Vol 13, Issue 18, (2023) E-ISSN: 2222-6990

The Effect of Self-image, Peer Influence and Man-Nature Orientation toward Sustainable Shopping Behaviour among Undergraduate Students in Klang Valley

Adna, Nor Rasyidah & Jasmine Leby Lau

Department of Resource Management & Consumer Studies, Faculty of Human Ecology,
Universiti Putra Malaysia, Serdang, Selangor
Corresponding Author Email: jasminelau@upm.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v13-i18/19963 DOI:10.6007/IJARBSS/v13-i18/19963

Published Date: 15 December 2023

Abstract

The negative effects of linear economics are manifesting themselves in the form of deteriorating environmental quality. Following this, more consumers are beginning to shift to sustainable way of shopping. The objectives of this research were to investigate the relationship between each of self-image, peer influence, and man-nature orientation toward consumer's sustainable shopping behaviour and to determine the factor(s) that significantly predict the shopping behaviour. Data were collected from 210 undergraduate students from Universiti Putra Malaysia (UPM) and Universiti Teknologi MARA (UiTM) campuses located within Klang Valley. Correlation analyses shown that all three determinant factors were positively correlated with sustainable shopping behaviour. Multiple regression results revealed that peer influence has the most effect on sustainable shopping behaviour, followed by man-nature orientation and self-image. It is suggested that companies should focus on developing and positioning products that provide positive experience so that these young consumers could recommend it to peers through word of mouth. In addition, businesses also need to focus on eco-packaging and green attributes of the product that enhance self-image and sustainability orientation within the young consumers.

Keyword: Sustainability, Self-Image, Peer Influence, Man-Nature Orientation, Say-Do Gap

Introduction

Environmental sustainability is defined as a state of equilibrium, resilience, and interrelatedness that permits human civilization to fulfil its demands while not surpassing the ability of its supporting ecosystems to replenish the services required to meet those needs, nor reducing biological variety via human activities (Morelli, 2011). Through sustainable practices, the demand in the market is fulfilled while also conserving the resources,

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

particularly natural ones. As it is generally known, consumers play a big part in the economy, since they are the ones who drive firms' motivation to produce and sell the products. As a proof, 80 percent of company leaders and investment professionals agree and predict that companies' concern about environmental, social, and governance issues will return more shareholder value in the next several years (Haanaes & Brown, 2022). Consequently, many retail and consumerbusinesses are adopting a more comprehensive view of sustainability in order to appeal to customers and investors searching for ecologically friendly products (Haller et al., 2022).

In the quest to achieve sustainability, consumers need to have both environmental knowledge and the sense of responsibility when making purchases. Fortunately, recently more consumers are becoming more concerned about environmental issues, especially when deciding what to buy (Deloitte, 2021; TetraPak, 2019). In fact, slightly more than half of the respondents in a world-wide research believed that changing their own lifestyle is the primary way of solving environmental issues (Électricité de France, 2020). It was also found that 92% of consumers view companies in a positive image when the companies are in favour of social or environmental concerns. Meanwhile, almost 90% percent of the consumers admitted that they would be more likely to trust those companies (Cone Communications, 2017). More than half of consumers are also reportedly to be willing to transform their purchasing habits to reduce the environmental impact (Haller et al., 2022). Sustainable shopping or sustainable purchase is the act of acquiring things that are produced from recycled materials, are ecologically preferred, bio-based, or energy and water-efficient, utilising renewable energies and fuels, or providing alternatives to harmful or toxic substances (University of Michigan Finance Procurement Services, n.d.).

There are several determinants found to be influencing consumers' sustainable shopping behaviour such as social factors, level of awareness on sustainability, pricing, quality of product, social media influence, and gender (Meader, 2022; Saeed et al., 2019; Migheli, 2021). In this study, three factors influencing sustainable shopping behaviour were investigated, namely self-image, peer influence and man-nature orientation of consumers. Self-image is the idea a person has on his or herself (Onkvisit & Shaw, 1987) while peer influence occurs when an individual has an effect on, or is impacted by other people of similar age (Laursen & Veenstra, 2021). Man-nature orientation is the pleasant conduct or connection that exists between humans and the nature as a result of a love for the environment and a commitment to safeguard it (Chekima & Chekima, 2019). In this study's context, sustainable shopping behaviour includes buying product with fair trade label, environmentally friendly packaging, environmentally safe products (Joshi & Rahman, 2017; Afridi et al., 2021). Hence, this study aims to find out what is the relationship and the influence of self-image, peer influence, mannature orientation on sustainable shopping behaviour, particularly among undergraduate students in Klang Valley.

According to Muniandy et al (2014), university students make up a significant fraction of Malaysia's consumer segment. In terms of environmental concern, a study found that the awareness among college students was only slightly over 60 percent (Shri & Tiwari, 2021). It is also worth noting that adults aged 18 to 34 years are more likely to be enticed with marketing that uses a "green" cause (Chain Store Age, 2012). Furthermore, with the easy access to information available these days, people are expected to know and concern about

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

environmental issue (Kane, 2022; Cohen, 2021), especially now that the effects of linear economics are manifesting themselves (Gill, 2021; Cockburn, 2019). The existing linear economy is built on the creation of waste from natural resources via manufacturing. The products produced are then gotten rid of as garbage after consumption and, overtime, it destructs the environment (Garces-Ayerbe et al., 2019). Thus, practicing sustainable shopping behaviour may benefit the environment as well as the well-being of people (United Nation Environment Programme, n.d.).

In a study on consumer's engagement in the circular economy, it was found that "buying secondhand products" only had 28.4% of the respondents rating the behaviour positively (Cerulli-Harms et al., 2018). In the similar vein, Noh and Mosier (2014) found that among young consumers, high level of ideal or aspired self-image led to a more hedonic spending pattern, compared to those with low actual self-image, which lead to a more utilitarian spending. In the market, companies provide consumers with a channel to project socially assigned meanings of themselves (Gonzalez-Jimenez, 2017). This means that wearing, using, or generally consuming a certain brand accentuates the self-concept or image that one has and this image is projected to others around them. A study done among Malaysian university students on their intention in buying luxury items revealed more than half believed that owning luxury items reflect their wealth status and that using one could make them feel more welcomed in their field of study (Shuhaily et al., 2018). This further proves that self-image influences consumption or shopping behaviour among young consumers, particularly university students. Whether or not if the undergraduate students in Klang Valley regard themselves as environmentally conscious individuals, this study may find out if their shopping or consumption may or may not portray that self-image as environmentally conscious people.

Next, for peer influence, a study done found that although peer influence in consumption behaviour varies among cultures (individualistic versus collective), the normative peer influence affected more than informational peer influence (Opoku, 2012). Furthermore, Gulati (2017) proposed that when it comes to making purchases, peer influence acts as a determinator of which things to buy. Hence, it is possible that peer influence could either support or reject one's decision to shop sustainably.

In regard to the man-nature orientation, Afridi et al.(2021) suggested that a consumer who contemplates ecologically friendly items ought to have values that are positive toward human relationships with nature and are aware of the environmental consequences of their purchases. To relate with this present research, a study done in Malaysia had found that although the environmental knowledge among university students is high, the actions taken to help with the sustainability issue among them are just moderate (Jusoh et al., 2018). Thus, it is crucial to further study the influence of this factor on undergraduate students' sustainable shopping behaviour. This study was done to bring deeper understanding of consumers' sustainable shopping behaviour within the population of undergraduate students in Klang Valley, especially within the areas of the focused factors. Based on researcher's finding, previous studies done in Malaysia for sustainable shopping or purchase behaviour often focused more on the significance of knowledge or awareness, prices, and gender as the factors, especially for research done within the population of university students (Lasuin & Ng, 2014; Khuzaimah et al., 2020; Lai et al., 2020; Shiban & Isa, 2017). Thus, by conducting

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

this research, it may contribute more on the findings that concern self-image, peer influence, and man-nature orientation as the factors.

Literature Review

Sustainability Concept

Originally, the concept of sustainability started in the field of forestry as early as in the 18th century, with it being roughly defined as the yield being not more than the production of resources as to not affect the future generation's benefits (Wiersum, 1995). Although this term has different meanings for different fields, the most frequently used definition for it is "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, n.d.). Similarly, in the context of environmental matter, it can be defined as a concept in conservation that satisfies the needs of current and future generations in terms of resources and services without compromising the health of the ecosystem, to produce those resources and services (Morelli, 2011). In terms of the behaviours of economic players, Haller et al (2022) had also noted that many retail and consumer businesses have adopted a more comprehensive approach to sustainability in order to engage with consumers and investors who are becoming more environmentally conscious. The findings done by Ipsos, a market research company, showed that the environment is important to consumers, and sustainability is still one of the top concern. Worldwide, 70% of people believed that people are more concerned about environmental issues now than the prior year; and 72% think that if regular people do nothing to stop climate change, they would be harming coming generations (Strong et al., 2021).

Hanss and Böhm (2011) studied consumer's comprehension on sustainability and how it influences their purchase choices found that among the five aspects of sustainability (environmental, social, economic, temporal, and development), the consumers felt that the environmental, social, and developmental aspects were particularly more noteworthy in importance. They valued recyclable packaging, just producer compensation, reduced energy consumption, low carbon dioxide emissions, and ethical treatment of animals when deciding the traits for sustainable products. When using labels to suggest which products are sustainable, they trust more in the labels that are familiar to them.

Sustainable Shopping Behaviour

Sustainable shopping behaviour is the act of acquiring things that are produced from recycled materials, are ecologically preferred, bio-based, or energy and waterefficient, utilising renewable energies and fuels, or providing alternatives to harmful or toxic substances (University of Michigan Financial Procurement Services, n.d.). On a study on green lifestyle and satisfaction, it was found that life satisfaction has a favourable relationship with green behaviour and sustainable consumption (Binder & Blankenberg, 2017). This means that green behaviour and sustainable consumption actions, which include sustainable shopping, may be interrelated with one's satisfaction in life.

It was found that sustainable shopping behaviour was more prominent among female consumers, as opposed to male consumers (Witek & Kuzniar, 2020; Migheli, 2021). In European research regarding the say-do gap of how consumers actually behave in this matter, it was found that consumers are around on average, 14% less prone to actually practice sustainable shopping behaviour, as compared to the percentage of which they find

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

importance in practicing it (DS Smith Packaging UK, 2020). Next, in line with the recent COVID-19 pandemic, it was found that consumers who had pleasant outlooks on the shopping experience during the pandemic tended to become more sustainability-prone and to develop a more environmentally aware character (Gupta & Mukherjee, 2022). In return, this led those individuals into sustainable consumption behaviour (which includes sustainable shopping) and more online shopping; whereas the opposite happened to those who had negative outlooks on the shopping experience during the pandemic.

On the policies regarding sustainable shopping practices, Zen (2018) had studied the No Plastic Bag Campaign in Malaysia to see how far it transformed the way Malaysians shop. The study concluded that more wholistic approaches need to be established to transform the long-held shopping behaviour in Malaysia, into a more sustainable way of shopping. The sustainable shopping behaviour in which the data was taken for in this current research are; buying products in the minimum possible amount of packaging, buying products produced in a way that has a lower impact on the environment, buying products made using sustainable material, and buying products packaged using recycled materials.

Self-Image

Self-image can be defined as the idea a person has on his or herself (Sirgy, 1982). Some psychologists define this phrase as the mental picture, physical look, and the combination of the experiences, wants, and feeling of a person that him or herself has on self (Bailey, 2003). From the humanist view, self-image is described as the behaviour and personal adjustment of a person on his or herself (Coon, 1979). These definitions align with the definitions of selfconcept by Saikia (2020) who stated that self-concept is the way one believes about, judges, or sees oneself, as well as the attitude and sentiments that someone has about one's own self. Thus, within context and where the definitions fit, it is befitting to use self-concept interchangeably with self-image in this current research. Among adolescents, self-image in terms of environmental preservation was shown to be the third most important driver for green purchasing behaviour among the teenagers in Hong Kong (Lee, 2008). This was mainly because the image of an ecologically conscious individual might reflect a positive picture of oneself to others. In Malaysia, Suganthi (2013) found that among the tested factors, selfimage affected the intention to make green purchases the most. A significant precursor to the green intentions was also discovered to be self-image congruence by Nguyen and Nguyen (2020). Although a behaviour does not always come from a conforming intention, it is worth noting that intention is regarded as a close predictor for the behaviour itself and that it is an essential component of it (Bălău, 2018). Furthermore, Haller et al (2022) stated that consumers seek businesses and products that align with their personal beliefs, which helps reaffirming the consumers' self-image. Venhoeven (2016) has also found that when an environmentally sustainable is done voluntarily, one would feel good about his or herself and it positively produces a good self-image.

When making sustainable purchases, Teyssier et al (2014) found that along with social-image, a consumer also considered his or her self-image when buying a sustainable product (in the case of study; chocolate with fair-trade label). The consumers were found to be more inclined to buy the fair-trade chocolate when their decisions were made public; whereas in terms of the prices that they said were willing to pay (in public) for the non-fair-trade chocolate was lowered. This had shown that consumers were trying to showcase to others the image of

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

themselves that value fairtrade goods rather than the non-sustainable option. Another study, regarding consumer's sustainability in the fashion industry, it was found that the inconsistency between their attitude and actual behaviour towards acquiring sustainable clothing was majorly influenced by their self-image (Crommentuijn-Marsh et al., 2010). Deeper into the research, it was evident that the consumers tried to match the clothing styles to their own personalities and identities (self-image). Moreover, Muller (2021), in her study on sustainable decision-making, also inferred that when making complicated decisions, one's image of his or her ideal self is put above others. Based on the above discussion, the following hypothesis is developed.

H1: Self-image has a significant relationship with sustainable shopping behaviour.

Peer Influence

Peer influence is the influence that occurs when an individual has an effect on or is impacted by other people of similar age (Laursen & Veenstra, 2021). A study regarding peer influence on undergraduate students' academic performance showed that the influence form peer group did have a significant impact on the studied phenomena (Filade et al., 2019). According to Guzman (2007), peer influence may be both beneficial and bad; and that peer influence most likely effective if it comes from the similarities among peers. Gulati (2017) concluded in her research that peer influence has a positive relationship with purchases made. Furthermore, Mavale and Soni (2018) found that young adults are affected by the product option consumed by their friends. The degree of how much peer influence has on this group's purchase behaviour differ based on what type of product or service in question (Mavale & Soni, 2018; Makgosa & Mohube, 2007). However, for sustainable purchases, Larrson and Khan (2012) found that peer influence was not a significant for it while Sharaf and Isa (2017) found that peer influence does affect the intention to make sustainable purchases. Females are also believed to be more susceptible to be influenced by peers, as they have higher social conformity (Jessie & Seock, 2002). Khare (2019) also concluded on his study about green apparel buying that peer influence was one of the factors that affect one's perceived advantages in purchasing green apparel, which then lead to the actual purchase. However, Lee (2014) found peer influence to be only the second to last factor (out of six factors) to indicate the sustainable consumption behaviour among young consumers with education in Hong Kong. This finding goes hand-in-hand at which peer influence is not the strongest factor in sustainable behaviour, as found by (Tsarenko et al., 2013). The research was to examine the impact of external factors, which were retailer influence and peer influence, on ecologically friendly consumption behaviour. The study had found that not only did retailers significantly affected consumers' environmentally aware behaviour, but it was stronger than peer influence too. Rahnama and Leszczyc (2022) studied the effect of fixed and growth mindsets on sustainable foods purchasing, with peer influence and three motivational factors as the mediating variables. As the results, peer influence, along with the other independent variable had important roles in determining the behaviour or purchase decision. Thus, with the mixed findings for peer influence regarding sustainable consumption (including shopping), peer influence may or may not have effect on consumers' sustainable shopping behaviour

H2: Peer influence has a significant relationship with sustainable shopping behaviour.

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

Man-Nature Orientation

Man-nature orientation is the pleasant conduct or connection that exists between humans and the nature as a result of a love for the environment and a commitment to safeguard it (Chekima & Chekima, 2019). Wafa et al (2003) stated that man-nature orientation has to do with a person's perception of nature as an entity to be dealt with or an entity beyond his control. Man-nature orientation has been found to have an influence on one's sustainable purchase behaviour (Chan, 2001; Afridi et al., 2021). Sugandini et al (2018) had also concluded that man-nature orientation is one of the factors that is evident and sufficient to have affected one's environmental attitude, which leads to sustainable behaviour. Furthermore, mannature orientation and the intention to make green purchases are also strongly correlated based on a study by (Sreen et al., 2018). This correlates with the study by Diyah and Wijaya (2017) which concluded that man-nature orientation (along with healthy consumption lifestyle, subjective norm, attitude toward green product and purchase behavioural control) played its part in determining purchase intention of green products, which them would lead to a probable purchase. Liang and Chaipoopirutana (2014) also found man-nature orientation to be one of the factors that positively influenced the green purchase intention for electronic products. However, according to a study by Mehta and Sharma (2019), although the relationship between man-nature orientation and the visit intention to green hotel was positive, the correlation between the two was very low. In a study to compare and investigate the behaviour of consumers from two countries regarding green apparel, it was found that man-nature orientation was the only contributor that was not significant, among the consumers in China (Seung & Jin, 2017). As a moderating variable, man-nature orientation (and perceived behavioural control) enhanced the link between generativity and environmentally friendly consumer behaviour; thus, consumers who have better man-nature orientation are more inclined to participate in sustainable purchase behaviour and making it possible to focus marketing messages more effectively (Afridi et al., 2021). Consistent with the above literature, we posit that:

H03: Man-nature orientation has a significant relationship with sustainable shopping behaviour.

H04: Self-image, peer influence, and man-nature orientation significantly predict sustainable shopping behaviour.

Method

Sample and sampling method

The target population for this research is the undergraduate students at universities and colleges located in Klang Valley. This area was chosen because the tertiary institutions are mostly located in urban areas, in which a wider range of product options are available in the marketplaces because of its more developed state of economic activities. Thus, with the wider and better selections of products, researcher found it appropriate to study shopping behaviour at urban areas as the study would not be limited by the absence of sustainable products at the marketplaces.

In total, there are six (6) public universities in Klang Valley, namely Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM), Universiti Putra Malaysia (UPM), Universiti Teknologi MARA (UiTM), Universiti Islam Antarabangsa Malaysia (UIAM), and Universiti Pertahanan Nasional Malaysia (UPNM). Finally, UPM and UiTM campuses were randomly selected as

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

representatives for the undergraduate students in Klang Valley. The data was collected through online questionnaire. During the two weeks period, a total of 210 questionnaires were obtained.

Research Instrument

The questionnaire for this research consists of five sections where the items in the first four sections are scored using a 5-point Likert scale, ranging within strongly agree (5) – agree (4) – neutral (3) – disagree (2) – strongly disagree (1). A 5-point scale is used since it is balanced, with two scales ranging within agreement and another two scales ranging within disagreement; the neutral scale is to moderate the data from getting only extreme respond outcomes from the respondents.

Section A consists of nine questions on self-image factor and these items were adopted from (Lee, 2008, 2009; Sprott et al., 2009). Section B bears five items on peer influence, which were adopted from Larrson and Khan (2011) as well as (Lee, 2009). Man-nature orientation was measured in Section C with four items adopted from (Chan, 2001). The instrument was originally used with 7-point Likert scale but was revised to 5-point Likert scale in this research. Similar approach was done by Afridi et al (2021) revised the scale to 5-point Likert scale for their study. The Cronbach's alpha for each factor is 0.524, 0.727, 0.602 and 0.714 respectively. As the alpha value for self-image was below the acceptable value of 0.6 (Pallant, 2001), the ninth item "My brands are important indication of who I am as a person who cares about the environment" has been deleted to raise the value to 0.609.

Section D measures consumer's sustainable shopping behaviour with six items adopted from (Joshi and Rahman, 2017; Afridi et al., 2017). The last section gathers the demographic information of the respondents including age, gender, university of current study and respondent's year of study.

Results and Discussion

Respondents' Sociodemographic Background

Table 1 below presented the demographic background of 210 respondents that participated in this study. Most respondents aged between 19-22 years old (78.6%), female (66.7%), studying at upm (51.4%) and currently in their third year of study (59%).

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

Table 1
Respondents' Demographic Data

Variables	Modalities	Number of respondents	Percentage
Age (years)	19-22	165	78.6
	23-26	45	21.4
Gender	Male	70	33.3
	Female	140	66.7
University	UPM	108	51.4
	UiTM	102	48.6
Current year of study	Year 1	0	0
	Year 2	20	9.5
	Year 3	124	59.0
	Year 4	62	29.5
	Year 5	4	1.9

Hypothesis Testing

Hypothesis testing for this study was carried out using Pearson's correlation and multiple regression analysis. The size of a correlation coefficient is interpreted based on Guildford's rule of thumb (1973). Table 2 below illustrates the correlation coefficient for all variables.

Table 2
Pearson's Correlations

No.	Variables	М	SD	1	2	3
1	Self-image	32.48	3.56	-		
2	Peer influence	16.32	4.20	0.41**	-	
3	Man-nature orientation	18.23	2.26	-0.05	0.30**	-
4	Sustainable shopping behaviour	22.43	3.85	0.43**	0.84**	0.15*

Note: *p<.05; **p<.01

From the above table, it is found that self-image had a positive moderate correlation with sustainable shopping behaviour (r = 0.437, p < 0.001). This finding corresponded to previous research by Lee (2008); Suganthi (2013); Choshaly (2017) that self-image did have effect on young people's intention to make green purchases. This is because it is proven that when ecologically sustainable action was chosen willingly as opposed to when it was forced by external circumstances, it more positively produced a good self-image (Venhoeven, 2016). A significant precursor to the green intentions was also discovered to be self-image congruence (Nguyen & Nguyen, 2020). It is worth noting that intention is regarded as a close predictor for the behaviour itself and that it is an essential component of it (Bălău, 2018). Thus, the finding regarding self-image from this current research did conform and reflect the findings from other previous research that involve self-image as a significant contributing factor toward sustainable actions, including sustainable shopping behaviour.

Next, peer influence appeared to have a significant positive strong correlation with sustainable shopping behaviour (r = 0.84, p < 0.001), which is the highest among three factors

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

tested. This is in line with the outcome reported by Gulati (2017); Mavale & Soni (2018) that young adults were affected by the product option consumed by their friends. Similarly, Sharaf & Isa (2017); Suki & Suki (2019) also discovered that peer influence did impact people's green and sustainable purchasing decision. Social and peer influence can influence behavior in making purchasing decisions among consumers, especially teenagers through trust, interaction, habits, recommendations, and information provided (Gunawan et al., 2023).

The third factor, man-nature orientation had a significant positive weak correlation with sustainable shopping behaviour. This corroborates Diyah & Wijaya (2017); Sreen et al (2018) and Sugandini et al (2018) findings where man-nature orientation is one of the factors that is evident in affecting green purchase intention and sustainable behaviours. Consumers who have stronger man-nature orientation are more inclined to participate in sustainable purchase behaviour due to their concern about the environment and the commitment to safeguard it from destruction. Therefore, hypotheses 1 to 3 are all supported.

For hypothesis 4, multiple regression was used to determine the factors that significantly predict sustainable shopping behaviour. Table 3 shows the regression results for this study. The R square of this study was 0.713, which means all three determinant variables explain 71.3% of the variability of intention to adopt smart home technology. The value F in this study was 173.663 (p < 0.01) indicating the independent variables in this study significantly predict the dependent variable. Among the three determinant variables, peer influence had the highest value of standardized coefficients beta (β) of 0.826 (p < 0.001). This means that for every 1 unit increase in peer influence, sustainable shopping behaviour among respondents will increase by 0.826 units. Thus, peer influence posed the strongest influence toward sustainable shopping behaviour. Man-nature orientation is the next significant predictor with a β value of 0.101 (p < 0.01) and followed closely by self-image with a β value of 0.097 (p < 0.05.) From the analysis, it can be concluded that hypothesis 4 is supported.

Table 3
Multiple Linear Regression Analysis

Variable	В	SE	β	р
Constant	3.550	1.835		
Self-image	0.105	0.044	0.097	0.018**
Peer influence	0.755	0.039	0.826	0.000***
Man-nature	0.171	0.066	0.101	0.011*
orientation				

Note: Dependent variable = Sustainable shopping behaviour;

Adjusted R Square = 0.713, F = 173.663; *p < 0.01, **p < 0.05, *** p < 0.001

Implications

The aim of this study is to understand the effect of self-image, peer influence, and man-nature orientation on sustainable shopping behaviour among undergraduate students in Klang Valley. There are several implications that could be drawn from the present study. Based on Peason's correlations, it is found that self-image, peer influence dan man-nature orientation were positively related with sustainable shopping behaviour. In addition, analysis from multiple linear regression showed that peer influence was the most significant factor that

Vol. 13, No. 18, Human Ecology. 2023, E-ISSN: 2222-6990 © 2023

influence sustainable shopping behaviour, following by man-nature orientation and self-image.

Peers play an important role in the social and emotional development of young adults as it is a tool for maintaining and increasing resemblances between friends. Thus, institutions and organisations that organize environmental campaigns or programmes for undergraduate students should set aims beyond implementing the awareness. Instead, the organisers should try to invite these population to try ecofriendly or sustainable products with peers or friends. This is suggested because, from the findings of this current study, the population did share the experiences of using such products with their peers or friends, but they often did not recommend it to their peers nor did they go shopping for such products with them. Based on this, an example of an initiative that could be done is organizing a campaign where brands that sell sustainable products come together and market their brands and/or products to these undergraduate students. Such campaign can be done in the forms of bazaars, or even becoming sponsors for university's programmes, during which souvenirs (products or product testing can be done by students themselves. By experiencing the use of sustainable products, younger consumers may be more inclined to recommend it to others through word of mouth.

In addition, this paper also suggested that there is a significant relationship between selfimage and sustainable shopping behaviour among university students. This suggested that these young consumers are awarded by a sense of feeling good and positive about themselves for the being an ecologically conscious individual. Venhoeven (2016) stated that when an environmentally sustainable is done voluntarily, one would feel good about his or herself and it positively produces a good self-image. In line with this, consumers tend to seek businesses and products that align with their personal beliefs, which helps reaffirming the consumers' self-image (Haller et al., 2022). Thus, it is very important for green marketers to associate appropriate image with the green products. For instance, marketers could focus on design features such eco-packaging and green attributes of the product. In addition, product positioning could also be carried out to enhance user's perception of the brand. Murtagh et al (2012) suggested green campaign should stress on a sense of feeling 'competent' and 'in control of their lives and context' so to encourage consumers to embrace sustainable consumption. Present study also found that although young consumers may not consider purchasing products that have environmental repercussions. Younger generations tend to have higher eco-conscious that values sustainability in their purchasing decisions and expects brands to take the lead on environmental issues. Hence, organisations should avoid ingredients that are harmful to the environment if they intend to gain a market share among the younger consumers.

References

- Afridi, S. A., Khan, W., Haider, M., Shahjehan, A., & Afsar, B. (2021). Generativity and green purchasing behavior: Moderating role of man-nature orientation and perceived behavioral control. *SAGE Open, 11*(4), 1-14.
- Bailey, J. A. (2003). Self-image, self-concept, and self-identity revisited. *Journal of The National Medical Association*, *95*(5), 383-386.
- Balau, M. (2018). Exploring the link between intention and behavior in consumer research. *In The International Conference "European Integration Realities andPerspectives"* (pp. 134-141).

- Berthiaume, D. (2023). *How consumers* Chekima, B., Chekima, K., & Chekima, K. (2019). Understanding factors underlying actual consumption of organic food: The moderating effect of future orientation. *Food quality and preference*, 74, 49-58.
- Binder, M., & Blankenberg, A. (2017). Green lifestyles and subjective well-being: More about self-image than actual behavior? *Journal of Economic Behavior & Organization, 137*, 304-323.
- Cerulli-Harms, A., Münsch, M., Thorun, C., Michaelsen, F., & Hausemer, P. (2020). Loot boxes in online games and their effect on consumers, in particular young consumers. *Publication for the Committee on the Internal Market and Consumer Protection (IMCO), Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 202*.
- Chan, R. Y. (2001). Determinants of Chinese consumers' green purchase behavior. *Psychology and Marketing, 18*(4), 389-413.
- Chekima, B., & Chekima, K. (2019). The impact of human values and knowledge on green products purchase intention. In *Exploring the Dynamics of Consumerism in Developing Nations* (pp. 266-283). IGI Global.
- Cockburn, H. (2019). *Plastic waste swamping UK rivers, with one waterwaymore polluted than Great Pacific Garbage Patch, report says.* TheIndependent. Retrieved from
- https://www.independent.co.uk/climate-change/news/plastic-pollution-river-uk-great-pacific-garbage-patch-greenpeace-study- a8965326.html
- Cohen, L. (2021). More than 63,000 pounds of trash removed from one of the biggest accumulations of ocean plastic in the world. CBS News. Retrieved April 18, 2022, from https://www.cbsnews.com/news/trash-removed-from-great-pacific-garbage-patch/
- Cone Communications (2017). 2017 Cone Communications CSRStudy. Retrieved from https://conecomm.com/2017-csr-study/
- Coon, D. (1979). Essentials of psychology: Exploration and application. WestPublishing.
- Crommentuijn-Marsh, P., Eckert, C., & Potter, S. (2010). Consumer behavior towards sustainability within fashion. In *International Conference on Kansei Engineering and Emotion Research* (pp. 1-10).
- Deloitte United Kingdom. (2021). Sustainability & consumer behaviour 2021. Retrieved from https://www2.deloitte.com/uk/en/pages/consumerbusiness/articles/sustainable-consumer.html
- Diyah, I. A., & Wijaya, T. (2017). Determinant factors of purchase intention on green product. Jurnal Aplikasi Manajemen, 15(1), 54-62.
- DS Smith Packaging UK. (n.d.). Sustainable packaging: Has the COVID-19 changedeverything?

 Retrieved from https://blog.dssmith.com/sustainable-packaging-covid19
- Électricité de France. (2020). Climate change: Citizens are worried buttorn between a need to act and a rejection of constraints. Ipsos. Retrieved from
- https://www.ipsos.com/en-ch/climate-change-citizens-are-worried-torn-between-need-act-and-rejection-constraints
- Filade, B. A., Bello, A. A., Uwaoma, C. O., Anwanane, B. B., & Nwangburuka, K. (2019). Peer group influence on academic performance of undergraduate students in Babcock University, Ogun state. *African Educational Research Journal*, 7(2), 81-87.
- Garcés-Ayerbe, C., Rivera-Torres, P., Suárez-Perales, I., & Leyva-de la Hiz, D. I. (2019). Is it possible to change from a linear to a circular economy? An overview of opportunities and barriers for European small and medium-sized enterprise companies. *International journal of environmental research and public health*, 16(5), 851.

- Gill, V. (2021). *Pacific Ocean garbage patch is immense plastic habitat*. BBC News. https://www.bbc.com/news/science-environment-59521211
- Gonzalez-Jimenez, H. (2017). The self-concept life cycle and brand perceptions: An interdisciplinary perspective. *AMS Review*, 7, 67-84.
- Guildford, J. P. (1973). Fundamental Statistics in Psychology and Education (5th ed.). New York: McGraw-Hill.
- Gulati, S. (2017). Impact of peer pressure on buying behaviour. *International Journal of Research-Granthaalayah*, *5*(6), 280-291.
- Gunawan, C. M., Rahmania, L., & Kenang, I. H. (2023). The influence of social influence and peer influence eon intention to purchase in e-commerce. *Review of Management and Entrepreneurship*, 7(1), 61-84.
- Gupta, A. S., & Mukherjee, J. (2022). Long-term changes in consumers' shopping behavior post-pandemic: An exploratory study. *International Journal of Retail & Distribution Management*, 50(12), 1518-1534.
- Guzman, M. R. T. (2007). Friendships, Peer influence, and peer pressure during the teen years. NebGuide. University of Nebraska.
- Haanaes, K., & Brown, K. (2022). How the Pandemic Has Demonstrated the Importance of System Leadership in Executive Education. *Executive Education after the Pandemic: A Vision for the Future*, 237-244.
- Haller, K., Wallace, M., Cheung, J., & Gupta, S. (2021). Consumers want it all: hybrid shopping, sustainability, and purpose-driven brands. *IBM Institute for Business Value*, 1-24
- Hanss, D., & Böhm, G. (2011). Sustainability seen from the perspective of consumers. *International Journal of Consumer Studies*, *36*(6), 678-687
- Jessie, H. C., & Seock, Y. (2002). Adolescents' clothing purchase motivations, information sources, and store selection criteria: A comparison of male/female and impulse/nonimpulse shoppers. *Family and Consumer Sciences Research Journal*, 31(1), 50-77.
- Joshi, Y., & Rahman, Z. (2017). Investigating the determinants of consumers' sustainable purchase behaviour. *Sustainable Production and Consumption*, 10(1), 110-120.
- Jusoh, S., Kamarudin, M. K. A., Wahab, N. A., Saad, M. H. M., Rohizat, N. H., & Mat, N. H. N. (2018). Environmental awareness level among university students in Malaysia: a review. *International Journal of Engineering & Technology*, 7(4.34), 28-32.
- Kane, J. (2022, March 28). 'We are unstoppable': Youth climate strikes return in fullforce. Grist. Retrieved from https://grist.org/article/global- climate-strike-youth/
- Khare, A. (2019). Green apparel buying: Role of past behavior, knowledge and peer influence in the assessment of green apparel perceived benefits. *Journal of International Consumer Marketing*, 1-17.
- Khuzaimah, A. B., Taslim, F. A., Zabri, I. F., Jia, K. J., Ganamoorthi, K. R., Ling, L. E., ... & Maruthai, E. (2020). Consumer Behaviour in Green Purchasing: A Case Study in Petaling Jaya, Malaysia. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(5), 44-59.
- Lai, Z. H., Ong, J. Y., Tan, S. L., & Tio, Y. X. (2020). Factors affecting willingness to pay for green products among undergraduate students in UTAR (Doctoral dissertation, UTAR).
- Larsson, S., & Khan, M. A. (2011). A Study of factors that influence green purchase. *Master), Umeå University Umeå University, SE-901, 87*.

- Laursen, B., & Veenstra, R. (2021). Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research. *Journal of Research on Adolescence*, 31(4), 889-907.
- Lasuin, C. A., & Ng, Y. C. (2014). Factors influencing green purchase intention among university students. *Malaysian Journal of Business and Economics (MJBE)*, 1(2).
- Lee, K. (2008). Opportunities for green marketing: Young consumers. *Marketing Intelligence & Planning*, *26*(6), 573-586.
- Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' greenpurchasing behavior. *Journal of Consumer Marketing*, 26(2), 87-96.
- Lee, K. (2010). The green purchase behavior of Hong Kong young consumers: The role of peer influence, local environmental involvement, and concrete environmental knowledge. Journal of International Consumer Marketing, 23(1), 21-44.
- Lee, K. (2014). Predictors of sustainable consumption among young educated consumers in Hong Kong. *Journal of International Consumer Marketing*, *26*(3), 217-238.
- Liang, Q., & Chaipoopirutana, S. (2014). A study of factors affecting customer's attitude toward intention to purchase green electronic products at an IT Mall inBeijing, China. *International Conference on Business, Law and CorporateSocial Responsibility*, 45-49.
- Meader, D. N. (2022). Sustainable product purchase behavior [Bachelor's thesis]. Retrieved from
- https://scholarworks.uvm.edu/hcoltheses/485
- Makgosa, R., & Mohube, K. (2007). Peer influence on young adults' products purchase decisions. *African Journal of Business Management*, 1(3), 64-71.
- Mavale, S., & Soni, P. (2018). The influence of peers in consumer decision making process of college going young adults from Pune Region. *International Journal of Management, Technology and Engineering*, 8(6), 749-754.
- Mehta, A., & Sharma, S. (2019). A study of consumer behavior and visit intention towards green hotels. *International Journal of Hospitality & Tourism Systems*, 12(2), 27-35.
- Migheli, M. (2021). Green purchasing: the effect of parenthood and gender. *Environment, Development and Sustainability*, 23(7), 10576-10600.
- Morelli, J. (2011). Environmental sustainability: A definition for environmental professionals. Journal of Environmental Sustainability, 1(1), 2.
- Müller, P. (2022). Exploring the role of self-image congruence within the sustainable decision-making process and the changes in the attitude behaviour gap (Doctoral dissertation).
- Muniady, R., Al-Mamun, A., Permarupan, P. Y., & Zainol, N. R. B. (2014). Factors influencing consumer behavior: A study among university students in Malaysia. *Asian Social Science*, 10(9), 18.
- Murtagh, N., Gatersleben, B., & Uzzell, D. (2012). Self-identity threat and resistance to change: Evidence from regular travel behaviour. *Journal of Environmental Psychology*, 32(4), 318-326.
- Nguyen, Y. T., & Nguyen, H. V. (2020). An alternative view of the millennial green product purchase: The roles of online product review and self-imagecongruence. *Asia Pacific Journal of Marketing and Logistics*, 33(1), 231-249.
- Noh, M., & Mosier, J. (2014). Effects of young consumers' self-concept on hedonic/utilitarian attitudes towards what is 'cool'. *International Journal of Fashion Design, Technology and Education*, 7(3), 163-169.
- Onkvisit, S., & Shaw, J. (1987). Self-concept and image congruence: some research and managerial implications. *Journal of Consumer Marketing*, *4*(1), 13-23.

- Opoku, R. (2012). Young Saudi adults and peer group purchase influence: A preliminary investigation. Young Consumers, 13 (2), 176–187.
- Pallant, J. (2001), SPSS survival manual a step by step guide to data analysis using SPSS for windows (version 10), Buckingham Open University Press.
- Rahnama, H., & Popkowski Leszczyc, P. T. (2022). The effect of fixed and growth mindsets on buying sustainable foods. *British Food Journal*, *124*(12), 4533-4550.
- 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, 1-18.
- Saikia, R. (2020). A study on self-concept. *International Education & Research Journal*, 6(6), 1-2.
- Seung, B. K., & Jin, B. (2017). Predictors of purchase intention toward green apparelproducts: A cross-cultural investigation in the U.S. and China. *Journal of Fashion Marketing and Management*, 21(1), 70-87.
- Sharaf, M. A., & Isa, F. M. (2017). Factors influencing students' intention to purchase green products: A case study in Universiti Utara Malaysia. *Pertanika Journal of Social Science and Humanities*, 25(2), 240-245.
- Shri, G., & Tiwari, R. R. (2021). Environmental literacy among college students. *Indian Journal of Occupational and Environmental Medicine*, *25*(3), 128-132.
- Strong, C., Ansons, T., & Long, J. (2021). *Addressing the sustainability say-do-gap: Leading the way to activate consumer behaviour change*. Ipsos. Retrieved from
- https://www.ipsos.com/sites/default/files/ct/publication/documents/2021-07/lpsos-Views Addressing-the-Sustainability-Say-Do-Gap.pdf
- Shuhaily, O., Afida, M. A., & Cham, X. Y. (2018). Predictors of purchasing intention of luxury goods among university students in Selangor. *Malaysian Journal of Consumer and Family Economics*, 20(1), 57-80.
- Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of consumer research*, *9*(3), 287-300.
- Sprott, D., Czellar, S., & Spangenberg, E. (2009). The importance of a general measure of brand engagement on market behavior: Development and validation a scale. *Journal of Marketing Research*, 46(1), 92-104.
- Sreen, N., Purbey, S., & Sadarangani, P. (2018). Impact of culture, behavior and gender on green purchase intention. *Journal of Retailing and Consumer Services*, 41, 177-189.
- Suganthi, R. (2013). The influence of environmental attitude, environmental knowledge, social influence and self-image on green purchasing intention [Master's thesis]. Retrieved from http://etd.uum.edu.my/5044/2/s811115_abstract.pdf
- Strong, C., Ansons, T., & Long, J. (2021). *Addressing the sustainability say-do-gap: Leading the way to activate consumer behaviour change*. Ipsos. Retrieved from
- https://www.ipsos.com/sites/default/files/ct/publication/documents/2021-07/lpsos-Views Addressing-the-Sustainability-Say-Do-Gap.pdf
- Sugandini, D., Rahatmawati, I., & Arundati, R. (2018). Environmental attitude on theadoption decision mangrove conservation: An empirical study on communities in special region of Yogyakarta, Indonesia. *Review of Integrative Business and Economics Research*, 7(1), 266-275.
- Teyssier, S., Etile, F., & Combris, P. (2014). Social- and self-image concerns in fair-trade consumption. *European Review of Agricultural Economics*, 42(4), 579-606.

- TetraPak. (2019). Consumer Environmental Trends Report 2019. Retrieved from https://www.tetrapak.com/content/dam/tetrapak/publicweb/gb/en/sustainability/documents/Tetra-Pak-Consumer-Environmental-Trends.pdf
- Tsarenko, Y., Ferraro, C., Sands, S., & McLeod, C. (2013). Environmentally conscious consumption: The role of retailers and peers as external influences. *Journal of Retailing and Consumer Services*, 20(3), 302-310.
- United Nations Environment Programme. (n.d.). Sustainable consumption and production policies. Retrieved from https://www.unep.org/explore-topics/resource-efficiency/what-we-do/sustainable-consumption-and-production-policies
- University of Michigan. (n.d.). Sustainable purchasing. *University of Michigan Finance Procurement Services*. Retrieved from https://procurement.umich.edu/diversity-sustainability/sustainable-purchasing
- Venhoeven, L. A., Bolderdijk, J. W., & Steg, L. (2016). Why acting environmentally-friendly feels good: Exploring the role of self-image. *Frontiers in Psychology*, *7*, 1846.
- Wafa, S. A., Govindan, J. T., Jantan, M., & Sulong, R. S. (2003). An analysis of the value orientations of Malaysians. 666-677.
- Wiersum, K. F. (1995). 200 years of sustainability in forestry: lessons from history. *Environmental management*, *19*, 321-329.
- Witek, L., & Kuzniar, W. (2020). Green purchase behavior: The effectiveness of Sociodemographic variables for explaining green purchases in emerging market. *Sustainability*, *13*(1), 209.
- Zen, I. S. (2018). Nudge to promote sustainable shopping lifestyle. *The Economy, Sustainable Development, and Energy International Conference*, *2*(22), 1394.