

Antecedent of Sustainable Consumption Behavior: Purchase, Using and Disposing

Amalia Choirunnisa¹, Rini Kuswati²

¹ (Management, Muhammadiyah University Of Surakarta, Indonesia, email: (Choirunnisaamalia@gmail.com))

² (Lecturer, Muhammadiyah University Of Surakarta, Indonesia, email: (rk108@ums.ac.id))

Abstract: *Textiles and clothing are a fundamental part of everyday life and an important sector in the global economy. It is hard to imagine a world without textiles. Clothes are worn by almost everyone, almost all the time and it also becomes an important expression for an individuality. In 2015, emission from textiles production totaled 1.2 billion tons of CO2 equivalent throughout its lifecycle. The fashion industry is a large consumer of water, high volumes of water containing hazardous chemicals into the environment. 20% of global industrial water pollution is attributable to the dyeing and treatment of textiles. Therefore, this study aims to analyze how does urban consumers can be persuaded to adopt sustainable practices when buying, using, and disposing of clothing. The population of this study is people who have bought clothes. This study took a sample of 161 respondents. The type of data used in this research is primary data. The data collection method used a questionnaire and was processed using the Partial Least Square (PLS) analysis tool with SmartPLS 4.0 Software. Based on the results of the analysis and discussion of the data, it shows that evaluation motivation, self-efficacy has a positive and significant effect on sustainable consumption behavior. Meanwhile, anticipatory motivation has no positive and significant effect on sustainable consumption behavior.*

Keywords – *disposal; motivation of anticipation; motivation of evaluation; purchase; self- efficacy; sustainable consumption; use;*

I. INTRODUCTION

Textiles and clothing are a fundamental part of everyday life and an important sector in the global economy. It is hard to imagine a world without textiles. Clothes are worn by almost everyone, almost all the time and it also becomes an important expression for an individuality. In 2015, emission from textiles production totaled 1.2 billion tons of CO2 equivalent throughout its lifecycle. The fashion industry is a large consumer of water, high volumes of water containing hazardous chemicals into the environment. As an example, 20% of global industrial water pollution is attributable to the dyeing and treatment of textiles. Less than 1% of the material used to produce clothing is recycled into new clothing, representing a loss of more than USD 100 billion worth of material each year. From 53 Million tones annual fiber production for clothing. Thus, it is estimated that only 73% produced ends up in a landfill or incinerator and only 13% of the total material inputs in some way recycled, most of the recycled consist of cascading into other industries with lower-value applications such as wiping clothes, mattress stuffing, and many others which are currently difficult to recapture and therefore likely constitute for final use. In the period up to 2024, fashion revenue is expected to show an annual growth rate of 8.4%, while at the same time it is likely that clothing prices will rise much more slowly, compared to other products. This is only possible if the cost of production is kept low. These low prices come at the expense of high negative social and environmental impacts. Consequently, the fashion industry is associated with labor, gender, and poverty issues, Many workers face dangerous working environments due to unsafe processes and the hazardous substances used in production, poor working conditions with long hours and low pay, when serving consumers in their desire for fashion at low prices. The potential for negative social impacts does not stop at the factory door.

Therefore, there is a need for awareness among clothing consumers to adopt an attitude of avoiding the depletion of natural resources in order to maintain ecological balance. To increase the sustainability of the fashion industry, changing consumer behavior to the way they choose their products, how much they buy, maintenance preferences and how and when they discharge their clothes. Although consumers' environmental impacts occur in their purchasing, use, and disposal practices, relatively few people are unaware that much about the behavior of these activities beyond the point of purchase. However, purchasing practices will influence consumer use and disposal behavior. for example, consumption growth increased because it was driven by fast-fashion retailers with increasing number of collections from year to year. two examples of a

retailer named Zara and H& M, which Zara offers 24 new clothing collections each year; H&M offers 12 to 16 and refreshes them weekly. Among all European apparel companies, the average number of clothing collections has more than doubled, from two a year in 2000 to about five a year in 2011. Nevertheless, the fashion industry phenomenon places more emphasis on fashion and not quality, items are often discarded before the end of their useful life due to the pursuit of mode in every season. After all, a wardrobe needs to make room for new clothes, and the choice of specific fibers determines how clothes are washed and disposed of.

Most research studies focus solely on sustainable purchasing. They discussed it was analyzed based on the theory of planned behavior. To research sustainable purchasing, while few people know about changing practices for sustainable use and disposal. Promoting such consumption behavior in a sustainable manner requires understanding consumption patterns across all phases of consumption. However, except for the study by Gwodz et al, only a few case studies investigated all consumers buying, using, and disposing of clothing in a more sustainable manner. Therefore, to investigate sustainable consumption behavior, we develop several hypotheses based on insights from different behavioral models, focusing on human behavior which argues that behavior change requires the synergistic operation of self-motivated and capable factors. At the same time, investigations about what motivates or enables humans to change their behavior have been reported by Mirella Soyer et al. Therefore, this study aims to investigate what factors drive the adoption of more sustainable practices by consumers regarding the purchase, use and disposal of clothing. In addition, we will investigate reported behavior as opposed to behavioral intention, which is common for studies based on the Theory of Planned Behavior. In this study, we developed three questionnaires to investigate sustainable consumption practices regarding the phases of buying, using, and disposing of consumer clothing in the city of Surakarta. Thus, we provide new measures for each phase to investigate sustainable behavior patterns.

II. LITERATURE REVIEW

Sustainable consumption has been comprehensively defined in terms of the use of goods and services that improve the quality of life and minimize negative effects in terms of resource use, waste emissions during the life cycle of a product (Kilbourne et al, 1997), more generally sustainable consumption is defined as in the procurement of products that have social, economic and environmentally friendly indications (Driesen, & Rayp, 2005). Sustainable consumption behavior is transitioning human behavior to reduce natural resource use further (Nabif & Kuswati, 2023). In this study, the definitions for the sustainable purchase, use, and disposal of clothing are derived from the R-imperatives, more specifically the synthesis from Reike et al (Reike, et al, 2018). Leading to a more circular economy, from most to least circular, this R is reject, reduce, resell/reuse, repair, upgrade, reproduce/update, reuse, recycle, restore, and remine. Following this imperative, sustainable buying involves rethinking what to buy by choosing eco-friendly brands or choosing clothing produced using eco-friendly principles (plant-based materials, recycled materials, little or no dyes, low washing temperatures), reduce consumption by buying more little but better quality stuff, or by getting used clothes. Sustainable use is concerned with maintaining and repairing clothing, while sustainable disposal involves behaviors such as reuse, reuse or recycling. This definition aligns with the need to shift to a circular economy that closes the loop on materials with a lower environmental impact. Ultimately, implementing these provisions by consumers promotes clothing longevity, which is key to minimizing emissions incurred over the garment's life cycle (Peters, 2011).

Dutch consumers spend around 5.4% of their income on clothing, and buy 14 kg of clothing per capita per year, which is even more than the French fashion nation which consumes an average of 9 kg (Watson, et al, 2018). Of these purchases, 96% were new clothing items. Compared to some other European countries, the Dutch are least interested in buying used clothes (Gray, 2017). The purchase decision is influenced by the availability of the product and the reasonable price of alternatives to unsustainable clothing. With that, came the initiative. Consumers who want to protect the environment are willing to pay 20% more for eco-friendly clothing items (Fogg, 2009). Said Ciasullo et al (2017), Consumers with a wish to protect the environment are willing to pay 20% more for a sustainable clothing item.

Many different kinds of actors can be involved in the collection of used textiles in cities: charities, municipalities, publicly or privately owned waste companies, clothing brands/retailers, post deliverers or a collaborating combination of these. Where it is the city municipality driving an action the action will likely be restricted to that city. Where it is a waste company, the action may be more widely spread and include other cities or municipalities. Where it is a charity or clothing brands/retailers the action may be national or even multinational. This means that in the latter case the action may not be adapted to the specific needs of the city in question and will be of a more generic nature. Account should be taken of this in the analysis of actions in the city. It may also mean that data has not been collected specifically for the city (Watson, et al., 2018).

The impact of use on the environment is quite large. An extensive LCA study shows that the impact varies from 27% to 48% when looking at human health, ecological diversity and resource availability (Beton, et al., 2014). However, several studies investigating the use-consumption phase, and those that do, focus mainly

on maintaining or maintaining activities such as washing, drying, and ironing. These findings suggest that the impact varies with clothing made from the fiber, therefore, measures exist to determine how consumers care for and use their clothing, but it also depends on the mass of how long and how intensely the clothing is worn (Peters, 2011). For example, cotton needs to be washed at a higher temperature, while synthetic fibers soil more easily. There is also the geographical difference factor. Dutch consumers use their washing machine six times a week, compared to German consumers who report an average of 4.4 washes (Gray S. 2017). Research on sustainable use practices such as repair, repair, and reuse is scarce, (Gwilt, 2014) also found that consumers associate poorly repaired clothing with poverty and therefore prefer invisible repairs, which require repair skills that most consumers lack. Research also shows that extending the life of a garment is the key to reducing emissions in a garment's lifetime. However, on average, clothes are thrown away after being worn only 7–8 times (McKinsey, 2019).

Disposal in this study involves consumers throwing away unwanted clothing items, regardless of whether they are disposed of as waste, for recycling or for reuse purposes (Laitala, 2014). There are various ways to dispose of clothes. Disposal for reuse consists of donating, taking back, selling or exchanging clothes; disposal for recycling involves throwing clothes in the recycling bin; disposal for incineration with or without energy recovery and disposal for landfill involves disposing of items with normal waste. Consumers throw away their clothes because of problems of wear, size, fashion or the need for a change (Laitala, 2014). Estimated disposal methods vary. A study by the Ellen MacArthur Foundation calculated that 2% of textile goods are recycled raw materials, 12% consists of recycled textile products, while 73% of textiles are burned or filled with land. (Ellen, 2017). In 2014, Dutch consumers threw away around 4.2 kg of clothing, lower than Italy, or Spain, but more than Denmark, France, Germany and Belgium (Gray, 2017). Methods that would extend the life of the garment such as returning the garment to the store, selling or exchanging the garment are used far less frequently (Henzen & Pabian, 2019), except by consumers with a high sense of fashion (Weber, et.al., 2017).

Research shows considerable differences in the importance of consumer behavior that must be attached to the consumption of sustainable fashion items, their knowledge of climate change, and their desire to change behavior. McNeill & Moore (2015) distinguishing between consumers who regard fashion as the center of their individual expression and who emphasize novelty and associating sustainable fashion with musty smells and uncomfortable materials; consumers who care about their social image and are willing to adopt sustainable practices, but not at any cost; and consumers who want to reduce their ecological footprint and actively seek behavior that supports this goal. Thus, knowledge of climate change may not cause consumers to change their behavior (Hofstede, 2018); (Kang, et.al., 2013). Finally, contrary to current impressions, research shows that younger respondents (18-29 years) are typically more unaware and unwilling to change behavior when compared to older respondents (Park & Lin, 2020). As a result, younger individuals are more susceptible to influence in ongoing decision making (Johnstone & Lindh, 2018).

The Theory of Planned Behavior (TPB) by (Ajzen, 1988) is one of the most frequently used models to investigate behavior change. The theory proposes that behavior change is mediated by intention to change, which is predicted by a person's attitude, subjective norms, and perceived behavioral control. Attitudes concern individual evaluations in carrying out certain behaviors; subjective norms refer to individual perceptions of support for the behavior to be carried out, while perceived behavioral control reflects individual ideas to be able to exercise control over this behavior (Ajzen, 1991).

Belief in one's own abilities is also called self-efficacy. According to (Bandura, 1997) Self-efficacy is one's belief that he can master the situation and produce positive results. If the person can decide whether to perform or not perform the behavior. Although some behaviors may in fact meet this requirement quite well, the performance of most depends at least to some degree on such non-motivational factors as the availability of requisite opportunities and resources (eg, time, money, skills, cooperation of others). Feist & Feist (2010) stated that self-efficacy as "individual belief that they are able to do something action that will produce something that is expected". Humans act in situations rely on reciprocity of behavior, environment, and cognitive states, especially cognitive factors related to that they are able or unable to perform an action to produce desirable achievements in a given situation.

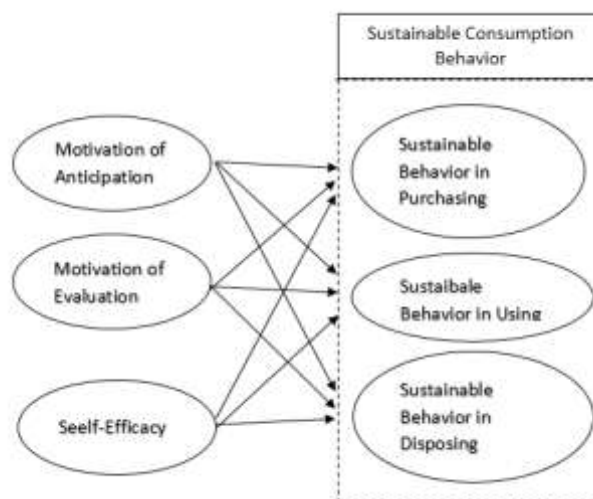


Fig 1. Research Framework

This research was conducted based on previous studies on the effect of brand image and product quality on iPhone smartphone purchase decisions with lifestyle as an intervening variable. The following is a study that was carried out by several previous researchers, including the following

1. Hypothesis 1 (H1a). Motivation of anticipation has a positive effect on sustainable behavior in purchasing.
2. Hypothesis 1 (H1b). Motivation of anticipation has a positive effect on sustainable behavior or in using.
3. Hypothesis 1 (H1c). Motivation of anticipation has a positive effect on sustainable behavior in disposal.
4. Hypothesis 2 (H2a). Motivation of evaluation has a positive effect on sustainable behavior in purchasing.
5. Hypothesis 2 (H2b). Motivation of evaluation has a positive effect on sustainable behavior in using.
6. Hypothesis 2 (H2c). Motivation of evaluation has a positive effect on sustainable behavior in disposing.
7. Hypothesis 3 (H3a). self-efficacy has a positive effect on sustainable behavior in purchasing
8. Hypothesis 3 (H3b). self-efficacy has a positive effect on sustainable behavior in using.
9. Hypothesis 3 (H3c). self-efficacy has a positive effect on sustainable behavior in disposing.

III. RESEARCH METHOD

Researchers use this type of quantitative research, because in this study it describes a variable, symptom or condition that is studied as it is and uses numerical data obtained from questionnaires.

A population is an individual or group that represents all members of a certain category of interest (Urdan, 2016). According to (Banerjee & Chaudhury, 2010) a population is an entire group about which some information is required to be ascertained. The group or individuals who have the same characteristics is the population (Creswell, 2012). The population in this study are all Indonesian. The non-probability sampling method used in this research is by using a purposive sampling technique. Purposive sampling is a sampling technique with certain considerations (Sugiyono, 2019). The number of samples used is 100 respondents. Purposive sampling criteria in this study are as follows:

1. Respondents are currently staying in Indonesia
2. Respondents are currently or have studied at UMS
3. Respondents like to buy clothes
4. Respondents who are under 17 years old are not allowed to fill in the questionnaire
5. Respondents like about fashion
6. Respondents know about environmental care

So, the sample of this study reached 150 respondents. The determination of a sample of 150 respondents is considered sufficient to represent the sample in this study, where the sample is larger than the minimum requirement of 30 respondents.

The data collection method used in this study was to use a questionnaire. The primary data sources are in the form of respondent identity data and the responses of respondents' consumers of any kind of clothes in Indonesia. The data that has been obtained from respondents who are the subject of research then the data is processed using SPSS 25.0 for Windows.

IV. RESULT AND DISCUSSION

In this study using a sample with the criteria of people who are Indonesian citizens, study at UMS and like to buy clothes, totaling 161 respondents, there are the following characteristics:

Description of sex characteristics

The following are the characteristic results of the sex description shown in the table:

Table 1. Description of gender characteristics

No.	Gender	Amount	Percentage
1.	Men / men / boys	35	21.7 %
2.	Girls / women / girls	124	77.0 %
3.	Do not want to be called / Do not want to disclose	2	1.2 %
Total		161	100%

Source: Primary Data 2022

From Table 1 above it can be seen that the sample collected was 161 respondents divided into 3 sex groups. Respondents with male sex were 35 people (21.7%), women were 77 people (77.0 %) and respondents who did not want to be named were 2 people (1.2%).

Description of Age Characteristics

The following are the characteristic results of the age description shown in the table:

Table 2. Description of age characteristics

No.	Gender	Amount	Percentage
1.	<18	14	8.7 %
2.	18-22	50	31.1 %
3.	23-40	75	46.6 %
4.	Do not want to be known / Do not want to disclose	22	13.7 %
Total		161	100%

Source: Primary Data 2022

Table 2 above it can be seen that the sample collected was 161 respondents divided into 4 age groups. Respondents aged <18 years were 14 people (8.7%), aged 18-22 years were 50 people (31.1%), aged 23-40 years were 75 people (46.6%) and respondents who did not want their age to be known were 22 people (13.7 %).

Description of Completed Level of Education

Following are the characteristic results from the Completed Level of Education description shown in the table:

Table 3. Description of Long-Working Characteristics

No.	Gender	Amount	Percentage
1.	D3 / Vocational Studies	9	5.6 %
2.	S1 / Bachelor's degree	81	50.3 %
3.	S2 / Master Degree	10	6.2 %
4.	S3/PHD	5	3.1 %
5.	SD/Primary Education	3	1.9 %
6.	SMA/Senior High School	50	31.1 %
7.	Middle / Junior High School	2	1.2 %
8.	None / None	1	0.6 %
Total		161	100%

Source: Primary Data 2022

From Table 3 above it can be seen that the sample collected was 161 respondents divided into 8 Education groups. Respondents with D3/ Vocational Studies education were 9 people (5.6%), S1/ Bachelor's degree education were 81 people (50.3%), S2 / Master Degree were 10 people (6.2%), Doctoral education / PHD were 5 people (3.1%), elementary education/ Primary Education totaling 3 people (1.9%), High

School/Senior High School education totaling 50 people (31.1%), Middle/Junior High School Education totaling 2 people (1.2%), and no education totaling 1 person (0.6%).

PLS Outer Model Test Results

Outer Model is a measurement model whose relationship between indicators and constructs is specified. The result is the residual variance of the dependent variable.

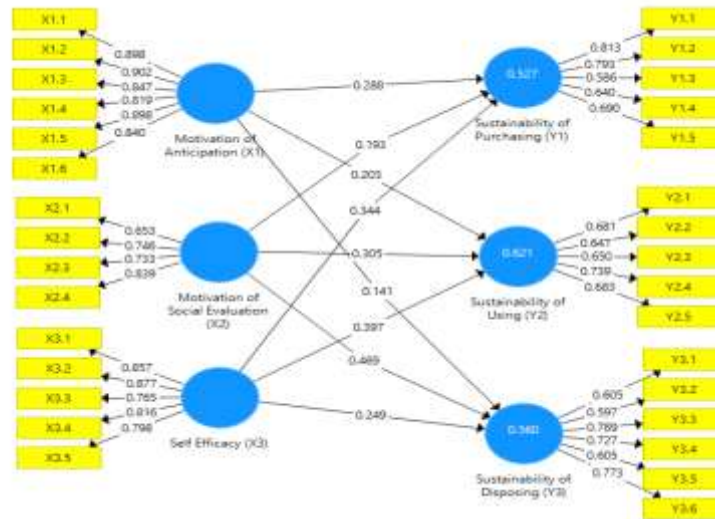


Fig 2. Outer Model
Source: Primary Data 2023

Convergent validity

To test convergent validity, the Outer loading value or loading factor is used. Convergent Validity is done by looking at item reliability (validity indicator) which is indicated by the loading factor value.

Table 4. Convergent Validity

Variable	Indicators	Outer Loading	Note
Motivation of Anticipation (X1)	X1.1	0.898	Valid
	X1.2	0.902	Valid
	X1.3	0.847	Valid
	X1.4	0.819	Valid
	X1.5	0.898	Valid
	X1.6	0.840	Valid
Motivation of Social Evaluation (X2)	X2.1	0.653	Valid
	X2.2	0.746	Valid
	X2.3	0.733	Valid
	X2.4	0.839	Valid
Self-Efficacy (X3)	X3.1	0.857	Valid
	X3.2	0.877	Valid
	X3.3	0.765	Valid
	X3.4	0.816	Valid
	X3.5	0.798	Valid
Sustainability of Purchasing (Y1)	Y1.1	0.813	Valid
	Y1.2	0.793	Valid
	Y1.3	0.586	Valid
	Y1.4	0.640	Valid

	Y1.5	0.690	Valid
	Y2.1	0.681	Valid
Sustainability of Using (Y2)	Y2.2	0.647	Valid
	Y2.3	0.650	Valid
	Y2.4	0.739	Valid
	Y2.5	0.683	Valid
	Y3.1	0.605	Valid
	Y3.2	0.597	Valid
Sustainability of Disposing (Y3)	Y3.3	0.789	Valid
	Y3.4	0.727	Valid
	Y3.5	0.605	Valid
	Y3.6	0.773	Valid

Source: Primary Data 2023

To test convergent validity, the Outer loading value or loading factor is used. The reflective measure or criterion in this test with a value of outer loading 0.05-0.60 (Ghozali, 2015). Based on Table 5 all statement items proved valid.

Reliability Test

1) Composite Reliability

The outer model can be measured in addition to assessing convergent validity and discriminant validity, it can also be done by looking at construct reliability or latent variables as measured by composite reliability. The output results for composite reliability can be shown in Table 5.

Table 5. Composite Reliability

Indicators	Composite Reliability	Note
Motivation of Anticipation (X1)	0.935	<i>reliable</i>
Motivation of Social Evaluation (X2)	0.759	<i>reliable</i>
Self-Efficacy (X3)	0.883	<i>reliable</i>
Sustainability of Purchasing (Y1)	0.833	<i>reliable</i>
Sustainability of Using (Y2)	0.812	<i>reliable</i>
Sustainability of Disposing (Y3)	0.841	<i>reliable</i>

Source: Primary Data 2023

Based on Table 5 above, it shows that the *composite reliability* of each variable shows a construct value > 0.7 0 (Ghozali, 2014). These results indicate that each variable meets *composite reliability* so that it can be concluded that all variables have a high level of reliability.

2) Cronbach's Alpha

The outer model can be measured in addition to assessing convergent validity and discriminant validity, it can also be done by looking at construct reliability as measured by Cronbach's Alpha. The output results for composite reliability can be shown in Table 6.

Table 6. Cronbach's Alpha

Indicators	Cronbach's Alpha	Note
Motivation of Anticipation (X1)	0.934	<i>reliable</i>
Motivation of Social Evaluation (X2	0.735	<i>reliable</i>
Self-Efficacy (X3)	0.881	<i>reliable</i>
Sustainability of Purchasing (Y1)	0.753	<i>reliable</i>
Sustainability of Using (Y2)	0.715	<i>reliable</i>
Sustainability of Disposing (Y3)	0.771	<i>reliable</i>

Source: Primary Data 202 2

Furthermore, in the Table 6. above, the *Cronbach's alpha* for each variable shows a construct value > 0.60, thus these results indicate that each research variable has met the requirements for the *Cronbach's alpha value*, so it can be concluded that all variables have a high level of reliability. (Ghozali, 2014).

Multicollinearity Test

Multicollinearity test is used to determine multicollinearity between variables by looking at the correlation between independent variables. The results of the multicollinearity test:

Table 7. VIF

Collinearity (VIF)	Sustainability of Purchasing (Y1)	Sustainability of Using (Y2)	Sustainability of Disposing (Y3)	Note
Motivation of Anticipation (X1)	2,616	2,616	2,616	Multicollinearity Free
Motivation of Social Evaluation (X2)	1,521	1,521	1,521	Multicollinearity Free
Self-Efficacy (X3)	2,951	2,951	2,951	Multicollinearity Free

Source: Primary Data 2023

Multicollinearity test is to determine the multicollinearity between variables by looking at the correlation values between the independent variables. The criterion that applies to the multicollinearity test is if the VIF (*Variance Inflation Factor*) value is <10, which means that the regression model is free from multicollinearity.

Structural Model or Inner Model

In this model to measure how the causal relationship between latent variables. The coefficient of determination (R^2) and Goodness of Fit are used to evaluate this model.

R-Square

The R-squared value (R^2) is used to calculate the level of independent variation of the dependent variable. The higher the value of R^2 , the better the prediction model of the research model. If R^2 is greater than 0.7, the model is significant (strong) (Ghozali, 2011).

Table 8. R squares

	R Square
Sustainability of Purchasing (Y1)	0.527
Sustainability of Using (Y2)	0.621
Sustainability of Disposing (Y3)	0.560

Source: Primary Data 2023

Based on Table 8. above, it shows that the R Square value for the Sustainability of Purchasing variable (Y1) is 0.527. This acquisition explains that the percentage of Sustainability of Purchasing is 52.7 %. This means that the variable Motivation of Anticipation (X1), Motivation of Social Evaluation (X2, and Self-Efficacy (X3) on Sustainability of Purchasing is 52.7 % and the remaining 47.3 % is influenced by other variables. For the variable Sustainability of Using (Y2) is 0.621. This achievement explains that the percentage of Sustainability of Using is 62.1 %. This means that the variables Motivation of Anticipation (X1), Motivation of Social Evaluation (X2, and Self-Efficacy (X3)of Using is 62 % and the remaining 38 % is influenced by other variables.The Sustainability of Disposing Variable (Y3) is 0.560. This achievement explains that the percentage of Sustainability of Disposing is 56 %. This means that the variable Motivation of Anticipation (X1), Motivation of Social Evaluation (X2, and Self-Efficacy (X3) on Sustainability of Purchasing by 56 % and the remaining 44 % is influenced by other variables.

Goodness of Fit Test

The goodness-of-fit test was carried out to evaluate the measurement model, structural model, and to provide a simple measure for the prediction of the model as a whole (Ghozali 2015). Following are the results of the Q-square analysis:

Table 9. Q squares

	Q Square
Sustainability of Purchasing (Y1)	0.232
Sustainability of Using (Y2)	0.267
Sustainability of Disposing (Y3)	0.254

Source: Primary Data 2023

Based on Table 9, a Q square value that is greater than 0 indicates that the model is predictively relevant.

Hypothesis testing

Hypothesis testing in this study was carried out by looking at *t statistics* and *P- Value*. The t test aims to determine how much influence the independent variables have on the dependent variable partially

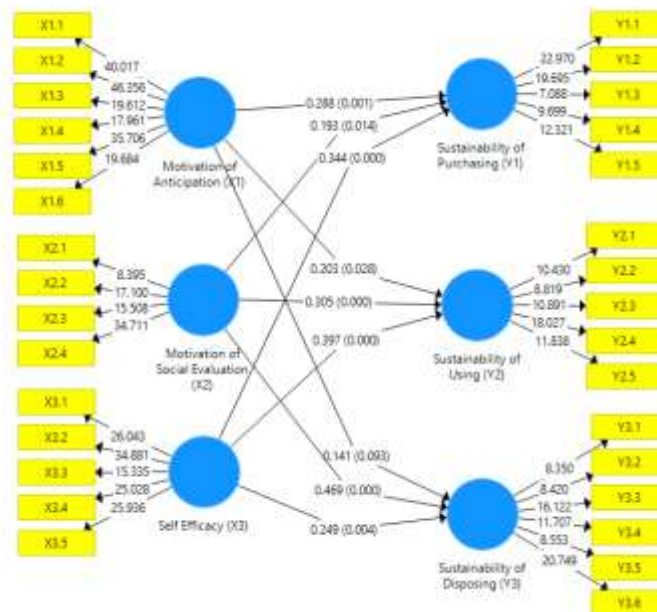


Fig 3. Inner Model
Source: Primary Data 2023

Direct Effects

This direct effect uses the t test which aims to determine the effect of the independent variable on the dependent variable partially. This hypothesis can be accepted if the *P Values* < 0.05. In testing the hypothesis, it can be said to be significant if the T-statistic value is greater than 1.96, whereas if the T-statistic value is less than 1.96 then it is considered insignificant (Ghozali, 2016).

Table 10. Direct Effects

	Original Sample (O)	Sample Means (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
MoA(X1) -> SoP(Y1)	0.288	0.287	0.086	3,336	0.001
MoA(X1) -> SoU(Y2)	0.203	0.200	0.092	2,200	0.028
MoA(X1) -> SoD(Y3)	0.141	0.138	0.084	1682	0.093
MoS(X2) -> SoP(Y1)	0.193	0.196	0.079	2,459	0.014
MoS(X2) -> SoU(Y2)	0.305	0.305	0.061	4,956	0.000
MoS(X2) -> SoD(Y3)	0.469	0.471	0.074	6,342	0.000
SE(X3) -> SoP(Y1)	0.344	0.342	0.086	3,992	0.000
SE(X3) -> SoU(Y2)	0.397	0.400	0.087	4,541	0.000
SE(X3) -> SoD(Y3)	0.249	0.252	0.087	2,863	0.004

Source: Primary Data 2023

Based on the table above, it shows that of the nine hypotheses there is one that is not significant because the *T-Statistics value* is < 1.96 and *P-Values* > 0.05 , namely the Motivation of Anticipation hypothesis on Sustainable of Disposing

V. DISCUSSION

The Effect of Motivation of Anticipation on Sustainable Purchasing

Based on the results of the analysis in this study, it proves that Motivation of Anticipation has no effect on Sustainable of Purchasing. Based on the results obtained, the P-values were $0.001 < 0.05$, this is proves that Motivation of Anticipation has a positive and significant effect on sustainable behavior in purchasing, so this hypothesis is supported. In this study, the Motivation of Anticipation of the Indonesian people, especially students at the Muhammadiyah University of Surakarta, influences the Sustainable of Purchasing. They tend to choose clothes from brands that are environmentally friendly, choose clothes according to the circumstances or season, choose quality clothes that are more durable or long lasting. The purchase decision is influenced by the availability of the product and the reasonable price of alternatives to unsustainable clothing. with that, came the initiative. Consumers who want to protect the environment are willing to pay 20% more for eco-friendly clothing items (Fogg, 2009). Said Ciasullo et al (Ciasullo, et.al., 2017), Consumers with a wish to protect the environment are willing to pay 20% more for a sustainable clothing item.

The Influence of Motivation of Anticipation on Sustainable of Using

Based on the results of the analysis in this study, it proves that Motivation of Anticipation has a positive and significant effect on Sustainability of Using. Based on the results obtained, the P-values were $0.028 < 0.05$, this is proves that Motivation of Anticipation has a positive and significant effect on sustainable behavior in Using, so this hypothesis is supported. In this study, the Motivation of Anticipation of the Indonesian people, especially students at the Muhammadiyah University of Surakarta, has an effect on Sustainable of Using. They tend to stick with clothes with minor and repairable defects, wash them and reuse them. Research on sustainable use practices such as repair, repair, and reuse is scarce, Gwilt (2014) also found that consumers associate poorly repaired clothing with poverty and therefore prefer invisible repairs, which require repair skills that most consumers lack. Research also shows that extending the life of a garment is the key to reducing emissions in a garment's lifetime. However, on average, clothes are thrown away after being worn only 7–8 times (McKinsey, 2019).

The Effect of Motivation of Anticipation on Sustainable of Disposing

Based on the results of the analysis in this study, it proves that Motivation of Anticipation has no significant effect on Sustainable of Disposing. Based on the results obtained, the P-values were $0.093 > 0.05$, this proves that Motivation of Anticipation has no significant effect on sustainable behavior in Disposing, so this hypothesis is no supported. In this study, the Motivation of Anticipation of the Indonesian people, especially students at the Muhammadiyah University of Surakarta, has no effect on the Sustainable of Disposing.

The Influence of Motivation of Social Evaluation on Sustainable of Purchasing

Based on the results of the analysis in this study, it proves that Motivation of Social Evaluation has a positive and significant effect on Sustainable of Purchasing. Based on the results obtained, the P-values were $0.014 < 0.05$, this is prove that Motivation of Social Evaluation has a positive and significant effect on sustainable behavior in purchasing, so this hypothesis is supported.

The Effect of Motivation of Social Evaluation on Sustainable of Using

Based on the results of the analysis in this study, it proves that Motivation of Social Evaluation has a positive and significant effect on Sustainable of Using. Based on the results obtained, the P-values are $0.000 < 0.05$, this is proves that Motivation of Social Evaluation has a positive and significant effect on sustainable behavior in Using, so this hypothesis is supported.

The Influence of Motivation of Social Evaluation on Sustainable of Disposing

Based on the results of the analysis in this study, it proves that Motivation of Social Evaluation has a positive and significant effect on Sustainable of Disposing. Based on the results obtained, the P-values are $0.000 < 0.05$, this is proves that Motivation of Social Evaluation has a positive and significant effect on sustainable behavior in Disposing so this hypothesis is supported.

The Effect of Self Efficacy on Sustainable of Purchasing

Based on the results of the analysis in this study, it proves that Self Efficacy has a positive and significant effect on Sustainability of Purchasing. Based on the results obtained, the P-values are $0.000 < 0.05$,

this is proves that Self Efficiency has a positive and significant effect on sustainable behavior in Purchasing, so that this hypothesis is supported. Individuals who have high self-efficacy, when specifying a specific goal will devote all attention to fulfilling demands, and when faced with obstacles and difficulties in achieving these goals, they will try their best to be able to survive more long time and successfully achieve goals or performance established (Lee & Bobko, 1994).

The Effect of Self Efficiency on Sustainable of Using

Based on the results of the analysis in this study, it proves that Self Efficiency has a positive and significant effect on Sustainable of Using. Based on the results obtained, the P-values are 0.000 <0.05, this is proves that Self Efficiency has a positive and significant effect on sustainable behavior in Using, so this hypothesis is supported. Individuals who have high self-efficacy, when specifying a specific goal will devote all attention to fulfilling demands, and when faced with obstacles and difficulties in achieving these goals, they will try their best to be able to survive more long time and successfully achieve goals or performance established (Lee & Bobko, 1994).

The Effect of Self-Efficacy on Sustainable of Disposing

Based on the results of the analysis in this study, it proves that Self Efficiency has a positive and significant effect on Sustainability of Disposing. Based on the results obtained, the P-values were 0.004 <0.05, this is prove that Self Efficiency has a positive and significant effect on sustainable behavior in Disposing, so this hypothesis is supported. Individuals who have high self-efficacy, when specifying a specific goal will devote all attention to fulfilling demands, and when faced with obstacles and difficulties in achieving these goals, they will try their best to be able to survive more long time and successfully achieve goals or performance established (Lee & Bobko, 1994).

VI. CONCLUSIONS

This study aims to determine the Antecedent of Sustainable Consumption Behavior: Purchase, Using and Disposing, based on the results of the research that has been carried out and data analysis as explained in the previous chapter, the following are the conclusions from the results of the study as follows motivation of anticipation has a positive effect and significant on sustainable behavior in purchasing., motivation of anticipation has a positive effect and significant on sustainable behavior in using, motivation of anticipation has no significant effect on sustainable behavior in disposal, Motivation of evaluation has a positive effect and significant on sustainable behavior in purchasing, motivation of evaluation has a positive effect and significant on sustainable behavior in using, motivation of evaluation has a positive effect and significant on sustainable behavior in disposing, self -efficacy has a positive effect and significant on sustainable behavior in purchasing, self-efficacy has a positive effect and significant on sustainable behavior in using, self-efficacy has a positive effect and significant on sustainable behavior in disposing.

Future Research

Based on the conclusions and limitations in this study are as follows, Future research is expected to be able to use not only use questionnaires and future research is expected to be able to use more variables and increase the number of samples and tests in different areas for the research population, not only in Muhammadiyah University Surakarta but all Indonesian people.

BIBLIOGRAPHY

- [1] Kilbourne, W., McDonagh, P., & Prothero, A. (1997). Sustainable consumption and the quality of life: A macromarketing challenge to the dominant social paradigm. *J. Macromark.* 1997, 17, 4–24. *SAGE JOURNALS*, 4-24.
- [2] De Pelsmacker, P., Driesen, L., & Rayp, G. (2005). Do consumers care about ethics? Willingness to pay for fair-trade coffee. *J. Consum. Aff. Wiley Online Library*, 363-385.
- [3] Reike, D., Vermeulen, W., & Witjes, S. (2018). he circular economy: New or refurbished as CE 3.0? Exploring controversies in the conceptualization of the circular economy through a focus on history and resource value retention options. *Science Direct*, 246-264.
- [4] Dr Glen Peters, D. C. (2011, may). *Carbon Trust: London, UK*. Retrieved from The Carbon Trust 2011: <https://www.carbontrust.com/our-work-and-impact/guides-reports-and-tools/international-carbon-flows>
- [5] Watson, D., Aare, A., Trzepacz, S., & Dahl Petersen, C. (2018). Used Textile Collection in European Cities; ECAP/Rijkswaterstaat: The Hague, The Netherlands. *ECAP*.

- [6] Gray, S. (2017). Mapping Clothing Impacts in Europe—The Environmental Cost. *ECAP / WRAP*.
- [7] Fogg, B. (2009). A Behavioral Model for Persuasive Design. *Stanford University*.
- [8] Ciasullo, M., Maione, G., Torre, C., & Troisi, O. (2017). What about sustainability? An empirical analysis of consumers' purchasing behavior in fashion context. Sustainability. *MDPI*.
- [9] Watson, D., Aare, A., Trzepacz, S., & Dahl Petersen, C. (2018). Used Textile Collection in European Cities. *ECAP*.
- [10] Beton, A., Dias, D., Farrant, L., Gibon, T., Le Guern, Y., Desaxce, M., . . . al, e. (2014). Environmental improvement potential of textiles (IMPRO-Textiles). *JRC Scientific and Policy Reports*.
- [11] Gray, S. (2017). Mapping Clothing Impacts in Europe—The Environmental Cost. *ECAP/WRAP*.
- [12] Gwilt, A. (2014). Fashion and sustainability: Repairing the clothes we wear. In *Fashion Design for Living*. *ROutledge*, 79-95.
- [13] McKinsey Company. (2019). The State of Fashion. *Mc Kinsey & Company*.
- [14] Laitala, K. (2014). Consumers' clothing disposal behavior—A synthesis of research results. *wiley online library*, 444-457.
- [15] Ellen MacArthur Foundation. (2017). A New Textiles Economy: Redesigning Fashion's Future. *Ellen MacArthur Foundation*.
- [16] Gray, S. (2017). Mapping Clothing Impacts in Europe—The Environmental Cost. *ECAP/WRAP*.
- [17] Henzen, R., & Pabian, S. (2019). Increasing consumer participation in textile disposal practices: Implications derived from an extended theory of Planned Behaviour on four types of post-consumer textile disposal. *irish publisher*.
- [18] Weber, S., Lynes, J., & Young, S. (2017). Fashion interest as a driver for consumer textile waste management: Reuse, recycle or disposal. . *wiley online library*, 207-215.
- [19] McNeill, L., & Moore, R. (2015). Sustainable fashion consumption and the fast fashion conundrum: Fashionable consumers and attitudes to sustainability in clothing choice. *wiley online library*, 212-222.
- [20] Hofstede, H. (2018). Circulariteit in Retail [Circularity in the Retail Sector]. *ABN AMRO*.
- [21] Kang, J., Liu, C., & Kim, S.-H. (2013). Environmentally sustainable textile and apparel consumption: The role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance. *wiley online library*, 442-452.
- [22] Park, H., & Lin, L. (2020). Exploring attitude–behavior gap in sustainable consumption: Comparison of recycled and upcycled fashion products. *science direct*, 623-628.
- [23] Johnstone, L., & Lindh, C. (2018). The sustainability-age dilemma: A theory of (un)planned behaviour via influencers. *wiley online library*, 471-499.
- [24] Ajzen, I. (1988). Attitudes, Personality and Behavior. *Dorsey*.
- [25] Ajzen, I. (1991). The theory of planned behavior. *science direct*, 179-211.
- [26] Armitage, C., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *the british psychological society*, 471-499.
- [27] Fielding, K., Terry, D., Masser, B., & Hogg, M. (2008). Integrating social identity theory and the theory of planned behaviour to explain decisions to engage in sustainable agricultural practices. *the british psychological society*, 23-48.
- [28] Liobikiene, G., Mandravickaite, J., & Bernatoniene, J. (2016). Theory of planned behavior approach to understand the green purchasing behavior in the EU. *science direct*, 38-46.
- [29] Kang, J., Liu, C., & Kim, S.-H. (2013). Environmentally sustainable textile and apparel consumption: The role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance. *wiley online library*, 442-452.
- [30] Chang, H., & Watchravesringkan, K. (2018). Who are sustainably minded apparel shoppers? An investigation to the influencing factors of sustainable apparel consumption. *emerald insight*, 148-162.
- [31] Terry, D., Hogg, M., & White, K. (1999). The theory of planned behaviour: Self-identity, social identity and group norms. *the british psychological theory*, 225-244.
- [32] Sarafino, E. (1994). Health Psychology: Biopsychosocial and Interaction. *John Wiley & Son*.
- [33] Bandura, A. (1997). Self-Efficacy: The Exercise of Control. . *W. H Freeman & Company*.
- [34] Eisenberg, N. &. (1989). The roots of prosocial behavior in children. *New York: Cambridge University Press*.
- [35] Malkus, A. J. (1997). Environmental concern in school-age children. Paper presented at the biennial meeting of the Society for Research in Child Development, Washington, DC.
- [36] Soyer, M., & Dittrich, K. (2021). Sustainable Consumer Behavior in Purchasing, Using and Disposing of Clothes. *MDPI*.
- [37] Laitala, K., Klepp, I., & Henry, B. (2018). Does use matter? Comparison of environmental impacts of clothing based on fiber type. Sustainability.

- [38] Ajzen, I. (1991). The theory of planned behavior.
- [39] Gwozdz, W., Nielsen, K., & Muller, T. (2017). An environmental perspective on clothing consumption: Consumer segments and their behaviour patterns.
- [40] Meinhold, J. L. (2005). environment and behavior. *sagepub*, 511-532.
- [41] William Kilbourne, P. M. (1997). Sustainable Consumption and the Quality of Life: A Macromarketing Challenge to the Dominant Social Paradigm. *Sagepub*.
- [42] PATRICK DE PELSMACKER, L. D. (2005). Do Consumers Care about Ethics? Willingness to Pay for Fair-Trade Coffee.
- [43] Denise Reike, W. J. (2017). Resources, Conservation & Recycling. *elsevier*.
- [44] Maria Vincenza Ciasullo, G. M. (2017). What about Sustainability? An Empirical Analysis of Consumers' Purchasing Behavior in Fashion Context. *mdpi*.
- [45] Laitala, K. (2014). Consumers' clothing disposal behaviour – a synthesis of research results. *International Journal of Consumer Studies*.
- [46] Sabine Weber, J. L. (2016). Fashion interest as a driver for consumer textile waste management: reuse, recycle or disposal. *International Journal of Consumer Studies*.
- [47] Ainun Ni'mah, I. T. (2014). Hubungan Antara Dukungan Sosial dan Self Efficacy Dalam Menyelesaikan Skripsi. *unnes*.
- [48] Hamidah, C. K. (2014). PENGARUH SELF-EFFICACY, LINGKUNGAN KELUARGA, DAN LINGKUNGAN SEKOLAH TERHADAP MINAT BERWIRUSAHA SISWA SMK JASA BOGA. *Jurnal Pendidikan Vokasi*.
- [49] Malkus, J. L. (2005). Adolescent Environmental Behaviors: Can Knowledge, Attitudes, and Self-Efficacy Make a Difference? *sagepub*.
- [50] Dittrich, M. S. (2021). Sustainable Consumption Behavior in Purchasing, Using and Disposing of Clothes. *MDPI*.
- [51] Nabif, M., Noor, F., & Kuswati, R. (2023). The Effects of Environmental Value and Environmental Engagement on Sustainable Consumption Behavior. 1(January), 1517–1531.