

Factors Affecting the Consumers' Willingness to Pay for Sustainable Fashion Products (Study Case: Natural Dyed Batik)

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Abstract

Due to globalization and the fast upkeep with fashion trends, the number of imported cheap textile products and fast fashion products are increasing in developing countries especially in Indonesia. This can suppress the development of local industries that are oriented towards green products. Lately, many Indonesian fashion industries are starting to apply sustainable concepts and some of them are in the batik sector. Natural dyed batik production process goes through several stages, in which overall need a long coloring process and expensive costs. This what makes natural dyed batik is relatively more expensive than the synthetic dyed batik as well as other types of fashion. The issue of consumers' willingness to pay for environmentally friendly products has begun to be widely discussed in research, especially in relation to the existence of eco-friendly fashion industries. This research primarily aims to identify the factors that influence consumers to buy environmentally friendly products. The method used is a review of literature studies related to the context of eco-friendly textile products. The findings of this study revealed that there are six factors that influence consumers' willingness to pay for natural dyed batik products, such as value orientation, cognitive knowledge, aesthetics, demographics, attitude towards green products, and green purchase intention.

Keywords

Literature Review, Sustainable Fashion, Natural Dye Batik, Willingness to Pay.

1. Introduction

The changing dynamics of the fashion industry have forced retailers to manufacture products at low cost while remaining flexible in design, quality and speed to market. This strategy is carried out to maintain a profitable position in an increasingly demanding market (Bhardwaj & Fairhurst, 2010). With fast production times and the ability to keep up with the latest trends, fast fashion has been rapidly developed over decades (Brewer, 2019). Fast fashion focuses more on high profits with low production costs. The rise of cheap imported textile products in Indonesia has become a threat to small local textile entrepreneurs in Indonesia (Islamiati, 2023). This can be seen from the import value of used clothing in 2022 which reached US\$272,146 with a volume of 26.22 tons, recorded by Statistics Indonesia. The

Minister of Cooperatives and SMEs Indonesia said that imported used goods is an illegal practice that can threaten the sustainability of local entrepreneurs such as batik and other small local brands. He said that the adaptability of the local textile entrepreneurs especially in batik industry is concerning, these MSME entrepreneurs got easily distracted by the latest market demand and swerved to the imported used goods because batik was lacking in buyers (Islamiati, 2023).

However, currently many fashion brands are starting to apply sustainable concepts to their products including batik industry. Sustainable fashion has a basic concept that is opposite from fast fashion. Sustainable fashion has the principles of durability and production processes that are ethical and also environmentally friendly. Sustainable fashion does not depend on trends, tends to have limited collections, applies zero waste cutting designs, and minimizes textile waste. Natural dyed batik itself is an innovation to carry out an environmentally friendly batik process by minimizing the production of waste that is detrimental to health and the environment.

Batik has been recognized by UNESCO (The United Nations Educational Scientific and Cultural Organizations) as Indonesia's intangible cultural heritage. In the past, batik was commonly used by Javanese people who were limited to the aristocratic class. However, at this time batik has become one of the national clothes that is commonly worn by Indonesians on various occasions (Wulandari, 2022). In the Big Indonesian Dictionary (KBBI), "Batik" is defined as a pictorial cloth made specifically by writing or applying wax to the cloth, which is then processed through a certain process.

There are several techniques for making batik that are often used by batik craftsmen, which include written or canting batik, stamped batik, combination batik, dyed batik, painted or dabbed batik, and printing batik. Among the several processes of making batik, the process of making batik or canting is the most traditional method. The manufacturing process still uses a traditional canting tool which is filled with hot wax before being used to make patterns. After that, the cloth is dyed using natural materials such as turmeric, areca nut seeds, noni root bark, mangosteen peel, soja tree, guava leaves, indigo leaves, mundu tree bark. After the cloth has been successfully colored, the wax is released from the cloth to form a beautiful batik motif. The process of making written batik or canting requires quite high accuracy, the texture and motifs of batik are made manually by hand, the materials must also be processed before producing the desired color. So the manufacturing process in this way takes a long time, about two to three months.

Because the process is quite complicated, the price of natural dyed batik is much more expensive than other types of batik. The price of natural dyes is still relatively more expensive than synthetic dyes. In terms of price, batik with natural dyes cannot compete. However, in terms of quality, the natural color of batik has a unique color impression because it cannot emit exactly the same color as one another, besides that the colors produced by natural dyes also tend to be softer than synthetic dyes which tend to be sharper.

Green products or environmentally friendly products tend to have relatively more expensive prices. One of the important challenges facing entrepreneurs today is identifying what factors are influencing consumers' willingness to pay for environmentally friendly products (Laroche et al., 2001). Willingness to pay is an important issue to explain the attitude of consumers' willingness to pay more, including purchasing green products (Khoiriyah & Toro, 2014). The issue of consumers' willingness to pay for environmentally friendly products has begun to be widely discussed in research, especially in relation to the existence of eco-friendly fashion industries. There have been many researches discussing willingness to pay and the factors that influence consumers' willingness to buy environmentally friendly products at a premium price.

Several studies related to factors affecting consumers' willingness to pay especially in the eco-friendly textile products have been conducted previously. Research conducted by Yeong Sheng Tey et al. (2018) used purchasing capacity, sustainability concerns, shopping behavior and product attributes as the variables. The finding of this research is that even when value is added, the evidence indicates that the apparel will gain minimum acceptance unless the aesthetic is also appealing. Another research has been conducted by Gwendolyn Hustvedt & John C. Bernard (2008), the variables used are consumer attitudes towards green products, ecological knowledge and demographics. The results show that consumer decisions in buying products is highly influenced by consumer demographic factors. Another research done by Seae Lee (2015) used demographic, knowledge, value, attitude, and behavior. It is resulted that value is related to environmental awareness (knowledge, attitudes and behavior) and environmental awareness directly influence consumers' willingness.

There are not many articles that discuss the tendency of buyers who buy eco-friendly fashion products for the attractive appearance from the aesthetic side. Aesthetics is one of the most important factors as it plays a role in attracting consumers. According to the prior research done by Ren-Chuen Tzou et al (2007), perceived aesthetics composed by pleasure and beauty has been validated as a significant determinant for acceptance of fashion. Aesthetic is a major factor of fashion objects by emphasizing satisfying consumers through the experience of beauty and sleek appearance.

1.1 Objectives

The purpose of this study is to identify the factors that influence consumers to buy environmentally friendly products. By reviewing several research articles and finding the research gaps regarding willingness to pay for sustainable fashion also combining the significant variables with the aesthetic factor to build a research hypothesis and the influence between variables that will be used in further research and is specified for natural dyed batik product.

2. Literature Review

2.1. Green Products

Green products are usually products that last a long time, do not cause harmful toxins, are made from recyclable materials, or are packaged using recyclable materials. Of course, there are no completely green products, because all product manufacturing consumes energy and resources and creates by-products and emissions in their manufacture and when they are transported to warehouses and stores (Durif et al., 2010). According to (Albino et al., 2009), this product is designed to minimize environmental impacts during its cycle. Specifically, the use of non-renewable materials is reduced and the use of toxic materials is reduced. The definition of a green product according to (Liu & Wu, 2009) is a product whose functions and ideas are related to the process of taking materials, production, sales, utilization, and processing of waste available for recycling, reducing pollution, and saving energy.

2.2. Value Orientation

Value orientation is defined as an individual's tendency to achieve desired goals, varies by level of importance, and directs principles in life. According to (Triandis, 1993), the two main values that influence consumer behavior are individualism and collectivism. Individualism and collectivism orientations have been shown to influence various social behaviors. Likewise, the level of individualism or collectivism tends to influence motivation to engage in environmental awareness behavior (Lin & Huang, 2012).

2.2. Cognitive Knowledge

Cognitive knowledge refers to how a person stores information (Kluwe, 1982). In meaning, cognitive is an activity that makes an individual connect, assess, and consider an event so as to gain knowledge afterwards.

2.3. Attitude towards Green Products

According to (Eagly & Chaiken, 1993), attitude (attitude) is a psychological tendency that is expressed by doing a certain entity by making some considerations that are beneficial or detrimental. Based on research conducted by (Yadav & Pathak, 2016) which confirms that consumer attitudes towards environmentally friendly products significantly influence the purchase of environmentally friendly products.

2.4. Green Purchase Intention

Green purchase intention is defined as a concept where customers buy environmentally friendly products and choose to buy these products over other conventional products. Green purchase intention is also defined as purchase intention and real purchase by consumers after they are aware of the existence of environmentally friendly attributes in a brand (Huang et al., 2014). Consumers are willing to buy because the product is less harmful to the environment. Green purchase intention is conceptualized as a person's probability and willingness to own a product as a preference for purchasing considerations (Eles & Sihombing, 2017). Green purchases can have an impact on organizational profits. It also helps build a positive public and brand image in the market (Sreen et al., 2018).

2.5. Willingness to Pay

Willingness to pay is defined as the maximum price received by a buyer to pay for a certain amount of goods or services (Le Gall-Ely, 2009). According to (Wedgwood & Sandom, 2003), there are 3 ways to estimate willingness to pay, which are as follows:

1. Observe the prices people pay for various goods in the market.
2. Observe each individual's expenses in the form of money, time, labor, etc. to acquire an item or to avoid losing it.
3. Asking people directly about their willingness to pay for a good or service in the future.

3. Methods

The method used in this scientific articles is a qualitative method and literature study or library research. By studying the relevant theory and reviewing literature that is in accordance with the discussed topic. The initial stage is to search for papers with the two main keywords “willingness to pay” and “sustainable fashion”. The search was conducted by indexing and filtering articles at Scopus and Google Scholar. The results are then selected only on papers that have been cited at least once and have a minimum of 20 literature references (Figure 1).

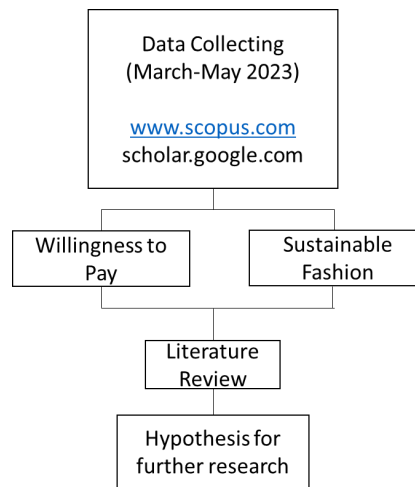


Figure 1 Methods

4. Results and Discussion

The following are some relevant studies that have previously existed, which discuss the willingness to pay for sustainable fashion products. From the research articles that have been collected, the variables used will be seen then the gaps will be obtained so that a research model and hypothesis will be built to be used in further research (Table 1).

Table 1. Relevant Research

Relevant Researches	Authors	Methods	Variables	Differences
<i>Factors Influencing Willingness to Pay for Sustainable Apparel</i>	Yeong Sheng Tey, Mark Brindal & Haddy Dibba	Vote count analysis	Demographics, sustainability issues, consumer purchasing attitudes, and product attributes.	This study uses product attribute variables, but does not focus on internal consumer factors such as value orientation.
<i>Consumer Willingness to Pay for Sustainable Apparel</i>	Gwendolyn Hustvedt & John C. Bernard	Questionnaire	Consumer attitudes towards green products, ecological knowledge, demographics,	This study does not use the variables of value orientation and the aesthetic side of clothing products
<i>Consumer' Value, Environmental Consciousness, and Willingness to Pay more toward Green-Apparel Products</i>	Seahee Lee	Questionnaire	Environmental knowledge, environmental concern, environmental behaviors	This study only uses variables from the environmental side such as knowledge, concern, and behavior.
<i>Willingness to Pay More for Green Products</i>	Shuqin Wei, Tyson Ang, Vivien E. Jancenelle	Questionnaire	Eco-literacy, Lack of Environmental Concern (LoEC), Perceived Consumer Effectiveness (PCE)	This research focuses on the environmental problems themselves and the influence of consumers in solving them
<i>Willingness to Pay for Socially Responsible Products: Case of Cotton Apparel</i>	Jung E. Ha-Brookshire & Pamela S. Norum	Questionnaire	Attitudes toward socially responsible cotton apparel, demographic characteristics, apparel product evaluative criterion	This research only considers product behavior, demographic characteristics, and product criteria as variables.
<i>Nurturing Consumers' Green Purchase Intention of Natural Dyed Batik during Craft Shopping Tour in the Batik City of Pekalongan Indonesia</i>	Wenti Ayu Sunarjo, Vigory Gloriman Manalu, Wiwiek Rabiatul Adawiyah	Questionnaire	Knowledge of green product, attitude, demography	This research focuses only on green purchase intention, and focuses on the purchasing factors of natural color batik products from the environmental side.

Consumers' willingness to buy green products is highly dependent on the value system. Generally values can be divided into self-transcendence and self-enhancement. Self-transcendence consists of concern for others and a desire to work for the good of society. It is a journey of personal self-discovery, in which one strives for greater perfection and a higher perspective (Barber et al., 2012). Self-enhancement reflects the degree to which individuals are motivated to promote self-interest and how they see themselves. These values influence and trigger Action (Kilbourne et al., 2005).

In addition, consumer willingness to buy green products is also influenced by knowledge. Knowledge has been recognized in consumer research as a characteristic that influences all phases of the decision process. More specifically, knowledge is a relevant and significant construct that influences how consumers collect information (Alba & Hutchinson, 1987).

Apart from the aspects of value and knowledge, factors that can influence consumers' willingness to buy a product, especially environmentally friendly products in the form of textiles, are aesthetics or beauty. According to research conducted by (Revianto, 2019), there are 15 indicators of 7 attributes of batik cloth, which include the quality of the stitching of the batik cloth, the quality of the workmanship of the batik cloth, the quality of the good and durable colors, the type of cloth, the ease of maintenance, the type of dye, batik motifs, color contrast, seller identity (brand), eco-friendly packaging, complete product information, product guarantees, price discounts, price against quality provided and good service when buying. Based on the research done by Yeong Sheng Tey, Mark Brindal, and Haddy

Dibba (2018), even when value is added, evidence suggests that apparel will gain minimum acceptance unless aesthetics are also appealing.

Based on the literature review conducted, there are not many studies that use aesthetics as a variable that influences consumers' willingness to buy sustainable fashion products. Meanwhile, aesthetics is one of the most important aspects of sustainable fashion since it plays a crucial role in attracting consumers. Sustainable fashion or natural dyed batik is frequently seen as dull or unappealing compared to the other types of batik, and buyers may be reluctant to buy eco-friendly options if they do not feel aesthetically satisfied. If natural dyed batik can offer aesthetically pleasing and trendy options, buyers are more likely to switch to sustainable and eco-friendly fashion. A survey has been conducted before by collecting 50 reviews from several Indonesian e-commerce such as Shopee, Tokopedia, and Lazada. Most consumers who buy batik products in e-commerce stated that they are satisfied with the quality of materials used, the motifs used, and also the colors resulted. Therefore, aesthetic is essential in creating natural dyed batik that is both attractive and long-lasting (Figure 2).

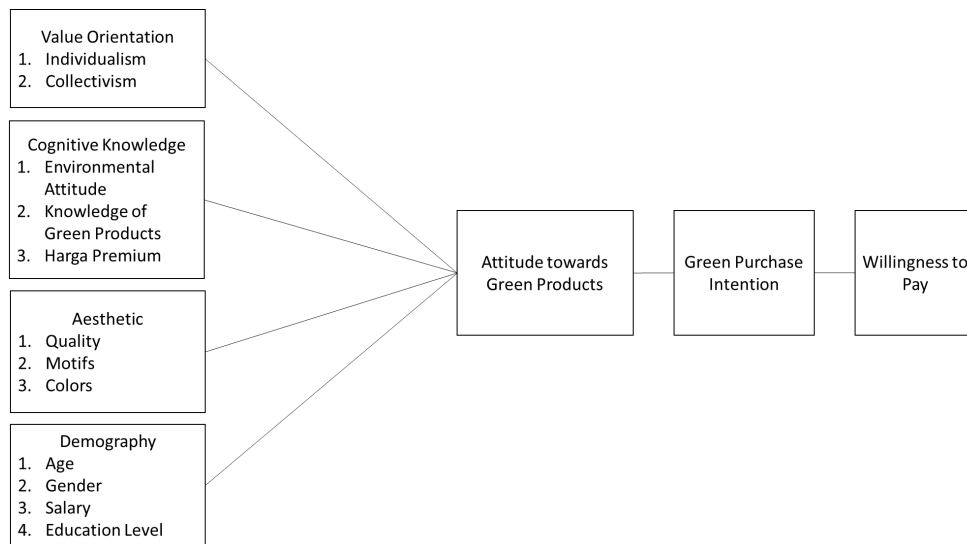


Figure 2 Conceptual Framework

Based on the conceptual framework above, it can be concluded that value orientation, cognitive knowledge, aesthetics, and demographics influence attitudes towards green products which in turn affect green purchase intention and willingness to pay as the final decision. These variables were obtained from several literatures which included:

1. Value Orientation (Schwartz, 1994), (Laroche et al, 1999), (Konsky et al, 2002).
2. Cognitive Knowledge (Junaedi, 2008), (Trivedi et al, 2018), (Sunarjo et al, 2021), (Laroche et al, 2001)
3. Aesthetic (Hwang et al, 2016)
4. Demography (Leszczynska, 2019), (Laroche et al, 1999).
5. Attitude towards Green Products (Patel et al, 2020)
6. Green Purchase Intention (Patel et al, 2020)

Consumers' willingness to pay for natural dyed batik products will be analyzed through the relationship between variables and also seen from the aspect of the production value chain. Based on this, the hypothesis in this study are:

1. H1: Value orientation, cognitive knowledge, aesthetics, and demographics are significantly related to the attitude towards green product.

The higher the value orientation, the higher the attitude towards green products (Laroche, 2001). Efforts to identify green consumers can be traced back to the early 1970s. According to McIntyre (1993), women tend to be more ecologically conscious than men. And based on research conducted by Henion (1972), consumers with middle or high incomes will be more likely to act ecologically because of a higher level of education so that increased sensitivity to social problems. However, several studies conducted by Chan (1999) and McKeage (1994) state that demographics are not as important as knowledge, values and/or attitudes in explaining green

behavior. Chan (1999) revealed that cognitive knowledge about environmental issues is a significant predictor of environmentally friendly behavior.

2. H2: Consumer attitudes towards environmentally friendly products affect consumer intentions in buying environmentally friendly products.
According to research conducted by Verma (2018) by creating a socio-psychological model that was developed by including original variables, and showed that consumer attitudes towards environmentally friendly products ranked highest in the results achieved to predict consumer purchase intentions towards green products. Then Hung et al (2016) stated that consumer attitudes toward green products were positively related to consumer purchase intentions for green products.
3. H3: Green purchase intention influences consumers' willingness to pay more to get environmentally friendly products.
According to research conducted by Chaudhary (2018), purchase intention has a positive effect on willingness to pay. Because price plays an important role in making purchasing decisions. Research conducted by Xu, Wang, Yu (2019) also shows that purchase intention has a significant effect on willingness to pay. Because price is one of the factors that influence consumer behavior and intentions in buying a product, at an appropriate price, consumers' availability to pay will be created.

5. Conclusion

Based on the literature review that has been done, it can be concluded that many studies have proven that demographic, cognitive knowledge, and value orientation are significantly related to willingness to pay. However, there are not many studies that include aesthetics as a variable, when aesthetics is one of the most important aspects of sustainable fashion since it plays a crucial role in attracting consumers. Sustainable fashion or natural dyed batik is frequently seen as dull or unappealing compared to the other types of batik, and buyers may be reluctant to buy eco-friendly options if they do not feel aesthetically satisfied. If natural dyed batik can offer aesthetically pleasing and trendy options, buyers are more likely to switch to sustainable and eco-friendly fashion. Therefore, aesthetic is essential in creating natural dyed batik that is both attractive and long-lasting.

From the results and discussion that has been conducted, that there has not been much research discussing natural dyed batik products. Then further research is needed to discuss consumers' willingness to pay related to natural dyed batik as a form of support for authentic Indonesian sustainable fashion products, with the hypotheses and the research model that have been obtained in this study.

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