

# Factors Affecting Young Consumers' Intention to Purchase Upcycled Fashion Products: A Case Study in Vietnam

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International Business Management Copy Right: Medwell Publications Abstract: In this study, the author has given different basis to build hypothesis and research models to find out the factors affecting the Vietnamese young consumer's intention to purchase upcycled fashion products. Firstly, this paper focuses on studying the relationship between attitudes and purchase intentions. Secondly, the author studies the effects of factors on attitudes and purchase intentions. The main research subjects are factors affecting Vietnamese young consumer' intention to purchase upcycled fashion products. Hence, this research was conducted based on survey results among 400 young people aged 18-34 in Hanoi and Ho Chi Minh City which are two big city in Vietnam. The authors used two statistical software, SPSS 26.0 and AMOS 20.0, to analyze the survey results. These tools help the authors analyze Cronbach's alpha reliability coefficients, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), Structural Equation Model (SEM). The results show that there was a positive relationship between young consumer's attitudes and purchase intention in the Vietnamese context. Attitude mediates the relationship between the influencing factors and purchase intention. Moreover, the study test the impact of five main factors including environmental concern, social value, uniqueness value, perception financial risk and perceive quality risk. The environmental concern ( $\beta = 0.337$ ) is considered as the strongest effect on consumer's attitudes towards products. The factors such as uniqueness value ( $\beta = 0.302$ ) as well as social value ( $\beta = 0.216$ ) also positively affect consumer's attitudes. On the other hand, perception financial risk ( $\beta = -0.168$ ) and perceive quality risk ( $\beta = -0.280$ ) negatively affect consumer's attitudes.

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#### INTRODUCTION

In modern society, the fashion industry is growing day by day, however, this also means that more and more wastes from the fast fashion industry are created and those wastes have negative impacts on the environment. Research by the Ellen MacArthur Foundation shows that the number of global apparel products has doubled in the past 15 years but on average, the number of used products is much less and discarded faster than ever. As a result, the fast-fashion landfills are huge, difficult to handle, pollute the environment. Regrettably, humans are the victims of the fast-fashion industry. According to the Environmental Protection Agency, there are about 14.3 million tons of textiles, only in the United States. Those textiles were brought to landfills in 2012, accounting for 5.7% of total urban solid waste<sup>[1]</sup>. In the real situation that global product surpluses exceed 100 billion products a year, environmentalists have warned of "potentially catastrophic" environmental damage if this continues to increase. Upcycled fashion-a new fashion trend emerges as a sustainable way to solve this situation. The upcycling fashion trend is being enthusiastically received and responded to by young people. Especially young people in developed countries such as Korea, America and other countries in Europe. In Vietnam, young consumers are also gradually approaching this new fashion trend. However, upcycled fashion has not really developed in our country. This paper focuses on identifying and testing the appropriateness of the factors that influence young consumer's intent to buy upcycled fashion products. It also examines and compares the effects of these factors on consumer attitudes towards this product category. This research has practical implications for consumers, upcycled fashion businesses, government agencies in promoting intent to buy upcycled fashion products and also in spreading this sustainable trend.

#### Literature review and hypothesis

## Upcycling and the upcycling trend in fashion industry:

Upcycling is emerging today as a new trend that focuses on sustainability and environmental friendliness. Data obtained from online websites shows that the number of products with upcycle labels recorded in 2016 increased by nearly 30 times compared to 2010. And thanks to its uniqueness, the price for each product is also usually 6-10 times higher than old items yet attracts a great number of buyers. It seems that this trend is receiving special attention from consumers.

In the fashion industry, the term "upcycling" emerged in the industry not long ago but has received huge attention because of its potential. Unlike used clothing, upcycling offers a better solution to outdated fashion products by using patterns, fabrics of the outfits to create a completely new design. Moreover, since, it utilizes the existing parts of the product, it often uses less resources and reduces waste during production. Upcycling is thought to be an innovation that optimizes the balance of a product's aesthetics and the ability to protect the environment. Recognized as the biggest trend in the Spring/Summer, 2021 fashion season, the upcycling trend has also approached the most famous fashion houses. For example, Balenciaga introduces a gown made of the undercoat; Marni uses fabric left over from old collections for outdoor designs; Coach uses materials from bags from the 1970s or recently, Miu Miu's Upcycled collection has been released which resonates with both creativity and aesthetics with 80 dresses appeared for the first time, redesigned from old products carefully selected from secondhand shops and markets around the world.

Upcycle fashion is being accepted and responded enthusiastically by young people, especially young people in developed countries such as Korea, America and Europe. Upcycling fashion products are gradually becoming popular and favored by young people due to their creativity, aesthetics and environmental friendliness. However in Vietnam, this trend is not yet popular and eco-fashion products in general or upcycling in particular are still a niche market because of their high cost and people's lack of awareness of their benefits. Awareness and participation in the production of upcycled products, especially in fashion is also limited. Nevertheless, upcycling is yet a very promising industry in the future.

**Purchase intention:** Purchase intention is described as the intention indicating that a consumer is willing to buy a product after evaluating it<sup>[2]</sup>. Ajzen and Fishbein<sup>[3]</sup> define intention as an individual's willingness to make a voluntary effort to perform a certain action. To predict consumer's future behavior, classic marketing research uses buying intention as a descriptive element of the relationship between attitudes and behaviors. Purchase intention is one of the most important concepts in sustainable consumption research because the study of purchase intention is based on the correlation between intention and behavior<sup>[4]</sup>.

Purchase intention toward upcycled fashion products is the ability of consumers to buy high fashion products, generating positive word of mouth and a tendency to pay for them<sup>[5]</sup>.

Attitude: Engel and Blackwell's study in 1978, defined attitudes as the basic direction of an individual's likes or dislikes towards people, things and phenomena. Also according to the Theory of Reasoned Action (TRA), attitude is described as an individual's positive or negative feelings about performing a certain behavior. Attitude describes how well an individual rated the outcome of an action as positive or negative. This is

considered to be one of the most important determinants of behavioral intention and refers to how a person perceives a particular behavior<sup>[6]</sup>.

## **Hypothesis**

The relationship between environmental concern and attitude toward the products: Environmental concerns are defined as people's concerns about problems regarding the environment that has developed as a result of consumer's beliefs, concerns, values and intentions. Many researches show that consumers' environmental concern can lead to eco-friendly behaviors such as recycling, positive attitudes towards environmentally friendly products and subsequently purchase intentions<sup>[7]</sup>. Several authors describe green product consumers as those who have strong commitment to green products; critical and concerned about the environment. Choi and Choi<sup>[7]</sup>, suggest that American, Korean and Japanese consumers will show an interest in issues related to green products when they are aware of the importance of an improved environment. Upcycling enables a sustainable design option for reuse materials (used clothing, textiles) to be employed for greatest environmental benefit. The concept of upcycling presents an eco-friendly process as technological developments advance towards more sustainable methods of production. To sum up, consumer appetite has shifted to upcycled products because of their environmental concerns. Therefore, we propose the following hypothesis:

 H<sub>1</sub>: Consumer's environmental concern has a positive effect on consumer attitudes towards upcycled fashion products

The relationship between consumer's perceived social value and attitude toward the product: The social values of green products are the perceived values resulting from the cohesion of social groups, the pressure and the influence of those around them on the consumption of green products<sup>[8]</sup>. In other words, social values of upcycled fashion is the perception of social recognition and positive assessment from others due to the social image of the products or the satisfaction of consumer's social needs. Social relationships affect the way consumers behave. Social classes also tend to influence their behaviour<sup>[9]</sup>. Consumers consider their green purchasing consumption as a modern lifestyle and they prefer to consume it because of their self-image in the society. Other research also shows that consumers engage in green purchasing behavior when their eco-friendly behavior is highly valued. If consumers think that upcycled fashion products are environmentally friendly, unique and scarce and that it makes a good

impression on people around them, it means that consumers obtain high social value from the products. O'Cass and Frost<sup>[10]</sup> argue that social values can help consumers form an attitude toward products and they also suggest that social values can shape consumer's attitudes to the product in order to maintain relationships with others. In sum, we propose the following hypothesis:

 H<sub>2</sub>: Consumer's perception of social value has a positive effect on consumer attitudes towards upcycled fashion products

The relationship between consumer's perceived uniqueness value and attitude toward the product: Tian *et al.*<sup>[11]</sup> and Goldsmith<sup>[12]</sup> define consumer's need for uniqueness as "the traits of pursuing differentness relative to others through acquisition, utilization and disposition for the purpose of developing one's self-image and social image".

Yoon<sup>[13]</sup> explored the motivations of buying recycled and recycled fashion products and found that the perceived value of pursuing unique and rare items has a positive impact on attitudes as well as purchase intention of both reused and recycled products. Due to the characteristic of upcycled fashion being redesigned and difficult to mass-produce, consumers may perceive the uniqueness and scarcity of these products, thus, forming a positive attitude to the product that leads to the purchase intention. to affirm the difference and create his own identity. Therefore, the study proposes the following hypothesis:

 H<sub>3</sub>: Consumer's perception of uniqueness value has a positive effect on consumer attitudes towards upcycled fashion products

The relationship between consumer's perceived financial risk and attitude toward the product: Financial risk is consumer's perception of the potential economic loss when buying a product. It can be the investment loss or the additional costs to repair or replace the purchased product a problem arises. Consumers considering purchasing sustainable fashion products may also perceive a financial risk when they think these products will be relatively expensive compared to conventional ones as they cannot be mass-produced or for many other reasons. Consumers are also concerned about the value of the product and the price paid for it, in other words, they wonder if the quality of the product is worth the money they spent. Consequently, consumers who are aware of financial risks in upcycle products may have negative attitudes towards this product. Our study propose the following hypothesis:

 H<sub>4</sub>: Consumer's perception of financial risk has a negative effect on consumer attitudes towards upcycled fashion products

The relationship between consumer's perceived quality risk and attitude toward the product: Quality risks, also known as performance risks, are the uncertainty about whether a purchased product will function as expected<sup>[14, 15]</sup>. From the fashion perspective, functional aspects include the quality, the durability of the garment and the ease of care during use. Consumer's disappointment about these factors is the quality risk. The risk increases when consumers do not have enough information and confidence to assess the products<sup>[16]</sup>. Upcycle products differ from conventional and other sustainable fashion in that they are discarded materials or items that cannot be sold, through a process of sorting, cutting and redesigning, returned into new products. However, manufacturing without using wholly new materials can cause consumers to be skeptical and thus delay purchase intention. Park[17] argue that due to the specificity of the upcycling process, consumers may worry that these products will not meet their needs such as durability, efficiency and ease of use. Besides, most people who have had experience in purchasing the product responded that the long-term value of upcycle clothes is slightly lower than that of conventional ones and they don't usually use it. Therefore, we propose the following hypothesis:

 H<sub>5</sub>: Consumer's perception of quality risk has a negative effect on consumer attitudes towards upcycled fashion products

The relationship between attitude toward the product and purchase intention: In previous studies in the sustainable product sector, scholars have investigated the attitudes towards products in an attempt to determine the behavior of purchasing environmentally friendly products<sup>[18]</sup>. Attitude can be a predictor of behavior, because when an individual develops a positive or negative attitude toward certain objects or products, there is a high chance that the action will depend on that person's attitude. The Fazio *et al.*<sup>[19]</sup> study also found that when consumers develop a positive attitude toward a product, this attitude has a positive effect on future buying intent and actual buying behavior.

In addition, according to the reasoned behavior theory (TRA) proposed by Fishbein and Ajzen<sup>[6]</sup>, people often consider different actions and they will choose to take actions that can lead to the results they want. Intention is the link between attitudes and behavior. Behavior is defined as a person's intention to take an action in a

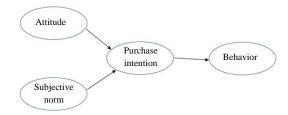


Fig. 1: Theoretical action model (TRA)

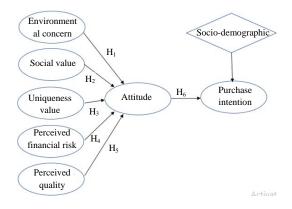


Fig. 2: The conceptual model of the study

given context. Intention is the perceived representation of a person's willingness to take action. Fishbein and Ajzen have proposed that the individual's intention to perform the behavior is influenced by two factors: attitude towards the behavior and subjective norms. Therefore, we expect that consumers 'attitudes towards upcycle products will positively influence consumer's buying intentions (Fig. 1):

 H<sub>6</sub>: Attitudes towards products have a positive impact on the intention to buy upcycled fashion products

Also according to this theory, attitudes toward behavior are formed by two factors: an individual's belief in the behavior's consequences (the belief that the behavior will lead to qualitative results and the person's assessment of this outcome (value relative to the characteristics of the action's outcome). Reasoned action theory states that there exists a direct correlation between attitude and outcome, if one believes that a certain behavior will lead to a desired or favorable result (value perceived), then the person is more likely to have a positive attitude toward the behavior. In addition, if people believe that a certain behavior will lead to an undesirable or unfavorable outcome (risk perceived), then more likely one will have a negative attitude toward that behavior.

From the above reviews, the authors propose a model to study the factors affecting the intention to buy upcycled fashion products (Fig. 2).

#### MATERIALS AND METHODS

Research process: The research is conducted following these steps: looking into the theoretical basis and overview of studies to decide the model and measurement scale, conducting qualitative research to test independent variables, mediating variables and dependent variables; identifying the relationship between the factors; using preliminary quantitative research to test the reliability of measurement scales (Cronbach's alpha) and official quantitative research to test measurement scales by Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), testing the model with Structural Equation Model (SEM) and testing research hypotheses and impacts of control variables (ONE-WAY ANOVA). Then, we will make some proposals for specific subjects (consumers, corporation and the state).

Collecting and processing data: Both qualitative and quantitative methods are employed in this research. The elements and observational methods used in this paper are mostly collected from previous studies, most of which are conducted by foreign organization. Therefore, in the qualitative phase, we performed in-depth interview with experts and group discussion with consumers between the ages of 18 and 34 who are living and working in Vietnam. The qualitative results help verify the relevance of the model and measurement scales in order to supplement and perfect the initially proposed research model. At the same time, we look into the awareness and attitudes of the objects of research towards the current trends of upcycling clothes in Vietnam, as well as consumer behaviors regarding upcycled clothing items owned at present and future demand.

The result of the qualitative research is used as the basis for adjusting the initially created quantitative questionnaire, making it closer to reality, more intelligible and able to collect more information. The quantitative research was conducted in the form of personal survey using the questionnaire. It includes 2 stages: preliminary quantitation and official quantitation. The survey was carried out online as a safety measure for the COVID-19 pandemic, on research subjects between the ages of 18 and 34 in Hanoi and Ho Chi Minh City with around 150 preliminary questionnaires and 400-500 official questionnairs through streaming and Google form. Each questionnaire has 2 parts: (i) personal information (including multiple choice questions to collects data on individual characteristics) and (ii) examination of factors impelling purchase intention. Part (ii) includes 7 subdivisions corresponding to 7 variables mentioned in the research model. All subdivisions are measured using the 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 strongly agree).

In the preliminary survey, 140 good answers were chosen out of 150 collected answers to be tested with

Cronbach's alpha. Based on the results, the measurement scales and questionnaires were adjusted for the official survey.

For the official survey, we received 410 answers, 400 of which are high quality answers from young consumers varying in sex, age, educational attainment and income and are used for the research. The result of the survey was analysed by the SPSS 26.0 and AMOS 22.0 Softwares. These tools help us analyse the Cronbach's alpha reliability coefficients, exploratory factor, confirmatory factor and structural equation model, as well as the effects of control variables in individual characteristics (ONE-WAY ANOVA).

#### RESULTS

Research sample: Among the 410 answers collected in the official qualitative research, 75% subjects were female, 23.75% were male and 1.25% were those of the third gender. In terms of ages, consumers between 18 and 23 year old accounted for 66.5%, followed by the 24-29 group at 26.25% and the 30 to 34 group at 7.25%. The 80.75% of the subjects were university students, 8.75% were highschool graduates, 7.25% were university graduates and 3,25% were pursuing an intermediate or postgraduate vocational degree. Half of the subjects have >5 million VND income, followed by those with 5-15 million VND income (25,25%). 6.75% of the subjects were those with 15-25 million VND income, 2% with 25-35 million VND and 2.25% with above 35 millions.

Reliability test using the Cronbach's alpha: In order to evaluate the reliability of the measurement scale, the Cronbach's alpha was employed. According to Hoàng Trong and Chu Nguyen Mong Ngoc, the measurement scale is the Cronbach's alpha coefficient between 0.8 and 1 indicates high reliability, between 0.7 and 0.8 is acceptable while >0.6 could be considered in the case that the measurement concept is new or unfamiliar with the surveyed subjects. In addition, the corrected item-total correlation must be at least 0.3 in order to meet the requirements.

Based on the results of the preliminary survey, we use the Cronbach's alpha test with the SPSS 26.0 software and excluded the observable variable YD3 of purchase intention because Cronbach's alpha coefficient if item deleted>Cronbach's alpha coefficient (0.883>0.882)

After the Cronbach's alpha test by SPSS26.0 on the official survey, all of the observable variables and factors are kept because it meets the requirements (0.6<Cronbach's alpha coefficient<1; Corrected itemtotal correlation>0.3; Cronbach's alpha coefficient if item deleted<Cronbach's alpha coefficient).

Table 1: Results of KMO test and Bartlett's test

KMO and Bartlett's test	Values
Kaiser-Meyer-Olkin measure of sampling adequacy	
Bartlett's Test of Sphericity	0.875
Approx. Chi-Square	7003.136
df	406
Sig.	0.000

Data analysis results using SPSS 26.0 Software

Table 2: Rotated component matrix

Variables	Factor									
	1	2	3	4	5	6	7			
DD4	0.861									
DD3	0.785									
DD2	0.754									
DD5	0.734									
DD6	0.654									
DD1	0.569									
G1		0.864								
G2		0.829								
G3		0.806								
G4		0.803								
CL2			0.893							
CL4			0.794							
CL1			0.775							
CL3			0.764							
MT3				0.817						
MT4				0.782						
MT2				0.708						
MT1				0.654						
XH2					0.951					
XH3					0.712					
XH4					0.667					
XH1					0.525					
YD4						0.913				
YD1						0.805				
YD2						0.731				
ΓD4							0.73			
ГD3							0.71			
TD2							0.66			
TD1							0.59			

Data analysis results using SPSS 260.0 Software

**Exploratory Factor Analysis (EFA):** In order to analyse the relationships among the variables and sorting the factors of independent variables, we performed an EFA on 29 observable variables.

First, we ran the KMO test and Bartlett's test. KMO (Kaiser-Meyer-Olkin) is the index showing the relevance of the EFA, the KMO coefficient between 0.5 and 1 means the EFA is acceptable. The result is showed in Table 1.

Results of KMO test and Bartlett's test indicated that there is a correlation among the variables (sig. = 0.000<0.05) and the coefficient KMO = 0.875 also proved the relevance of using the EFA to sort these variables. The average variance extracted at approximately 62.709% (>50%) and Eigenvalues =1.028 (>1) mean that the EFA results are acceptable. After the EFA, factors are shorted into groups (Table 2).

Based on this analysis, it can be seen that the observable variables were extracted into 7 major factors with weights exceeding 0.5. These observable variables

were then tested with CFA and SEM in the next step to test the proposed hypothesis and the relevance of the research model.

**CFA** (**Confirmatory Factor Analysis**): From the results of the EFA, 7 major factors were chosen for the research model. In order to evaluate whether or not the measurement scales meet the requirement of the model, the CFA method was used. According to Hu and Bentler (1999), the indexes used to evaluate Model fit are:

CMIN/df = 3 is good, CMIN/df = 5 is acceptable; CFI = 0.9 is good, CFI = 0.95 very good, CFI = 0.8 is acceptable; GFI = 0.9 is good, GFI = 0.95 is very good; RMSEA = 0.06 is good, RMSEA = 0.08 is acceptable; PCLOSE = 0.05 is good, PCLOSE = 0.01 is acceptable.

Results of the CFA on survey samples, using AMOS 20.0 are: GFI= 0.857>0.8, CFI = 0.905>0.9; CMIN/df 2.666<5; RMSEA = 0,065<0.08. Therefore, all indexes of the models met the requirements and the model was

Table 3: Testing the reliability, convergent validity and discriminant validity

		,,	8								
Variables	CR	AVE	MSV	MaxR(H)	YDM	DD	G	CL	MT	XH	TD
YDM	0.874	0.698	0.350	0.878	0.835						,
DD	0.874	0.541	0.312	0.893	0.461	0.736					
G	0.899	0.689	0.305	0.899	0.056	0.080	0.830				
CL	0.898	0.689	0.305	0.904	-0.163	-0.239	-0.552	0.830			
MT	0.832	0.553	0.366	0.834	0.417	0.350	0.192	-0.334	0.744		
XH	0.845	0.579	0.334	0.861	0.485	0.488	0.182	-0.340	0.508	0.761	
TD	0.832	0.554	0.366	0.834	0.592	0.559	0.118	-0.463	0.605	0.578	0.744

Data analysis results using AMOS 20.0 Software

Table 4: Standardized coefficients

Hypothesis	Estimate
Attitude <uniqueness td="" value<=""><td>0.302</td></uniqueness>	0.302
Attitude <perceived financial="" risk<="" td=""><td>-0.168</td></perceived>	-0.168
Attitude <perceived quality="" risk<="" td=""><td>-0.280</td></perceived>	-0.280
Attitude <environmental concern<="" td=""><td>0.337</td></environmental>	0.337
Attitude <social td="" value<=""><td>0.216</td></social>	0.216
Purchase Intention <attitude< td=""><td>0.616</td></attitude<>	0.616

Data analysis results using AMOS 20.0 software

proved acceptable by the research data. The explanatory variables for each factor were shown in the unstandardized weight table, in which the value P of explanatory variables was all approximately 0 (lower than 0.05%). Therefore, the significance of the explanatory variables in the model is confirmed (Table 3).

The result shown in Table 4 is that the unstandardized weights of the mentioned observable variables are all <0.5. The Composite Reliability coefficient of all measurement scales were >0.7. The Total Variance Extracted was >0.5. Therefore, it is confirmed that all measurement scales meet the demand of reliability and convergent validity. The discriminant validity is also achieved as SVM<AVE and all of the value SQRVATVE were higher than all Inter-Construct Correlation.

**Testing the hypothesis with the Structural Equation Model (SEM):** After testing the suitability of the model, we put the qualified observable variables and lantentvarable into the testing model. Using AMOS 20.0, we obtained the result which includes indexes to evaluate the suitability of the model. The values of the indexes are: Chi-square = 1001.338; DF = 360, CMIN/DF = 2.781 < 3; P = 0.000, RMSEA = 0.067 < 0.08; expenses CFI = 0.850 > 0.8; GFI = 0.905 > 0.9. Therefore, the model is considered suitable for SEM analysis (Fig. 3).

After SEM analysis using AMO 20.0, we have the table of unstandardized weights which showed the influence of the factors to the purchase intentions of upcycled clothing items, after SEM analysis using AMO 20.0. The result indicates that with 5% reliability (p<0.05), all hypothesis were accepted. The unstandardized weights of the 3 factors Uniqueness Value, Social Value and Environmental Concern have positive values, thus having positive influence on the purchase intention of upcycled fashion products. Meanwhile, the unstandardized weights of the 2 factors

Table 5: Squared correlations

Variables	Estimate
Attitude	0.617
Purchase intention	0.380

Data analysis results using AMOS 20.0 Software

perceived financial risk and perceived quality risk have negative values, thus having negative influence on the purchase intention of upcycled fashion products of young consumers in Vietnam. Therefore, it can be concluded that all hypotheses are acknowledged.

The extent of the influence of factors on the purchase intention of upcycled fashion items is shown in the Standardized regression weight table (Table 4).

The factor with the strongest positive influence on people's attitude toward upcycled clothes is environmental concern with a standardized weight of 0.337. Following are uniqueness value with 0.302 and social value with 0.216. Meanwhile, perceived risk in quality (-0.280) and perceived risk in pricing (-0.168) have a negative impact on attitude toward upcycled products and it can be seen that perceived risk in quality has a stronger influence than perceived risk in pricing.

From Table 5, we can see that the squared R value of the variable "Attitude" is 0.617 = 61.7%, so, the independent variables affect 61.7% of the variation of "attitude toward upcycled fashion items". The squared R value of the variable "Purchase intention" is 0.380 = 38.0%, so, "Attitude" affect 61.7% of the variation of "Purchase intention of upcycled fashion items".

**Testing the differences of the control variables:** In this step, we test the differences of the purchase intention of upcycled fashion items of young people in Vietnam in different groups regarding control variables. There are 4 control variables used in the model which are sex, age, income and educational attainment.

There are 3 sex groups: 1. Male, 2. Female and 3. Others. To test the differences of the purchase intention of upcycled fashion items among these sex groups, we use the ANOVA method (Analysis of Variance) with sig.

There are 3 age groups: 1. 18 to 23, 2. 24 to 29 and 3. 30-34. To test the differences of the purchase intention of upcycled fashion items among these age groups, we use the Anova method (Analysis of Variance) with sig.<0.05

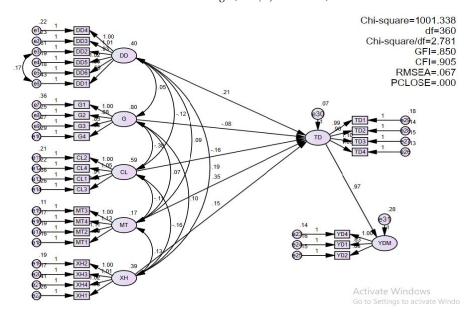


Fig. 3: Result of SEM analysis; Data analysis results using AMOS 20.0 Software

There are 5 income groups: 1. Below 5 million (VND), 2. 5 million to below 15 million, 3.15 million to below 25 million. The 4. 25 million to less than 35 million and 5. More than 35 million. To test the differences of the purchase intention of upcycled fashion items among these income group, we use the Anova method (Analysis of Variance) with sig.>0.05.

There are 4 educational attainment groups: 1. highschool graduates, 2. vocational intermediates, 3. University students and 4. Postgraduates. To test the differences of the purchase intention of upcycled fashion items among these educational attainment groups, we use the ANOVA method (Analysis of Variance) with sig.> 0.05.

The result show that differences in purchase intention of upcycled fashion items are only found in different sex groups and age groups while there is no noticeable difference among other groups.

## DISCUSSION

This study examined the effects of factors influence Vietnamese young consumers on attitudes and purchase intentions regarding upcycling fashion goods. The results of the study revealed several key findings:

First, the study the results of the structure model testing (SEM) showed that environmental concern, as an environmental aspect was a significant predictor when forming a positive attitude and making a purchase decision (H<sub>1</sub> is accepted). In other words, young Vietnamese consumers purchase upcycled fashion products mainly for protecting the environment. The more consumers care about the environment, the more positive

attitudes are toward this type of product. Moreover, in particular, other factors such as uniqueness value, social value also has a positive effect on the consumer's attitudes as well as buying intentions, (both H<sub>2</sub> and H<sub>3</sub> are accepted). These results may be interpreted in that upcycled products can attract consumers to better meet uniqueness, green and social value of upcycled fashion products by emphasizing unique design approaches and social value as well as maintaining environmental value.

On the other hand, perceive financial risk and perceive quality risk have a negative effect on consumer's attitudes and their intention (both  $H_4$  and  $H_5$  are accepted). We also discovered perceive quality risk will have a stronger impact than perceive financial risk because it has a higher standardized regression coefficients (|-0.280|>|-0.168|). These showed that Vietnamese young consumers seek quality over price. So the enterprises need proper strategic orientation. Focusing on the quality of products instead of exclusively praising low pricing and delivery costs. In this study, we proved the relationship between product attitude and purchase intention which is supported in many previous researches in the context of Vietnamese young consumers. The attitude have a positive impact on purchase intention ( $H_6$  is accepted).

Second, the factors of the socio-demographics play a role as control variables. This study explored the purchase intention for upcycled food based on individual characteristics and results showed that only gender and age had an effect on purchase intention. Compared with females and LGBT, male buyers were less willing to purchase the upcycled fashion products. The results help us better understand the actual differences between the genders in their willingness to buy upcycled fashion

products. Moreover, there were a difference in level of purchase intention between various age groups. The study showed that the younger consumers are, the higher level of purchase intentions will have.

#### **IMPLICATIONS**

From the results obtained after the research process, the authors can give a few recommendations to consumers, enterprises and state management agencies.

Firstly, for consumers, because upcycled fashion products has a meaningful message, consumers need to acquire certain knowledge about this fashion item. Thereby, consumers should share their knowledge with everyone to spread meaningful messages widely. However, consumers also need to consider for the origin of materials, finding brands prestige in order to purchase.

Secondly, this study provides a basis for companies on upcycled fashion products to improve consumer's purchase intention. The influence of gender and age on purchase intention of upcycled fashion products was verified again. Enterprises can launch more targeted marketing strategies to encourage consumers to buy products. In addition, it is necessary focus on developing strategies to promote consumer's perceptions of values about the upcycled fashion products. For exam, promoting through association with the fashionista, KOLs or influencers who have an influence as well as a great impact in the current industry of fashion in order to spread the images and value of this fashion item to people consuming more aggressively and closer. The strategie should emphasize the uniqueness, responsibility for the environment and society comes from individuals. The reason is these factors have positive impact on attitude an purchase intentions of Vietnamese young consumers. Businesses can also build or create some community groups to connect, share and provide knowledge about upcycled fashion products, so that, information can be easily accessed as well. Since, then, the company has built a group of potential customers.

Beside, enterprises need to reinforce customer trust when purchase upcycled fashion product (about quality and price) by providing information about the origin and product quality aimed at helping consumers to put their trust in the products as well as their fashion brands. This will be a great competitive advantage to help businesses gain better market share in the current period by.

Third, state management agencies should have policies to encourage production and business inupcycled fashion goods. Specific actions can be mentioned as: Helping producers for marketing activities, updating information, managing origin of materials and qualities,

supporting credit loans and reducing tax for the first 5 years of operating for enterprises regarding upcycled fashion products, etc.

## Research limitation and direction for further researches

**Research limitation:** This study on Vietnamese young consumer' intention to purchase upcycled fashion products still has some limitations:

Firstly, the research scope is consumers living in Hanoi and Ho Chi Minh. However, the study subjects are young people from 18-34 years old and the sample size is considered to be small (400 people) so it is not possible to draw a broad conclusion about the factors affecting other local or age group's user intentions.

Second, apart from the factors indicated in the research model which affect intention to purchase upcycled fashion products, there are many factors which are not mentioned in this study such as aesthetic and emotional value, the influence of the media, etc.

**Direction for further researches:** Firstly, expanding the surveyed areas, focusing on the survey other potential cities in Vietnam. Expanding the survey sample size in order to ensure the reliability, accuracy and reality of the research.

Secondly, considering affects of some new variables such as the influence of the media, the fashion motivation, emotional value, etc. in the Vietnamese context.

Thirdly, research deeply about purchase behaviors of consumers upcycled fashion products.

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## REFERENCES

- 01. Anonymous, 2014. Upcycling: The new wave of sustainable fashion. 3p Contributor, 3BL Media & TriplePundit, Northampton, Massachusetts.
- 02. Tarabieh, S.M.Z.A., 2021. The impact of greenwash practices over green purchase intention: The mediating effects of green confusion, Green perceived risk and green trust. Manage. Sci. Lett., 11: 451-464.
- 03. Ajzen, I. and M. Fishbein, 2000. Attitudes and the attitude-behavior relation: Reasoned and automatic processes. Eur. Rev. Soc. Psychol., 11: 1-33.
- 04. Nguyen, T.T.H., Z. Yang, N. Nguyen, L.W. Johnson and T.K. Cao, 2019. Greenwash and green purchase intention: The mediating role of green skepticism. Sustainability, Vol. 11, No. 9. 10.3390/su11092653

- 05. Kim, I., H.J. Jung and Y. Lee, 2021. Consumers value and risk perceptions of circular fashion: Comparison between secondhand, upcycled and recycled clothing. Sustainability, Vol. 13, No. 3. 10.3390/su13031208
- Fishbein, M. and I. Ajzen, 1975. Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. 1st Edn., Addison-Wesley, Reading, MA., USA., ISBN-13: 9780201020892, Pages: 578.
- 07. Choi, S.H. and J.H. Choi, 2014. An exploratory study of consumers environmental consciousness and behaviors in Korea, US and Japan. Women's Econ. Res., 11: 51-76.
- 08. Biswas, A. and M. Roy, 2015. Leveraging factors for sustained green consumption behavior based on consumption value perceptions: Testing the structural model. J. Cleaner Prod., 95: 332-340.
- 09. Candan, B. and S. Yildirim, 2013. Investigating the relationship between consumption values and personal values of green product buyers. Intl. J. Econ. Manage. Sci., 2: 29-40.
- O'Cass, A. and H. Frost, 2002. Status brands: Examining the effects of non-product-related brand associations on status and conspicuous consumption. J. Prod. Brand Manage., 11: 67-88.
- 11. Tian, K.T., W.O. Bearden and G.L. Hunter, 2001. Consumer's need for uniqueness: Scale development and validation. J. Consum. Res., 28: 50-66.
- 12. Goldsmith, B., 2009. Trash or treasure? Upcycling becomes growing green trend. Reuters, London, UK.

- 13. Yoon, S.I., 2013. Study on the current status of sustainable fashion industry and consumer's consumption behavior: Focused on reused and recycled fashion industry. Ph.D. Thesis, Dankook University, Yongin, South Korea.
- 14. Horton, R.L., 1976. The structure of perceived risk: Some further progress. J. Acad. Marketing Sci., 4: 694-706.
- 15. Shimp, T.A. and W.O. Bearden, 1982. Warranty and other extrinsic cue effects on consumers risk perceptions. J. Consum. Res., 9: 38-46.
- 16. Han, T.I. and J.E. Chung, 2014. Korean consumers motivations and perceived risks toward the purchase of organic cotton apparel. Clothing Text. Res. J., 32: 235-250.
- 17. Park, H.H., 2015. The influence of LOHAS consumption tendency and perceived consumer effectiveness on trust and purchase intention regarding upcycling fashion goods. Int. J. Hum. Ecol., 16: 37-47.
- 18. Kong, H.M., E. Ko, H. Chae and P. Mattila, 2016. Understanding fashion consumers attitude and behavioral intention toward sustainable fashion products: Focus on sustainable knowledge sources and knowledge types. J. Global Fashion Marketing, 7: 103-119.
- 19. Fazio, R.H., 1990. Multiple processes by which attitudes guide behavior: The MODE model as an integrative framework. Adv. Exp. social Psychol., 23: 75-109.