Understanding consumer purchase intention to purchase sustainable fashion: the moderating role of gender perception

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Abstract

The growing trend of sustainable fashion products has put the company to deal with the challenge of gender perception in quality, design, and price since fashion is consumers’ self-presentation of personality and taste. This study aims to examine the influence of sustainable fashion products to consumer purchase intention with gender perception as the moderating role. Results of moderated regression analysis (MRA) on 267 samples suggests that sustainable fashion product has a positive influence toward consumer purchase intention and the gender perception significantly moderates the Indonesian consumer purchase intention. Additionally, this study gained information that respondents were well aware with the effort of sustainability in fashion, and it believed can protect the environment.

Keywords

sustainable fashion; consumer purchase intention; gender perception; fast-fashion

INTRODUCTION

The expanded marketplace and heightened competition drive many industries to fuel their intense growth. In line with that, many companies have a rapid continuation of innovating and producing (Peirson-Smith & Evans, 2017). These actions result in higher levels of social and environmental impact (Grimmer & Woolley, 2012). Furthermore, through industrial developments it generates an understanding that our planet is unbounded in its resources (Neumann et al., 2020). Thus, we are currently facing environmental issues in many parts like global warming and scarcity of natural resources.

In recent years, the fashion industry activities lead to a higher amount of waste in landfills due to unrecyclable waste (Beall, 2020). At a global level, the wastes are amounting to 92 million tons (Beall, 2020). Through the estimation, only 12% of the clothing materials can be recycled globally (Beall, 2020). Fashion trends also obliges the industry to renew the styles to follow the consumer’s changing tastes (Gazzola et al., 2020). These changes in consumer’s tastes lead to an understanding of fashion’s lifespan.

As time goes by, fast-fashion is starting to happen and perform a massive production. Fast-fashion has an outcome of rapid changes in the product life cycle (Kong et al., 2016). Several fashion brands start initiate sustainable fashion to continues the fashion’s life cycle loop. The brands are the H&M Group, Zara, Pull & Bear, Bershka, Stradivarius, and Mango. They are successful in sustainable fashion and have created sustainable fashion products category. For example, the H&M Group launched the “Conscious Action” program, Mango created a collection called “The Committed”, and Inditex that owns Zara, Pull&Bear, Stradivarius, and Bershka introduced the “Join Life” collection (H&M, 2019; Inditex, 2019; Mango, 2019). They have started using organic cotton and fibres, renovated the used garment into presentable new products, and the final results will be unique (H&M, 2019; Inditex, 2019; Mango, 2019).

Those fashion brands tend to broaden their consumer segments into those who seek ethical value and ethical product (Stringer et al., 2020). This meaningful action arouses consumer’s perception of environmentally friendly efforts (Neumann et al., 2020). Sustainable fashion product trends give new preference to the consumers (Gazzola et al., 2020). Specifically, sustainable fashion products claim to perform no harmful materials, maximize durability, and timeless designs (Hosseinpour et al., 2016).
This aims of this paper is to analyze the effect of consumer purchase intention towards sustainable fashion products. Wei & Jung (2017) prove that environmentally friendly consumers’ raising awareness influences their purchase intention. Supported with Lee et al., (2020) study, purchase intentions are strongly made by consumer's consciousness in environment and sustainable label products. Consumer’s purchase intention is likely triggered by personal value and the product itself. However, taking further actions of sustainable fashion may bring the company to face challenges in consumer's perception of perceived value in quality, design, and price (Saricam & Okur, 2019).

Essentially, fashions are often a consumer’s communication of their personality and taste to society (McNeill & Venter, 2019). Through self-presentation, consumer’s perceptions of perceived value have the potential to drive their intention of purchase. Notably, few studies address sustainable fashion products with a discussion of gender perception in quality, design, and price. Gender becomes the driving force of a consumer purchase intention (Gazzola et al., 2020). Its background has shaped the perceptions and intentions to shop a product (Rahman et al., 2020). Accordingly, gender role represents consumers interest and expression, affecting their perception and self-identity (Han et al., 2017).

Han et al., (2017) argued that sustainable fashion product’s design, quality, and price appeal to consumer purchase intention determinants. The idea of a harmless effect on sustainable products becomes added value and convinces consumer’s intention to purchase (Javed et al., 2020). Since gender influences individual perception, their willingness to purchase sustainable fashion based on product’s quality, design, and price (Saricam & Okur, 2019). Hence, this study explores more and focuses on the gap between sustainable fashion products and consumer’s purchase intention. Gender perception (quality, design, and price) is the moderating variable and will determine the tendencies of consumer’s purchase intention.

Several studies use the theory of planned behaviour model to analyze their variables (Saricam & Okur, 2019; Jailil & Shaharuddin, 2019; Blazquez et al., 2020; Seock, Yoo-Kyoung; Norton, 2017). This study will be using a different method, namely moderated Regression Analysis (MRA). It is a method used by the researcher for linear multiple regression where the regression equation contains elements of interaction and tests the effect of a moderating variable (Gender Perception). The author also proposes two research questions and as follows: (1) Do sustainable fashion products affect consumer’s purchase intention? and (2) Does gender perception moderate consumer’s purchase intention within sustainable fashion products?

The results of this study will contribute to the literature of sustainable fashion. It will provide new insights of the influence of sustainable fashion products on consumer purchase intentions. Provide gender perception variable that moderates consumer purchase intention. And expands future studies’ knowledge within the scope of business marketing, fashion marketing, fashion brands, and the fashion industry.

**LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

**Sustainable fashion product**

The rapid growth of fashion trends leads to consumer awareness about ethical consumption (Dewanto & Belgiawan, 2020). Based on Kong et al., (2016), sustainable fashion products using eco-friendly materials and becomes a friendly alternative consumption for long-life wear. The common textile materials in sustainable fashion products are the blends of organic polyester and organic cotton (e.g., recycled materials) (Neumann et al., 2020). A study from Henninger et al. (2016) said that sustainable fashion product is a part of business model that associated with certifications and traceability of raw materials.

In another study by Hur & Cassidy (2019), fashion consumption patterns are unsustainable because consumer demand strongly impacts fashion production. By implementing sustainable fashion products, fashion companies have a future of sustainability in the harmless production and consumption process (Kim & Oh, 2020). The movement of sustainable fashion products stimulates consumer consciousness of responsible consumption.
(Blazquez et al., 2020). The concerns of sustainability influence purchase intention.

**Sustainable fashion product and consumer purchase intention**

Consumer purchase intention is consumer’s concerns to purchase with beliefs of perceiving values and benefits (Javed et al., 2020). An explanation from Dewanto & Belgiaawan, (2020), purchase intention happens due to the consumer’s motive under several conditions. Consumers are convinced to purchase when the product is favorable (Grazzini et al., 2021). Besides, consumers plan their willingness to purchase depending on how consumers can benefit from its product (Chen & Chang, 2012). Hence, the measurements of purchase intention will be associated with the provided products.

Sustainable fashion products send a signal of an environmental message, consumers will try to translate and determine their willingness to purchase (Lee et al., 2020). It grows the intention to buy and use sustainable products (Suki et al., 2016). The signals from both environmental messages and environmental benefits build a strong positive feeling about the product (Nam et al., 2017). It happens because consumers now consider fashion’s environmental footprint and desire to continue fashion’s cycle loop through purchasing sustainable fashion (Hur & Cassidy, 2019). Previous studies stated that sustainable fashion product positively impacts consumers’ purchase intention since consumers recognize sustainability and concerns of ethical consumption (Ritch, 2020; Stringer et al., 2020; Saricam & Okur, 2019; Jung et al., 2020). Thus, this study develops the hypothesis of the relationship between sustainable fashion products and purchase intention to respond to our curiosity. The hypothesis is as follow:

**H1:** Sustainable fashion product has a positive influence toward consumer purchase intention

The moderating role of gender perception in design, quality, and price

Gender displaying an individual’s traits, attitudes, and behavior in processing information of something (Bu & Go, 2016). Gender also influences individuals’ considerations and is reflected in their life orientation (Jain & Mishra, 2020). Further, the gender differences leave a different consumption pattern. Essentially, consumers have possessions and preferences toward product quality (Seo & Lang, 2019). Moreover, gender as a consumer’s profile possesses a personal taste of design, quality, and price, which is represented on self-image (Seo & Lang, 2019).

Consumers are willing to pay a premium price to get desired design and quality of the product (Blazquez et al., 2020). Further, the product attributes of design, quality, and price have different approaches toward the consumers. Hence, gender perception has a crucial role in determining purchase intention. Some studies stated that gender perspectives impact consumers’ intention to purchase by concerning sustainability concepts (Bu & Go, 2016; Jain & Mishra, 2020; Gazzola et al., 2020; Brough et al., 2016).

Product’s value has the power to influence consumers’ intention to purchase (Han et al., 2017). Between quality, design, and price, both males and females conclude the nature of purchasing a fashion product is to elevate their appearance or identity (Han et al., 2017). Gender displays the individual’s interest in design, quality, and the price will become the determinants of intention to purchase. The differences in gender’s approach will influence the likelihood to purchase the provided product (Tung et al., 2017). Thus, this study develops the hypothesis of gender in moderating sustainable fashion products toward purchase intention as a response to our curiosity. The hypothesis is as follow:

**H2:** Gender’s perception in design, quality, and price moderates the relationship between sustainable fashion product and consumer purchase intention

**METHODS**

**Population and sample**

This study conducted a survey of consumers interested in shopping at fast-fashion brands (such as H&M, Mango, Zara, Pull Bear, and Bershka) and their
knowledge of fashion trends. Those fast-fashion brands initiated the product category of sustainable fashion. Thus, these initiatives will provide new preferences in fashion trends and arouse the consumer's interest in environmentally friendly efforts.

The sampling method used purposive sampling with requirements (1) Indonesian Male and Female 15-55 years old (2) Recognize fast-fashion brands (e.g., H&M, Mango, Zara, Pull Bear, and Bershka) (3) Potential users of fast-fashion brands' who initiate product category of sustainable (4) Consider to purchase sustainable fashion products.

This survey conducted by an online questionnaire through google form and was collecting 267 Indonesian participants. The researcher conducted an online questionnaire through google form with classic scale measurements of a five-point Likert scale ranging from 1 = “strongly disagree” to 5 = “strongly agree”.

The respondent's characteristics were classified by name, gender, domicile, job and age. 56.9% of respondents are women and most respondents live in Salatiga (46.4%). From respondents’ jobs, College Students was dominating by 63.7% which was also 88.8% from the age range of 15-25 years old.

**Measurements**

This study adopting the previous studies’ measurements of variables and the details is presented in Appendix A. The independent variable of sustainable fashion products divided into three dimensions. First is the consumer knowledge on fast-fashion which modifications from Neumann et al., (2020). The measurements are: (1) the recognition of fast-fashion; (2) the thoughts of fast-fashion is an up-to-date fashion; (3) the thoughts of fast-fashion is an affordable fashion; (4) the thoughts of fast-fashion is a ready-to-wear fashion; (5) the knowledge of fast-fashion brands’ start to create sustainable fashion collections. Second is the sustainable fashion awareness with modifications from Rathinamoorthy, (2019). The measurements are: (1) the awareness of what sustainable fashion products are. (2) consumers’ understanding about the message of the sustainability concept (continues fashion’s life cycle loop); (3) sustainable fashion products give new preferences for ethical consumption. Third is the sustainable fashion knowledge with modifications from Peirson-Smith & Evans, (2017). The measurements are: (1) the knowledge sustainable fashion’s usage of environmentally friendly materials (e.g., organic cotton and organic polyester) and (2) the knowledge of sustainable fashion products are using leftover fabrics for the production of new products.

The variable of consumer purchase intention was used two dimensions. First dimension is the consideration towards product. The measurements are: (1) consumers are willing to purchase sustainable fashion products; (2) consumers have intentions to purchase fast-fashion’s sustainable collections; (3) consumers’ purchase intentions are included as their personal choices to protect the environment. These measurements are modifications from Neumann et al., (2020). Second dimension is the attitude towards product with modifications from Jalil & Shaharuddin, (2019). The measurements are: (1) consumers are convinced to purchase favorable sustainable fashion products and (2) consumers are willing to buy sustainable fashion products because it is worth to buy.

The moderating variable of gender perception using a dimension of perception towards product which modified from Neumann et al. (2020) and Rathinamoorthy, (2019). The measurements are: (1) gender perception toward the products has the power to influence consumers’ purchase intention; (2) gender perception has an impact on consumers to interpret the product's value; (3) gender perception of sustainable fashion product's quality defines a consumer's identity; (4) gender perception of sustainable fashion product's design defines a consumer's identity; (5) gender perception of sustainable fashion product's price defines a consumer's identity; (6) consumers’ selection of design is influenced by their desire to elevate the social look.

**RESULTS AND DISCUSSION**

Prior to hypotheses testing, we conducted the validity and reliability test of the collected data. The reliability test proceeded and was proven as reliable
when the result showed the coefficient of Cronbach's Alpha is greater than 0.70 (Carrillo Flores, Jorge, 2016). The next data testing which was continued is the validity test, the data was proven to be valid when the values of X, Y and Z are higher than the R-table. The R-table for the N = 30 is 0.349. The result stated that the data is proven as valid as the total value of X, Y, and Z > 0.349. Hence, the 26 empirical indicators that were used in this study were proven valid and reliable. The author shall proceed to the next step which is the classical assumption test.

This research conducts two steps to test the hypotheses. The first step is the simple regression test and continuing with moderated regression analysis (MRA). The researcher conducted the classical assumption test on a simple regression equation and passed all the tests. The heteroscedasticity test result shows that the data has a greater significance value than the alpha number (0.229 > 0.05), hence the data is accepted. Further, the researcher can move to the next test, which is a simple regressions test.

The simple regression analysis as shown in Table 2 suggest that consumer purchase intention (X) has a positive influence on sustainable fashion product (Y) ($\beta = 0.497; t=9.181; p<0.05$). Thus, the hypothesis 1 supports the positive influence of consumer purchase intention toward sustainable fashion product. The value of R Square explains that variables of sustainable fashion products have the power to influence consumer purchase intention in the amount of 24.1 %. The other 75.9% is influenced by another variable that is not included in this study. The regression model can be used to predict the variable of sustainable fashion products has a positive influence toward consumer purchase intention.

The result suggest that consumers now recognize sustainability messages and concerning ethical consumption through the look of environmental footprint (Stringer et al., 2020; Neumann et al., 2020). There are 63.7% of college students who were willing to purchase sustainable fashion products (average score of 4.22). Sustainable products become adding value and build

### Table 2.

The effect of sustainable fashion product on consumer purchase intention

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>16.976</td>
<td>1.757</td>
</tr>
<tr>
<td>Sustainable Fashion Product</td>
<td>.497</td>
<td>.054</td>
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<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td>R Square = 0.241 (24.1%)</td>
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</table>


### Table 3.

The moderating role of gender perception in design, quality, and price on the effect of sustainable fashion product on consumer purchase intention

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-26.906</td>
<td>15.470</td>
</tr>
<tr>
<td>Sustainable Fashion Product</td>
<td>1.402</td>
<td>.479</td>
</tr>
<tr>
<td>Gender's Perception</td>
<td>1.151</td>
<td>.366</td>
</tr>
<tr>
<td>XZ _Moderating</td>
<td>-.025</td>
<td>.011</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R Square = 0.371 (37.1%)</td>
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F test results = 51.444

positive effects on consumers’ purchase intention (Ritch, 2020; Jung et al., 2020). Further, 88.8% of 15-25 years old respondents admitted they were encouraged to purchase because sustainable fashion products can protect the environment (average score 4.15). Which in line with previous studies, sustainable fashion product positively impacts consumers’ purchase intention through the concern of sustainability efforts and ethical consumptions (Ritch, 2020; Stringer et al., 2020; Saricam & Okur, 2019).

Thus, with those numbers, it can be concluded that sustainable fashion products influencing consumers’ purchase intention. The environmental messages and environmental benefits build a strong positive feeling about the product (Nam et al., 2017). It affects consumers’ intention to purchase since the consumer spot the positive feeling. Therefore, fast-fashion brands should keep nurturing the sustainability concepts in their fashion product, because 94.1% of respondents positioned themselves to intentionally be willing to purchase sustainable fashion products from fast-fashion brands. Specifically, the concern of eco-friendly arouses consumers’ consideration to purchase (Neumann et al., 2020; Gazzola et al., 2020).

After the simple regression test, the author conducted the moderated regression analysis (MRA). In regards to the classical assumption test, the researcher passed the heteroscedasticity test using the absolute residual. The result shows that the data has a greater significance value than the alpha number (0.539; 0.582; 0.669 > 0.05), hence the data is accepted. In conclusion, the researcher can move forward to the next test, which is the moderated regression analysis (MRA) Test.

Table 3 shows the significance number is lower than the alpha (0.004; 0.002; 0.028 < 0.05), which means H2 is supported. The value of R Square shows that variables of gender perception increase the number from 24.1% to 37.1%. Therefore, gender perception gives more power to influence consumer purchase intention in the amount of 37.1%. The other 62.9% is influenced by another variable that is not included in this study. The regression model can be used to predict the hypothesis because the F result exceeds the alpha (51.444 (F result) > 0.05 (α)). Thus, it proves significantly that gender perception moderates the relationship between sustainable fashion product and consumer purchase intention.

The result shows that gender perception has an impact on consumers to interpret the product’s value which will moderate their intention to purchase. This result is
supported by some studies that gender perception moderates consumers’ intention to purchase sustainability products (Bu & Go, 2016; Jain & Mishra, 2020; Brough et al., 2016). Moreover, 56.9 % of women claimed that Gender becomes the consumer’s profile which has a different approach and leaves a different pattern (average score 4.52). This research’s findings are in line with the study from Seo and Lang (2019), consumers have their tastes and preferences toward products. Hence, gender becomes the consumer's profile which presents their self-image through the taste of design, quality, and price.

Through product design, quality, and price, gender’s perception determines each consumer’s approach to the product itself (Tung et al., 2017). Because those appealing factors were interpreted differently through gender’s perception and it is become important (Han et al., 2017). This also come as valid, because the finding showed that product design (average score 4.64) moderates each gender’s intention to purchase, the product’s quality (average score 4.60) moderates each gender’s intention to purchase, and the product’s price (average score 4.53) moderates each gender’s intention to purchase. Han, Seo, and Ko (2017) also defined the essence of purchasing a fashion product by considering the product’s design, quality, and price to enhance consumers’ look or identity. This finding was proved in this research by an average score of 4.15 (strongly agree). Hence, both males and females agreed that their purchase intention was moderated by their perception. The summary of our hypotheses testing is presented in Figure 1.

CONCLUSION

This research has completed the analysis of both sustainable fashion products and gender’s perception in quality, design, and price has a positive influence toward consumer purchase intention. It was clearly stated that both variables significantly influence consumer purchase intention. In addition, this research’s findings can be beneficial for several parties. First, it will provide new insights to the readers who want to find the influence of sustainable fashion products on consumer purchase intentions. Second, fast-fashion brands (H&M Group, Zara, Pull & Bear, Bershka, Stradivarius, and Mango) gain more knowledge about how sustainable fashion products exactly work on consumers' purchase intention. It can improve their research on their materials and provide more adding value.

Through this research, gender perception can be performed as a new variable for future development. Fast-fashion brands can keep their initiatives to improve fashion’s life cycle loop through the glasses of gender perception. For future research, it is encouraged to develop this research and use more variables that give more impact to the consumer’s purchase intention. Grimmer & Woolley, (2012) say that sustainable fashion products do not directly influence the consumer’s purchase intention. Further, the number of R squares of this study is 37.1% which means another 62.9% is influenced by other variables. Hence, the next researchers are expected to explore other correlated variables and broaden even more.

REFERENCES


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# Appendix A
## Measurements

<table>
<thead>
<tr>
<th>Variables</th>
<th>Conceptual Meaning</th>
<th>Dimension(s)</th>
<th>Measurements</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainable Fashion Product</strong></td>
<td>Fashion’s movement trend with concept recycled materials, durable products, and has certificate and traceability of product materials (Neumann et al., 2020; Henninger et al., 2016; Dewanto &amp; Belgiawan, 2020).</td>
<td>Consumer Knowledge on Fast-fashion</td>
<td>1. The recognition of fast-fashion. 2. The thoughts of fast-fashion is an up-to-date fashion. 3. The thoughts of fast-fashion is an affordable fashion. 4. The thoughts of fast-fashion is a ready-to-wear fashion. 5. The knowledge of fast-fashion brands’ starts to create sustainable fashion collections.</td>
<td>Measurements modification from (Neumann et al., 2020).</td>
</tr>
<tr>
<td><strong>Sustainable Fashion Awareness</strong></td>
<td></td>
<td></td>
<td>1. The awareness of what sustainable fashion products is. 2. Consumers’ understanding about the message of the sustainability concept (continues fashion’s life cycle loop). 3. Sustainable fashion products give new preferences for ethical consumption.</td>
<td>Modifications from (Rathinamoorthy, 2019).</td>
</tr>
<tr>
<td><strong>Sustainable Fashion Knowledge</strong></td>
<td></td>
<td></td>
<td>1. The knowledge sustainable fashion’s usage of environmentally friendly materials (e.g., organic cotton and organic polyester). 2. The knowledge of sustainable fashion products are using leftover fabrics for the production of new products.</td>
<td>Modifications from (Peirson-Smith &amp; Evans, 2017).</td>
</tr>
<tr>
<td><strong>Consumers Purchase Intention</strong></td>
<td>Consumers’ willingness to have the product by realizing the benefit they will have after the purchasing (Javed et al., 2020; Chen &amp; Chang, 2012).</td>
<td>Consideration towards product</td>
<td>1. Consumers are willing to purchase sustainable fashion products. 2. Consumers have intentions to purchase fast-fashion’s sustainable collections. 3. Consumers’ purchase intentions are included as their personal choices to protect the environment.</td>
<td>Modifications from (Neumann et al., 2020)</td>
</tr>
<tr>
<td><strong>Gender’s Perception in Quality, Design, and Price</strong></td>
<td>Genders perform as individuals with backgrounds, traits, and interests that will influence the consumer’s approach toward the provided product (Bu &amp; Go, 2016; Tung et al., 2017).</td>
<td>Perception towards product</td>
<td>1. Gender perception toward the products has the power to influence consumers’ purchase intention. 2. Gender perception has an impact on consumers to interpret the product’s value. 3. Gender perception of sustainable fashion product’s quality defines a consumer’s identity. 4. Gender perception of sustainable fashion product’s design defines a consumer’s identity. 5. Gender perception of sustainable fashion product’s price defines a consumer’s identity. 6. Consumers’ selection of design is influenced by their desire to elevate the social look.</td>
<td>Modifications from (Neumann et al., 2020; Rathinamoorthy, 2019)</td>
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</tbody>
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