behaviour Intention	0,121	1,533	0,063	0,166	2,065	0,020*	0,046	0,598	0,275
Perceived Consumer Effectiveness → Behaviour Intention	0,120	1,900	0,029*	-0,021	0,277	0,391	0,262	3,762	0,000*
Marketing Perspectives (External Factors)									
Aesthetic Criteria → Behaviour Intention	0,111	1,516	0,065	0,147	2,192	0,014*	0,085	1,010	0,157
Functional Criteria → Behaviour Intention	0,036	0,569	0,285	-0,008	0,093	0,463	0,044	0,442	0,329
Sustainable Criteria → Behaviour Intention	-0,043	0,674	0,250	0,225	3,008	0,001*	0,018	0,203	0,420
Brand Criteria → Behaviour Intention	0,137	2,446	0,007*	0,038	0,608	0,272	0,036	0,633	0,264

*) Signicant (≤0.05)

Hence, products characteristics, design, and green promotion could be considered for manufacturers to improve consumer knowledge and awareness. When presented with certain conditions, such as green products subsidies or discounts for consumers with high environmental concerns have more green behavior willingness. Pursuing product information and novelty seeking are aggressively they seeking. Findings show that social values impact selection behavior significantly. This may cause by some consumers feeling about green consumption great impact. P. C. Lin & Huang (2012) suggested that high environmental concerns consumers are more potential to be mattered with companion opinions green behavior. As green products attributes assist people assert and express their self-social image (Adnan et al. 2017). Briefly, notable green behavior determinants are comrades behaviour and social norms which represent reference groups (Suki, 2016).

Pro-environmental behavior and social responsibility had a significant effect on sustainable apparel intention behavior. In line with Jung et al. (2021), study found that more consumers are increasingly conscious of product influences on the environment, namely water hazard, soil and air pollution as a result of conventional clothing production processes, they choose to reduce consumption of clothing and support companies that process clothing in a responsible way (both environmental and social). So, they choose to switch to sustainable clothing products. Numerous studies (Barone, Miyazaki, & Taylor, 2000; Berger & Kanetkar, 1995; Creyer & Ross, W, 1997; Kang & Hustvedt, 2014; Neumann et al. 2021; J. J. Singh et al. 2012) suggest that social responsibility was green product intention behavior valid predictor. This study find that Perceived consumer effectiveness (PCE) and environmental knowledge positively impact sustainable apparel intention behavior. In line with Jung et al. (2021), Vermeir & Verbeke (2008), and Webb et al. (2008), study indicates that PCE directly affects green

products' purchase intention. Kang et al. (2013) argue when people believe that their consumption behavior is able to influence the environment, they tend to denote determinate attitudes towards sustainable apparel consumption. Such positive attitudes indirectly enhance sustainable apparel purchase intention. Numerous studies (Haryanto, 2014; Law et al. 2015; Pookulangara & Shephard, 2013; Shen et al. 2012) also indicated that consumer sustainability knowledge such as working conditions, sweatshop, eco-fashion, sustainable fibers can positively influence their attitude towards sustainable products and clothing brands. This can occur due to consumers` knowledge about global warming issues which impact positively on attitudes towards environmental matters followed by positive action through universe preservation (Haryanto, 2014). When shopping, consumers could adapt to this situation through environmental consideration (Haryanto, 2014). Individuals willingness to pay higher prices on environmentally friendly products is the evidence espousing this ecological environment refinement (Haryanto, 2014). Aesthetics, sustainable and brand significantly and positively affects sustainable apparel intention behavior, while functional criteria had no significant effect. The results indicated that aesthetics, sustainable, and brand criteria are prominent to enhance sustainable apparel intention behavior.

This research confirms the necessity of different marketing tactics for X, Y, and Z generations. The most significant differences are observed between Y and Z Generation, followed by X and Y Generation. Five significant distinctions are found between Y and Z Generation regarding various factors influencing sustainable apparel behavior.

Bootstrapping analysis results indicate that X Generation is primarily influenced by hedonic and differential shopping values, Y Generation by utilitarian and differential shopping values, and Z Generation shows no significant relationship with the four product criteria. Brand criteria are prominent for X Generation, while aesthetic and sustainable criteria are essential for Y Generation. Overall, sustainable criteria are considered significant across generations. These findings highlight sustainable consumption differences among Indonesian generation cohorts and emphasize the need for tailored marketing communication based on consumer behavior, shopping values, and criteria in the sustainable apparel business.

Managerial Implications

Based on this study results, marketing managers should prioritize promoting high-quality green products, considering the importance of product criteria in shaping sustainable apparel behavior intentions. Emotional appeal, knowledge, and social consequences are crucial. Governments and green groups can encourage adoption through targeted campaigns. Enhancing the shopping experience requires upgrading functionality, quality, and value of sustainable apparel. Designing products to meet diverse generational needs is vital. Emotionally attractive campaigns aligned with environmental concerns drive sustainable behavior. Leveraging social networks and peer influence significantly impact sustainable consumption (Ivanova et al. 2018; K. Lee, 2008).

This study enhances understanding of sustainable shopping attitudes and behaviors across different generations. It uncovers the complex relationships between consumer characteristics, marketing perspectives, and sustainable apparel intentions. The findings contribute to consumer behavior theories and offer practical guidance for marketers and policymakers (Prothero et al. 2011; Vermeir & Verbeke, 2006). Theoretical frameworks can be refined to accommodate generational variations in sustainable apparel behavior. Addressing these implications opens avenues for future research in promoting and understanding sustainability in consumer behavior.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study suggests three generations different patterns for their consumer characteristics and marketing perspective factors and its impacts on sustainable apparel buying intention behavior. The present study generates theoretical contributions by applying the ABC model in eco-friendly apparel purchase in Indonesia. The study provides a more profound insight for green consumption behavior expansion. Further, findings suggest that sustainable apparel buying intention differs across generations.

Recommendations

Future research should expand the sample size to enhance generalizability. Investigating different categories of sustainable apparel (e.g., secondhand, recycled, rental) using the research model is recommended. Qualitative techniques like focus group interviews can provide insights into customers' perceptions and actual purchase behaviors. Exploring additional factors such as lifestyles, values, subjective norms, and perceived risk is important. Investigating other product attributes, marketing activities, and willingness to pay a premium price associated with green consumption behavior should be considered.

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