

pISSN: 1906 - 3296 © 2020 AU-GSB e-Journal.
eISSN: 2773 - 868x © 2020 AU-GSB e-Journal.
<http://www.assumptionjournal.au.edu/index.php/AU-GSB>

Factors Influencing Purchase Intention Towards Environmentally Sustainable Clothing: A Study on Millennials of Metro Manila

Diwani Patisucan Tuñacao*, Bhumiphat Gilitwala

Received: April 13, 2022. Revised: May 18, 2022. Accepted: May 30, 2022

Abstract

Purpose: The study investigates the factors influencing the purchase intention of millennials of Metro Manila toward environmentally sustainable clothing. Research design, data, and **methodology:** A three-part questionnaire was developed to measure different factors' influence on purchase intention. A pilot test was conducted through an online survey using snowball and convenience sampling to determine questionnaire reliability. **Results:** Data collected were analyzed using the Statistical Package for Social Sciences (SPSS) Statistics Grad Pack version 28.0. Cronbach's alpha indicated that the questionnaire was reliable and could be used for research. Simple, and multiple linear regressions were used to analyze the 400 survey responses. The results indicated that some factors were aligned with the previous researches' outcome such as environmental attitude ($\beta = 0.521$), subjective norm ($\beta = 0.409$), and perceived value ($\beta = 0.106$) as highly influencing purchase intention while perceived quality ($\beta = 0.039$), and social media ($\beta = -0.007$) were insignificant. **Conclusions:** The results conveyed that attitude, behavior, or decision-making factors should not be generalized. This study focused on factors influencing purchase intention but also provided insights as to how can government, business organizations, and individuals contribute to addressing the ongoing environmental issues. An effective communications strategy can be used to enhance awareness to achieve positive results.

Keywords: purchase intention, environmental attitude, subjective norm, perceived value, social media

JEL Classification Code: M30, M31, M37

1. Introduction

Air pollution, climate change, and deforestation were among the five of the world's biggest problems (Zimmerman, 2016). Next to the oil industry, the apparel industry accounted for 10% of global carbon emissions and remained the second largest industrial polluter (Conca, 2015). In addition, according to McKinsey research, the fashion industry contributed about 2.1 billion metric tons of

greenhouse gas (GHG) emissions, about 4% of the global total in 2018 a sizable contribution to climate change (Berg et al., 2020). Aside from this, the apparel industry also contributed waste coming from the three out of five garments produced that ended up in landfills or were incinerated each year (Magnin & Hedrich, 2019). To address the global problem, the circular economy is identified as one of the current sustainable economic models that promote designing products in a way that they can be reused, remanufactured, recycled, or recovered such that they are

1 * Diwani Patisucan Tuñacao, Graduate School of Business and Advanced Technology Management, Assumptions University, Thailand. Email: diwani@protonmail.com

2 Bhumiphat Gilitwala, Professor, Graduate School of Business and Advanced Technology Management, Assumptions University, Thailand. Email: moayyedglt@au.edu

© Copyright: The Author(s)

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

maintained in the economy as long as possible to minimize waste generation and reduce greenhouse gas emission, the 12th goal of United Nations Environment Program (GOAL 12: Sustainable Consumption and Production, n.d.) sustainable consumption and production.

Business organizations took action and supported the global call on addressing climate change and environmental challenges by promoting environmentally sustainable products. Eleven fashion companies were leading the way in sustainability (Morgan, 2020), 26 best sustainable fashion brands can be trusted (Sachs & Seymour, 2019), and there were 45 ethical and environmentally sustainable clothing brands from the United States of America and Canada (Rauturier, 2022).

Eco-friendly, green, and fair-trade clothing, were the three categories of environmentally sustainable products (Hosseinpour et al., 2015). Moreover, green products were energy efficient and durable, often made from recycled materials, or renewable sources, and were biodegradable, reusable, and recyclable at the end of their life cycle while eco-friendly or environmentally friendly products claimed minimal or no harm to ecosystems and the environment (Vieira, 2019). This subject could be viewed from three perspectives such as academic, industrial, and consumer (Durif et al., 2010)

Individuals also took part in addressing environmental issues through their capabilities. A global survey conducted in 2015 by Nielsen.com indicated that three out of four millennials were willing to pay more for sustainable products (NIELSEN, 2015). Millennials, also known as generation Y, were those born from 1982 to 1996 (Howe & Strauss, 2000). However, there was a consensus that millennial generations were born between the 1980s and early 2000s (Lu et al., 2013). According to Pew Research, anyone born between 1981 and 1996 is considered a Millennial (Dimock, 2019). They are the sector that has simplified choices (Howe & Strauss, 2000) but they have purchasing power (Tangsupwattana & Liu, 2017). Millennials are influenced by digital marketing (Smith, 2012). They highly use interactive technologies to gather information and get entertained, but they are less likely to purchase online (Moore, 2012).

In a survey conducted by Nielsen in 2018, 94% of the sample consumers from the Philippines responded that it was important for companies to implement environmental programs to improve the country. The same response was agreed by 85% of the millennial generation. ZALORA (2021) also revealed that millennials topped the four generations of shoppers with 64% demanding sustainable items. The same article described Philippine shoppers as most likely to be sustainable.

Despite the ongoing COVID-19 pandemic resulting in lockdowns, household spending on clothing and footwear was valued at 257 billion Philippine pesos in 2021, a growth

of 14.3% compared to the previous year (Statista, 2022). This is because most consumers were forced to use online methods of acquiring things with millennials shifting from desktop-based to mobile transactions (Go, 2021). The current global environmental situation, the advancement in technology, and the changes in consumer behavior pose challenges and opportunities for all sectors of society including the government, business organizations, and the individuals themselves.

This research is structured as follows: first, after presenting the research objectives, the research questions that were asked to achieve the objective, and the significance of the study in the introduction, the literature review is organized to provide a peer-reviewed definition of factors as used in the previously published articles, the presentation of their results in the context that they applied the concept, and finally the development of hypothesis which were used to determine the relationship between environmental knowledge, environmental attitude, subjective norm, perceived value, perceived quality, and social media with purchase intention in the context of millennials of Metro Manila. Next, the research methodology beginning from the questionnaire design was outlined, followed by the data analysis, and discussion of results. Finally, conclusions and recommendations are provided.

1.1 Research Objective

This research aims to investigate the factors influencing purchase intention towards environmentally sustainable clothing in the context of millennials of Metro Manila.

1.2 Research Question

What are the factors that influence the purchase intention of millennials towards environmentally sustainable clothing in the context of millennials of Metro Manila? What is the influence of environmental attitude, subjective norm, perceived value, perceived quality, and social media to purchase intention?

1.3 Significance of the Study

This study provides insights on factors influencing purchase intention towards environmentally sustainable clothing in the context of millennials of Metro Manila. Determining these factors will assist and guide different organizations such as the government in creating policies and regulations and efficient communications that will increase everyone's environmental awareness through the support from a business organization who are capable of making a positive action through the development, design, production, and marketing of environmentally sustainable

products to boost environmental protection, likewise respond to call in addressing climate change and other global and local environmental issues.

2. Literature Review

The theory of planned behavior suggesting a relationship between attitude and behavior (Fishbein, 1963) was used as a reference in this research wherein behavior is represented by purchase intention while attitude was represented by the various factors discussed in this section.

2.1 Environmental Knowledge

Environmental knowledge entailed awareness, and comprehension of the relationships between various dimensions, and a commitment to preserving the environment for future generations (Kumar, 2012). Green brand knowledge educated people about a product's distinctive brand qualities and environmental benefits (Mohd Suki, 2016). This covered efforts such as pollution reduction and natural resource conservation.

In a study conducted in Malaysia, it was discovered that familiarity with green brands such as organic vegetables was the most important predictor of green product purchasing (Mohd Suki, 2016). In contrast and in a different context, it was found that environmental knowledge did not have a direct and significant effect on consumers' purchase intention (Debora Indriani et al., 2019).

This study referred to environmental knowledge as the awareness and comprehension of the relationship between different dimensions and commitment to preserving the environment as defined by Kumar (2012). To test the same concept in a different context, the following hypothesis has been developed.

H_{1a}: Environmental knowledge influences environmental attitude.

2.2 Environmental Attitude

Individuals' responses to all objects and situations with which they were confronted were influenced by their mental state (Kumar, 2012). Environmental attitudes were a psychological tendency characterized by a degree of favor or dislike towards one's views of or ideas about the natural environment, including variables impacting its quality (Milfont, 2007). It fluctuated in response to current events and was dependent on one's age, gender, socioeconomic status, country, politics, values, personality, experience, education, and environmental knowledge (Gifford & Sussman, 2017). It was shaped by the big five personality traits such as agreeableness, conscientiousness, extraversion, openness to experience, and neuroticism (Duong, 2021).

In the context of fast-moving consumer goods and eco-

friendly items in Sweden, there was a favorable attitude towards paying a premium for green products, but there were gender disparities in purchasing intention (Morel et al., 2012). Sustainability, certainty, and perceived consumer effectiveness all had a considerable favorable effect on attitudes about purchasing sustainable dairy products, which were highly correlated with purchase intention (Vermeir & Verbeke, 2008). Additionally, Chinese consumers' sustainable apparel products attitude had a strong positive effect on purchase intention (Jung et al., 2020) similar to the case of purchasing an environmentally friendly car, it was also found that environmental attitude had a positive impact on purchasing intention (Xu et al., 2019). Green product purchase was studied in Pakistan and was found that there was a significant impact on attitude toward purchasing eco-friendly products (Azam & Ashraf, 2017). While young Brazilians' attitudes were also found to positively affect behavioral intention (Lionço et al., 2019). Green attitude also served as a mediator between terminal/instrumental value and green behavioral intents (Kautish & Sharma, 2019).

This study referred to environmental attitude as the concern for the environment or caring about environmental issues (Gifford & Sussman, 2012). To test the same concept in a different context, the following hypothesis has been developed.

H₁: Environmental attitude influences purchase intention.

2.3 Subjective Norm

Subjective norms consisted of the social pressure that the individual perceives to behave or not behave in a certain way (Lionço et al., 2019). It was defined as an individual's perceptions of whether people important to the individual think the behavior should be performed (Diddi & Niehm, 2017) and revealed the belief of individuals about how they would be viewed by their reference group if they performed a certain behavior (Al-Swidi et al., 2014).

In a study of young Brazilian consumers, results showed that subjective norms affected behavioral intention concerning the purchase of sustainable clothing and textiles (Lionço et al., 2019). In another study conducted in universities in Taiwan, results revealed that subjective norms affected personal norms and attitudes toward purchasing free-trade products, which in turn influenced consumer purchase intention (Wang & Chou, 2021). On the other hand, it was found to be insignificant and has low value in the study conducted at a university in Ahmedabad India (Kumar, 2012).

This study referred to the subjective norm as the social pressure that the individual perceived to behave or not behave in a certain way as defined by Lionço et al., (2019). To test the same concept in a different context, the following hypothesis has been developed.

H₂: Subjective norms influence purchase intention.

2.4. Perceived Value

Diverse customers differentiated perceived value based on different expectations (Akkaya, 2021). It could either be terminal or instrumental (Kautish & Sharma, 2019). Perceived value could also refer to monetary perceived sacrifice (Ko, 2019). Moreover, it was a price given up to obtain a product whose value according to customers had four meanings. These meanings could refer to low price, whatever they wanted in product or service, the quality received for the price, and what has been received for whatever given (Zeithaml, 1988). It is further described as the acceptable price range concept that bridges perceived quality, evaluation, and choice (Dodds et al., 1991). It influenced customers' behavior in purchasing what they value and contributed to their intention to purchase (Ko, 2019). Perceived value also referred to the willingness to buy (Chen et al., 2021). However, perceived value is also affected by lifestyle and varied across different product categories (Akkaya, 2021) which included perceived innovation and perceived greenness (Chen et al., 2021).

Perceived value was considered one of the variables that assisted in creating a competitive advantage (Ko, 2019). It was found to be one of the most decisive factors impacting consumers' perception of some specific product and their purchase intention (Tong & Su, 2018). Apart from product innovation and quality, consumers valued the ethical aspect of a product, and there was a willingness to pay for ethical products (Vermeir & Verbeke, 2008). Thus, consumers tend to purchase green products when perceived benefits were greater than perceived costs (Kautish & Sharma, 2019). Moreover, purchase price value together with brand equity and perceived corporate social responsibility efforts influenced purchase intention (Chang & Jai, 2015).

A study of sample consumers of branded phones in Ho Chi Minh Vietnam confirmed that perceived value had a positive influence on purchase intention (Dam, 2020). The same result has been found in a study conducted in the context of purchase intention of hydrogen-electric motorcycles in Taiwan wherein it is concluded that perceived value is significantly related to purchase intention (Chen et al., 2012).

This study referred to perceived value as the price given up to obtain a product for whatever is given according to Zeithaml (1988). To test the same concept in a different context, the following hypothesis has been developed.

H₃: Perceived value influences purchase intention.

2.5 Perceived Quality

Perceived quality is related to brand equity and is a mix of different marketing elements including price. It is the consumer's judgment about the superiority or excellence of the product (Zeithaml, 1988) and provides consumers

reason to buy (Tong & Su, 2018). Perceived quality's relationship has also been studied in relationship with brand equity and by increasing perceived quality, price is related positively to brand equity (Yoo et al., 2000).

Perceived quality's effect on purchase intention of organic apparel was confirmed in a study conducted on college students in the United States with the female more positive compared to male respondents (Tong & Su, 2018). A moderate significant relationship was found between perceived quality and emotional value towards purchase intention of both American and local products in Malaysia (Asshidin et al., 2016). Perceived quality also mediated trust and purchase intention in social media (Navitha Sulthana & Vasantha, 2021).

This study referred to perceived quality as the consumer's judgment about product excellence aligned with Zeithaml (1988). To test the same concept in a different context, the following hypothesis has been developed.

H₄: Perceived quality influences purchase intention.

2.6 Social Media

Social media is defined as "a group of Internet-based applications that were built on the ideological and technological foundations of Web 2.0, and that allowed the creation and exchange of user-generated content" (Kaplan & Haenlein, 2010). It allowed consumers to communicate with thousands of people well beyond their network (Saeed et al., 2019) and was heavily found in advertising articles now that it was used in product and service promotions (Rudyk et al., 2013). It is a low-cost marketing tool that is highly accessible and scalable, and able to produce, distribute, and collect a broader quantity of knowledge irrespective of time and space (Sogari et al., 2017).

In the Chinese consumer concept, engagement with social media and with their peers were important social influences that were directly tied to increasing sustainable apparel purchase intentions (Zhao et al., 2019). Research on social media users in Pakistan also revealed that social media influenced purchase intention (Saeed et al., 2019). Researching the general population, it was found that social media trust and perceived quality influences purchase intention (Navitha Sulthana & Vasantha, 2021). The apparel brand's social media marketing activities' relationship with customer response was mediated by brand equity in a study conducted in Pakistan (Khan et al., 2019).

This study referred to social media's purpose it served to the consumer such as using them to find, learn and gain knowledge and information as defined by Rudyk et al. (2013). To test the same concept in a different context, the following hypothesis has been developed.

H₅: Social media influence purchase intention.

2.7 Purchase Intention

Purchase intention referred to the consumer's interest to get a particular product or service either in the long term or short term (Sa'ait et al., 2016). This definition was the reference of this research. It also referred to the consumer's tendency to purchase a brand routinely (Diallo, 2012). Purchase intention is recognized as part of consumer behavior and is frequently used to forecast sales of an existing product.

3. Research Methods and Materials

3.1 Research Framework

This study attempts to determine what factors influence the purchase intention of millennials of Metro Manila towards environmentally sustainable products. Included in the factors to assess, which also represent the independent variables, are environmental knowledge (Hosseinpour et al., 2015; Kumar, 2012; Mohd Suki, 2016), environmental attitude (Azam & Ashraf, 2017; Duong, 2021; Kautish & Sharma, 2019; Morel et al., 2012), subjective norms (Kumar, 2012; Lionço et al., 2019), perceived value (Akkaya, 2021; Chen et al., 2012; Dam, 2020; Dodds et al., 1991; Tong & Su, 2018), perceived quality (Hosseinpour et al., 2015; Navitha Sulthana & Vasantha, 2021; Tong & Su, 2018), and social media (Navitha Sulthana & Vasantha, 2021; Saeed et al., 2019; Zhao et al., 2019). Referring to the articles reviewed, the following conceptual framework was developed to assist the research.

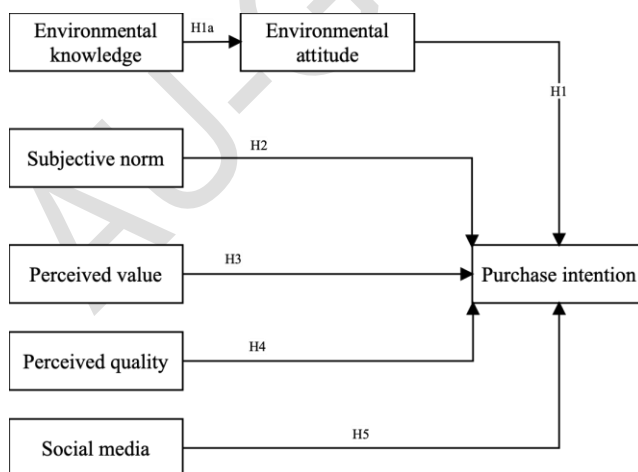


Figure 1: Research Framework

Moreover, hypotheses were developed based on the conceptual framework to determine if the factors presented have a significant influence on purchase intention. The hypotheses of this study are:

H1a: Environmental knowledge (EK) has a significant influence on environmental attitude.

H1: Environmental attitude (EA) has a significant influence on purchase intention.

H2: Subjective norm (SN) has a significant influence on purchase intention.

H3: Perceived value (PV) has a significant influence on purchase intention.

H4: Perceived quality (PQ) has a significant influence on purchase intention.

H5: Social media (SM) has a significant influence on purchase intention.

3.2 Research Methodology

The research was conducted by developing a survey questionnaire. **This questionnaire consisted** of three parts such as screening questions, demographic questions composed of age, educational background, gender, total working experience, income group, and frequency of clothing purchase, and Likert scale questions. Likert-scale is utilized to measure each factor's influence on consumer's purchase intention with 5 denoting "Strongly Agree" and 1, "Strongly Disagree". The Likert-scale questionnaire has a total of 23 questions comprised of four questions to determine environmental knowledge adopted from Sidique, et al. (2010), four questions to determine environmental attitude adopted from Do Valle et al. (2005), three questions to determine subjective norms adopted from Kumar (2012), three questions to determine perceived value adopted from Dam, T. (2020), three questions to determine perceived quality adopted from Yoo et al. (2000), three questions to determine social media influence adopted from Zhao et al. (2019), and three questions to determine purchase intention adopted from Kumar (2012). The questions were composed using Google Forms and distributed to sample respondents for pilot testing to determine the reliability of the questionnaire, and eventually to conduct the research.

3.2.1 Population and Target Sample

As of the year 2021, Metro Manila has a total population of 14 million including the target population of 6.4 million individuals aged 20 to 49 to which millennial generations belong (Age-Specific Population Projection, 2021). Using this target population, the proper sample size at a 5% margin of error is 400 respondents based on the formula by Yamane (1967). The study focuses on millennials of Metro Manila, Philippines, thus convenience and snowball sampling methodology were done to reduce the time of data collection.

3.2.2 Reliability Test

The distinguished indicator to measure and test the reliability of a research questionnaire is Cronbach's Alpha (Peter, 1979). A variable with $\alpha \geq 0.700$ at 5% margin of error is considered to have acceptable to excellent internal consistency (George & Mallery, 2019). The pilot testing resulted in an $\alpha = 0.917$ for environmental knowledge with three items, $\alpha = 0.930$ for environmental attitude with four items, $\alpha = 0.862$ for subjective norm with three items, $\alpha = 0.910$ for perceived value with three items, $\alpha = 0.979$ for perceived quality with three items, $\alpha = 0.955$ for social media with three items, and $\alpha = 0.726$ for purchase intention with four items. Thus, the questionnaire used in this research was reliable.

3.2.3 Data Analysis

The quantitative method was used to analyse the results of the research using Statistical Package for Social Science (SPSS) Statistics Grad Pack version 28.0. Cronbach's Alpha was used to test the reliability of the questionnaire to determine whether there were any confusing items, inconsistencies, or errors in the variables used for the questionnaire in which the results were provided in Table 1.

Descriptive data analysis was used to analyse demographic information and background of respondents while statistical analyses such as Simple Linear Regression and Multiple Linear Regression were used to determine the relationship between the dependent and independent variables. Simple Linear Regression was used to determine the relationship and significance of the independent variable's environmental knowledge towards the dependent variable's environmental attitude. On the other hand, Multiple Linear Regression was used to determine the relationship and significance of the independent variables such as environmental attitude, subjective norm, perceived value, perceived quality, and social media towards the dependent variable, purchase intention.

4. Results and Discussion

4.1 Demographic Profile Summary

After collecting the demographic information of the respondents, they were analyzed using descriptive statistics. These data described the individual respondent's general characteristics.

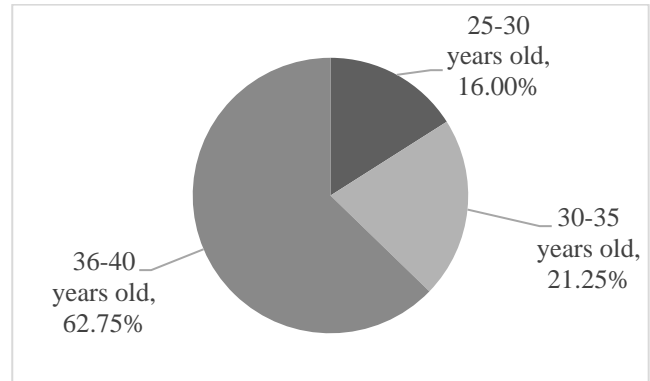


Figure 2: Sample Population Age

Figure 2 shows that majority of the 400 sample respondents were between 36-40 years old with 62.70%, while the 30-35 years old consisted of 21.30%, and 25-30 years old made up the remaining 16.00% of the respondents.

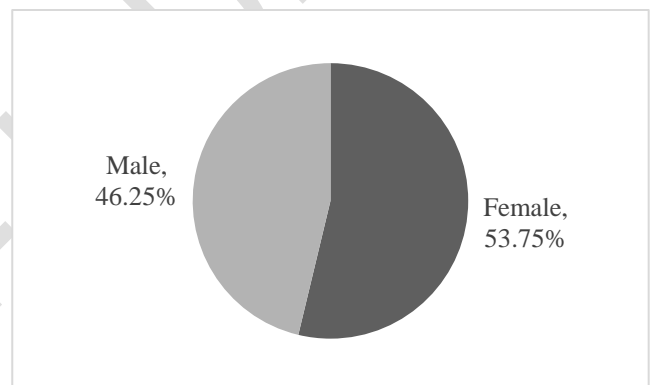


Figure 3: Sample Population Gender

Figure 3 shows that from 400 sample respondents, there were more female respondents at 53.75% while the male was at 46.25%.

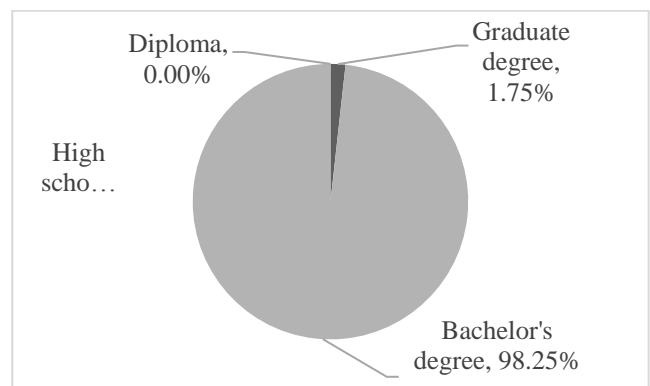


Figure 4: Sample Population Educational Background

Figure 4 shows that 98.25% of the 400 sample respondents had a bachelor's degree while only 1.75% had a graduate degree.

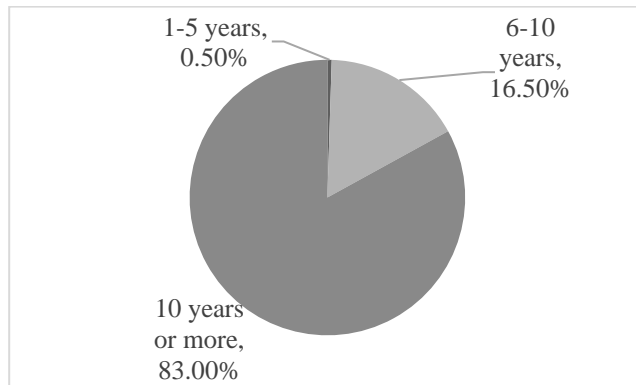


Figure 5: Sample Population Working Experience

Figure 5 shows that among the 400 sample respondents, there was 83.00% had more than 10 years of working experience while only 16.50% had been working for 6-10 years and only 0.50% had 1-5 years of working experience.

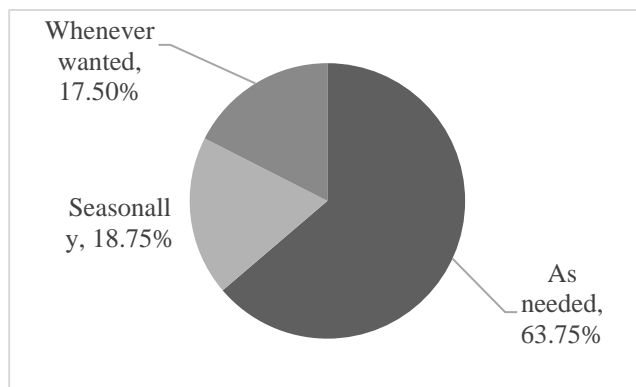


Figure 6: Sample Population Purchase Frequency

Figure 6 shows that among the 400 sample respondents, 63.75% purchased clothing as needed, 18.75% purchased seasonally, and 17.50% of the respondents purchased whenever they wanted.

4.2 Hypotheses Testing

After collecting 400 data, questions were abbreviated to represent the variables to analyse such as environmental knowledge (EK), environmental attitude (EA), subjective norm (SN), perceived value (PV), perceived quality (PQ), social media (SM), and purchase intention (PI). Simple Linear Regression is a statistical analysis used to determine the relationship and correlation between the independent and the dependent variable. It was also used to test the level of significance of the independent variable towards the dependent variable. And lastly, the same analysis method was used to determine the coefficient of determination R-square (R^2), the statistical measure that represents the proportion of the variance for the dependent variable that

can be explained by the independent variable. In this study, Simple Linear Regression was used to analyze the relationship between environmental knowledge and environmental attitude.

Table 1: Simple Linear Regression Model Summary

Predictor	R^2	Sig.	B	VIF
EK	0.976	0.000	0.988	1.000

Note: Dependent variable: EA, $p < 0.05$

Table 2 shows that environmental knowledge has an R^2 value of 0.976 (97.6%) at a 95% confidence level which implied that environmental attitude could be explained by environmental knowledge by 97.6%. It also shows a standardized coefficient of 0.988 (98.8%) which implied the increase in environmental attitude if environmental knowledge was increased by 1%.

Multiple Linear Regression is another statistical analysis approach used to determine the relationship, correlation, and level of significance of independent variables such as environmental attitude, subjective norm, perceived value, perceived quality, and social media towards the dependent variable purchase intention.

Table 2: Multiple Linear Regression Summary

Predictor	R^2	Sig.	B	VIF
EA, SN, PV, PQ, SM	0.816	<0.001	-	-
EA	-	<0.001	0.521	2.215
SN	-	<0.001	0.409	2.233
PV	-	<0.001	0.106	1.881
PQ	-	0.193	0.039	1.922
SM	-	0.804	-0.007	1.909

Note: Dependent variable: PI, $p < 0.05$

Table 2 shows that the predictors composed of environmental attitude, subjective norm, perceived value, perceived quality, and social media have an R^2 value of 0.816 (81.6%) at a 95% confidence level which implied that purchase intention could be explained by the said predictors by 81.6%. It also shows a standard coefficient of 0.521 (52.1%) for environmental attitude, 0.409 (40.9%) for social media, 0.106 (10.6%) for perceived value, 0.039 (3.9%) for perceived quality, and -0.007 (-0.7%) for social media which implied the increase in purchase intention if independent variables were increased by 1%. Table 3 also shows the highest Variance Inflation Factor (VIF) is 2.233 from the subjective norm and the lowest was from the perceived value of 1.881. The Variance Inflation Factor (VIF) test measures the value of multicollinearity among the factors and provides the level of collinearity. A VIF value of 5.0 or higher indicates a high correlation that is problematic, thus, less than or equal to 5.0 is better and ensures no overlapping variables (Akinwande et al., 2015). Therefore, multicollinearity did not exist in the variables.

The results of simple linear regression from Table 1 and the multiple linear regression from Table 2 were further

utilized to determine the significant variables influencing purchase intention towards environmentally sustainable clothing which are discussed in the following section.

Hypothesis 1

H1a₀: Environmental knowledge has no significant influence on environmental attitude.

H1a_a: Environmental knowledge has a significant influence on environmental attitude.

From Table 1, the level of significance of environmental knowledge equals 0.000 which is less than the p -value of 0.05 at a 95% confidence level. This means the null hypothesis is rejected, and it can be concluded that environmental knowledge has a significant influence on environmental attitude.

Hypothesis 2

H1₀: Environmental attitude has no significant influence on purchase intention.

H1_a: Environmental attitude has a significant influence on purchase intention.

From Table 2, the level of significance of environmental attitude is less than 0.001 which is less than the p -value of 0.05 at a 95% confidence level. This means the null hypothesis is rejected, and it can be concluded that environmental attitude has a significant influence on purchase intention.

Hypothesis 3

H2₀: Subjective norm has no significant influence on purchase intention

H2_a: Subjective norm has a significant influence on purchase intention

From Table 2, the level of significance of the subjective norm is less than 0.001 which is less than the p -value of 0.05 at a 95% confidence level. This means the null hypothesis is rejected, and it can be concluded that subjective norm has a significant influence on purchase intention.

Hypothesis 4

H3₀: Perceived value has no significant influence on purchase intention

H3_a: Perceived value has a significant influence on purchase intention

From Table 2, the level of significance of the perceived value is less than 0.001 which is less than the p -value of 0.05 at a 95% confidence level. This means the null hypothesis is rejected, and it can be concluded that perceived value has a significant influence on purchase intention.

Hypothesis 5

H4₀: Perceived quality has no significant influence on purchase intention

H4_a: Perceived quality has a significant influence on

purchase intention

From Table 2, the level of significance of perceived quality is 0.193 which is greater than the p -value of 0.05 at a 95% confidence level. This means the null hypothesis is accepted, and it can be concluded that perceived quality has no significant influence on purchase intention.

Hypothesis 6

H5₀: Social media has no significant influence on purchase intention

H5_a: Social media has a significant influence on purchase intention

From Table 2, the level of significance of social media is 0.804 which is greater than the p -value of 0.05 at a 95% confidence level. This means the null hypothesis is accepted, and it can be concluded that social media has no significant influence on purchase intention.

Three factors are significantly influencing millennials' purchase intention towards environmentally sustainable clothing based on the result of their p -values such as environmental attitude, subjective norm, and perceived value.

4.3 Discussions

Factors studied and analyzed were environmental knowledge, environmental attitude, subjective norm, perceived value, perceived quality, and social media. The questionnaire used to conduct the research was reliable according to the result of Cronbach's alpha from the pilot testing. Variance inflation factors resulted in less than 5.0 signifying no multi-collinearity existed among the variables. The R -value is equivalent to 81.6% implying that at a 95% confidence level, purchase intention could be explained by the predictors. However, hypothesis testing showed that only environmental attitude, subjective norms, and perceived value had a significant influence on purchase intention towards environmentally sustainable clothing. The highest factor influencing purchase intention was environmental attitude ($\beta = 0.521$) followed by subjective norm ($\beta = 0.409$) and perceived value ($\beta = 0.106$). These results were aligned with the previous research conducted by Morel (2012), Lionço et al. (2019), and Chen et al. (2012) concerning the influence of environmental attitude, subjective norms, and perceived value towards purchase intention respectively.

On the other hand, the research resulted in perceived quality ($\beta = 0.039$), and social media ($\beta = -0.007$) being unsupported which were not aligned with the results of previous research. This might be due to perceived quality being considered to be a part of or directly related to the perceived value (Zeithaml, 1988). Social media was also insignificant in this study. This may be due to millennials' environmental norms, values and behavior were not easily

altered by what they saw on social media as what has been observed in the food sector (Hynes & Wilson, 2016). It may also be due to the current situation. Lockdowns and restrictions in social activities lead to most individuals working from home, as indicated by the 63.75% of respondents who purchase clothing when needed. Also, the male respondents of the research which is equivalent to 46.35% may have made a difference in the influence of social media. This was found in the study by Chika et al. (2020) that while social media influences buying behavior, men were less influenced compared to women. In addition, millennial consumers may have a wide range of experiences and have seen the turn of the century when technological advancement provides more opportunities. But, they still took into consideration traditional values and norms enabling them to be mature enough to know and assess when to use an available tool for effective decision making.

This research was carried out to evaluate the validity of the integrated model that was employed, and the results produced an interesting combination of factors that both confirmed and contradicted at the same time some earlier research on a similar concept but different context. Factors confirmed to significantly influence purchase intention towards environmentally sustainable products were environmental attitude, subjective norm, and perceived value. While factors rejected and were found to be insignificant were perceived quality, and social media, the most prominent marketing tool in use today.

5. Conclusions

As a consequence of the research, the government and corporate organizations can gain valuable insight into how to increase consumers' intentions to purchase environmentally sustainable products in general. To improve environmental attitudes, the government's environmental department should strengthen existing and active non-governmental organizations to advocate environmental protection and conservation. This could be promoted through programs involving reducing, reusing, and recycling all aspects of a product from production, consumption, and disposal. Developing and incorporating environmental awareness programs into schools' and universities' curricula could help to form the minds of the next generation about the necessity of protecting the environment. This will both develop an environmental attitude at a young age, and likewise, encourage other members of the family to support environmental initiatives. By offering incentives, the government could encourage business organizations to collaborate and develop environmentally friendly products. This would serve to ease local environmental circumstances while also contributing to the country's collective response to global issues.

Green or "environment-friendly certification" from a credible certifying agency is recommended for business organizations including suppliers and manufacturers of environmentally sustainable clothing. It is also recommended that environmentally friendly packaging, labels, and tags be utilized to create awareness and guarantee consistency with the advocacy campaign. Business organizations should also be involved in and vocal about supporting environmental groups that share their values and vision for the future. Advertisements and business communications should encourage consumers to care for the environment for the sake of the next generation.

Cultural values and traditions should be incorporated in environmental marketing communications because culture identifies a nation that must be protected and preserved. Furthermore, a business organization may look into sharing a portion of the proceeds to be donated to charity to restore areas that were harmed by past blunders. Lastly, the concept of environmentally sustainable clothing and products should not be abused and exploited to raise prices. Prices should be maintained realistically so that consumers do not become hostile to the message of environmental protection support and consider it to be just another business maneuver to gain more profit than what is expected.

This study was limited to millennials in Metro Manila and did not include any other age groups. Therefore, the outcomes should not be interpreted as representing the behavior of a particular generation or consumers from a general place in a general context. Additionally, the purpose of this research aimed to investigate a variety of characteristics that influence purchase intention. Since the investigation into the link between each aspect is not conducted, additional studies in the same context but using a different analytical technique may be undertaken. This may have resulted in a different set of conclusions and may have provided unique insights into customer behavior in the area of environmentally sustainable clothing. Finally, due to the restrictions on physical interactions imposed by the COVID-19 situation, an online survey method was used for data collection. Respondents may perceive the survey as a market launch of a particular product or brand in which they are not interested in participating at the time of the survey, which may have a significant impact on how they respond to the questionnaire. An exploratory qualitative technique, on the other hand, might be useful in the future to further explain the backdrop and goal of the research and motivate participants to express themselves as well as open up about topics that have not been explored or examined in this study.

References

- Age-Specific Population Projection. (2021, January 7). *Republic of the Philippines Department of Health*
<https://doh.gov.ph/node/26570>
- Akinwande, M. O., Dikko, H. G., & Samson, A. (2015). Variance Inflation Factor: As a Condition for the Inclusion of Suppressor Variable(s) in Regression Analysis. *Open Journal of Statistics*, 5(7), 754-767. <https://doi.org/10.4236/ojs.2015.57075>
- Akkaya, M. (2021). Understanding the impacts of lifestyle segmentation & perceived value on brand purchase intention: An empirical study in different product categories. *European Research on Management and Business Economics*, 27(3), 100155. <https://doi.org/10.1016/j.iedeen.2021.100155>
- Al-Swidi, A., Huque, S. M. R., Hafeez, M. H., & Shariff, M. N. M. (2014). The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal*, 116(10), 1561-1580.
<https://doi.org/10.1108/BFJ-05-2013-0105>
- Asshidin, N. H. N., Abidin, N., & Borhan, H. B. (2016). Perceived Quality and Emotional Value that Influence Consumer's Purchase Intention towards American and Local Products. *Procedia Economics and Finance*, 35, 639-643.
[https://doi.org/10.1016/s2212-5671\(16\)00078-2](https://doi.org/10.1016/s2212-5671(16)00078-2)
- Azam, F., & Ashraf, S. (2017). Exploring the Relationship between Religiosity, Brand Trust and Green Purchase Intention as a Catalyst of Attitude. *International Journal of Multidisciplinary and Current Research*, 5(6), 1485-1493. <http://ijmcr.com>
- Berg, A., Magnus, K.-H., Kappelmark, S., Granskog, A., Lee, L., Sawers, C., & Polgampola, P. (2020). Fashion on Climate. *McKinsey.Com*.
<https://www.mckinsey.com/~media/mckinsey/industries/retail/our%20insights/fashion%20on%20climate/fashion-on-climate-full-report.pdf>
- Chang, H. J. J., & Jai, T. M. C. (2015). Is fast fashion sustainable? the effect of positioning strategies on consumers' attitudes and purchase intentions. *Social Responsibility Journal*, 11(4), 853-867. <https://doi.org/10.1108/SRJ-07-2014-0095>
- Chen, H. S., Chen, C. Y., Chen, H. K., & Hsieh, T. (2012). A Study of Relationships among Green Consumption Attitude, Perceived Risk, Perceived Value toward Hydrogen-Electric Motorcycle Purchase Intention. *AASRI Procedia*, 2, 163-168. <https://doi.org/10.1016/j.aasri.2012.09.029>
- Chen, L., Qie, K., Memon, H., & Yesuf, H. M. (2021). The empirical analysis of green innovation for fashion brands, perceived value and green purchase intention-mediating and moderating effects. *Sustainability (Switzerland)*, 13(8), 4238. <https://doi.org/10.3390/su13084238>
- Chika, E., Asogwa, S., Okeke, V., Verlunmun, C. G., & Gregory, E. (2020). Gender Disparities in the Influence of Social Media Advertisements on Buying Decision in Nigeria. *South African Journal for Communication Theory and Research*, 46(3), 87-105. <https://doi.org/10.1080/02500167.2020.1825100>
- Conca, J. (2015, December 3). *Making Climate Change Fashionable - The Garment Industry Takes on Global Warming*. *Forbes.Com*.
<https://www.forbes.com/sites/jamesconca/2015/12/03/making-climate-change-fashionable-the-garment-industry-takes-on-global-warming/?sh=235f5e7879e4>
- Dam, T. C. (2020). Influence of Brand Trust, Perceived Value on Brand Preference and Purchase Intention. *Journal of Asian Finance, Economics and Business*, 7(10), 939-947. <https://doi.org/10.13106/jafeb.2020.vol7.no10.939>
- Debora Indriani, I. A., Rahayu, M., & Hadiwidjojo, D. (2019). The Influence of Environmental Knowledge on Green Purchase Intention the Role of Attitude as Mediating Variable. *International Journal of Multicultural and Multireligious Understanding*, 6(2), 627. <https://doi.org/10.18415/ijmmu.v6i2.706>
- Diallo, M. F. (2012). Effects of store image and store brand price-image on store brand purchase intention: Application to an emerging market. *Journal of Retailing and Consumer Services*, 19(3), 360-367. <https://doi.org/10.1016/j.jretconser.2012.03.010>
- Diddi, S., & Niehm, L. S. (2017). Exploring the role of values and norms towards consumers' intentions to patronize retail apparel brands engaged in corporate social responsibility (CSR). *Fashion and Textiles*, 4(1). <https://doi.org/10.1186/s40691-017-0086-0>
- Dimock, M. (2019, January 17). *Defining generations: Where Millennials end and Generation Z begins*. *Pew Research Center*.
<https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/>
- do Valle, P. O., Rebelo, E., Reis, E., & Menezes, J. (2005). Combining behavioral theories to predict recycling involvement. *Environment and Behavior*, 37(3), 364-396. <https://doi.org/10.1177/0013916504272563>
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluations. *Journal of Marketing Research*, 28(3), 307-319. <https://doi.org/10.2307/3172866>
- Duong, C. D. (2021). Big Five personality traits and green consumption: bridging the attitude-intention-behavior gap. *Asia Pacific Journal of Marketing and Logistics*, 34(6), 1123-1144. <https://doi.org/10.1108/APJML-04-2021-0276>
- Durif, F., Boivin, C., & Julien, C. (2010). "In Search of a Green Product Definition". *Innovative Marketing*, 6(1), 25-33.
- Fishbein, M. (1963). An Investigation of the Relationships between Beliefs about an Object and the Attitude toward that Object. *Human Relations*, 16(3), 233-239. <https://doi.org/10.1177/001872676301600302>
- George, D., & Mallery, P. (2019). *IBM SPSS Statistics 26 Step by Step*. Routledge.
- Gifford, R., & Sussman, R. (2012). Environmental attitudes. In S. D. Clayton (Ed.), *The Oxford handbook of environmental and conservation psychology* (pp. 65-80). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199733026.013.0004>
- Go, J. U. (2021, January 29). *Hey, 2021 big spenders*. *INQUIRER.Net*. <https://business.inquirer.net/316601/hey-2021-big-spenders>
- GOAL 12: Sustainable consumption and production. (n.d.). *UNEP - UN Environment Programme*.
<https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-12>

- Hosseinpour, M., Nezakati, H., Md Sidin, S., & Foong Yee, W. (2015). Consumer's Intention of Purchase Sustainable Products: The Moderating Role of Attitude and Trust. *Journal of Marketing and Management*, 7(1), 40-49.
- Howe, N., & Strauss, W. (2000). *Millennials rising: the next great generation*. Vintage Books.
- Hynes, N., & Wilson, J. (2016). I do it, but don't tell anyone! Personal Values, Personal and Social Norms: can social media play a role in changing pro-environmental behaviours?. *Technological Forecasting and Social Change*, 111, 349-359. <https://doi.org/10.1016/j.techfore.2016.06.034>
- Jung, H. J., Choi, Y. J., & Oh, K. W. (2020). Influencing factors of Chinese consumers' purchase intention to sustainable apparel products: Exploring consumer "attitude-behavioral intention" gap. *Sustainability (Switzerland)*, 12(5), 1-14. <https://doi.org/10.3390/su12051770>
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Kautish, P., & Sharma, R. (2019). Value orientation, green attitude and green behavioral intentions: an empirical investigation among young consumers. *Young Consumers*, 20(4), 338-358. <https://doi.org/10.1108/YC-11-2018-0881>
- Khan, Z., Yang, Y., Shafi, M., & Yang, R. (2019). Role of social media marketing activities (SMMAs) in apparel brands customer response: A moderated mediation analysis. *Sustainability (Switzerland)*, 11(19). <https://doi.org/10.3390/su11195167>
- Ko, C.-H. (2019). Exploring the Relationship between Perceived Value and Intention to Purchase in Hotel Restaurants. *OALib*, 6(1), 1-12. <https://doi.org/10.4236/oalib.1105108>
- Kumar, B. (2012). *Theory of Planned Behavior Approach to Understand the Purchasing Behavior for Environmentally Sustainable Products*. Indian Institute of Management Ahmedabad, Research and Publication Department. <https://ideas.repec.org/p/iim/iimawp/11469.html>
- Lionço, A., Ribeiro, I., Johann, J. A., & Bertolini, G. R. F. (2019). Young Brazilians' purchase intention towards jeans made of Tencel® fibers. *Revista Brasileira de Marketing*, 18(3), 148-184. <https://doi.org/10.5585/remark.v18i3.16370>
- Lu, L., Böck, D., & Joseph, M. (2013). Green marketing: What the Millennials buy. *Journal of Business Strategy*, 34(6), 3-10. <https://doi.org/10.1108/JBS-05-2013-0036>
- Magnin, C., & Hedrich, S. (2019, July 25). *Refashioning clothing's environmental impact* | McKinsey & Company. McKinsey & Company. <https://www.mckinsey.com/business-functions/sustainability/our-insights/sustainability-blog/refashioning-clothings-environmental-impact>
- Milfont, T. L. (2007). *Psychology of Environmental Attitudes: a Cross-cultural Study of Their Content and Structure* [PhD Thesis, The University of Auckland]. Libraries and Learning Services. <http://hdl.handle.net/2292/1712>
- Mohd Suki, N. (2016). Green product purchase intention: impact of green brands, attitude, and knowledge. *British Food Journal*, 118(12), 2893-2910. <https://doi.org/10.1108/BFJ-06-2016-0295>
- Moore, M. (2012). Interactive media usage among millennial consumers. *Journal of Consumer Marketing*, 29(6), 436-444. <https://doi.org/10.1108/07363761211259241>
- Morel, M., Kwakye, F., & Hultén, P. (2012). *Green marketing: Consumers' Attitudes towards Eco-friendly Products and Purchase Intention in the Fast-Moving Consumer Goods (FMCG) sector* [Master's Thesis, UMEA University]. UMEA University Library
- Morgan, B. (2020, February 24). *11 Fashion Companies Leading The Way In Sustainability*. Forbes.Com. <https://www.forbes.com/sites/blakemorgan/2020/02/24/11-fashion-companies-leading-the-way-in-sustainability/?sh=2304ba286dba>
- Navitha Sulthana, A., & Vasantha, S. (2021). Mediating role of perceived quality between social media trust and purchase intention. *Materials Today: Proceedings*. <https://doi.org/10.1016/j.matpr.2020.11.573>
- NIELSEN. (2015, October). *The Sustainability New Insights on Consumer Expectations*. https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/Global20Sustainability20Report_October202015.pdf
- Peter, J. P. (1979). Reliability: A Review of Psychometric Basics and Recent Marketing Practices. *Journal of Marketing Research*, 16(1) 6-17. <https://doi.org/10.2307/3150868>
- Rauturier, S. (2022, March 17). *The 45 Most Ethical Clothing Brands from Australia and New Zealand*. Goodonyou.Eco. <https://goodonyou.eco/most-ethical-and-sustainable-clothing-brands-from-au-and-nz/>
- Rudyk, B., Douai, A., Auter, P. J., & Wedlock, B. (2013). The influence of social media in the early 21st Century: A meta-analysis of a decade of research (2001-2011). *Global Media Journal Arabian Edition*, 3(1-2), 90-111.
- Sa'ait, N., Kanyan, A., & Nazrin, M. F. (2016). The Effect of E-WOM on Customer Purchase Intention. *In International Academic Research Journal of Social Science*, 2(1), 73-80.
- Sachs, L., & Seymour, E. (2019, April 23). *21 Best Sustainable Clothing Brands to Help Lessen Your Environmental Impact*. Goodhousekeeping.Com. <https://www.goodhousekeeping.com/clothing/g27154605/sustainable-fashion-clothing/>
- Saeed, M. A., Farooq, A., Kersten, W., & Ben Abdelaziz, S. I. (2019). Sustainable product purchase: does information about product sustainability on social media affect purchase behavior?. *Asian Journal of Sustainability and Social Responsibility*, 4(1). <https://doi.org/10.1186/s41180-019-0029-3>
- Sidique, S. F., Lupi, F., & Joshi, S. v. (2010). The effects of behavior and attitudes on drop-off recycling activities. *Resources, Conservation and Recycling*, 54(3), 163-170. <https://doi.org/10.1016/j.resconrec.2009.07.012>
- Smith, K. T. (2012). Longitudinal study of digital marketing strategies targeting Millennials. *Journal of Consumer Marketing*, 29(2), 86-92. <https://doi.org/10.1108/07363761211206339>
- Sogari, G., Pucci, T., Aquilani, B., & Zanni, L. (2017). Millennial Generation and Environmental Sustainability: The Role of Social Media in the Consumer Purchasing Behavior for Wine. *Sustainability*, 9(10), 1911. <https://doi.org/10.3390/su9101911>

- Statista. (2022, January 27). *Household expenditure on clothing and footwear Philippines 2017-2021*.
<https://www.statista.com/statistics/709033/philippines-household-consumption-expenditure-clothing-and-footwear/>
- Tangsupwattana, W., & Liu, X. (2017). Symbolic consumption and Generation Y consumers: evidence from Thailand. *Asia Pacific Journal of Marketing and Logistics*, 29(5), 917-932.
<https://doi.org/10.1108/APJML-01-2017-0013>
- Tong, X., & Su, J. (2018). Exploring young consumers' trust and purchase intention of organic cotton apparel. *Journal of Consumer Marketing*, 35(5), 522-532.
<https://doi.org/10.1108/JCM-04-2017-2176>
- Vermeir, I., & Verbeke, W. (2008). Sustainable food consumption among young adults in Belgium: Theory of planned behaviour and the role of confidence and values. *Ecological Economics*, 64(3), 542-553.
<https://doi.org/10.1016/j.ecolecon.2007.03.007>
- Vieira, J. (2019, October 17). *What makes a product sustainable?*. LinkedIn.
<https://www.linkedin.com/pulse/what-makes-product-sustainable-joana-vieira>
- Wang, E. S. T., & Chou, C. F. (2021). Norms, consumer social responsibility and fair-trade product purchase intention. *International Journal of Retail and Distribution Management*, 49(1), 23-39. <https://doi.org/10.1108/IJRDM-09-2019-0305>
- Xu, L., Prybutok, V., & Blankson, C. (2019). An environmental awareness purchasing intention model. *Industrial Management and Data Systems*, 119(2), 367-381.
<https://doi.org/10.1108/IMDS-12-2017-0591>
- Yamane, T. (1967). *Statistics an Introductory Analysis* (2nd Ed.). Harper & Row.
- Yoo, B., Donthu, N., & Lee, S. (2000). An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28(2), 195-211.
<https://doi.org/10.1177/0092070300282002>
- ZALORA. (2021). *ZALORA Southeast Asia Trender Report 2021*.
<https://Zalora-Mktg.S3.Ap-Southeast-1.Amazonaws.Com/Zalora-Mktg/Trender/ZALORA-Southeast-Asia-Trender-Report-2021.Pdf>
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2-22.
- Zhao, L., Lee, S. H., & Copeland, L. R. (2019). Social media and Chinese consumers' environmentally sustainable apparel purchase intentions. *Asia Pacific Journal of Marketing and Logistics*, 31(4), 855-874. <https://doi.org/10.1108/APJML-08-2017-0183>
- Zimmerman, N. (2016, October 11). *Five of the world's biggest environmental problems*. DW.COM.
<https://www.dw.com/en/five-of-the-worlds-biggest-environmental-problems/a-35915705>