SUSTAINABLE CONSUMPTION PRACTICES AND WELL BEING AMONG HOUSEHOLDS IN PENINSULAR MALAYSIA

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Introduction

In the 21st century, environmental issues focus on things that can be threats to the harmony and well-being of human lives. This is due to the increased consumption of goods and services by households. The excessive use of consumption can have an adverse effect on human lives. The average monthly household expenditure in Malaysia increased by 12.1 percent from RM1,953 in 2004/2005 to RM2,190 in the year 2009/2010 (Department of Statistics Malaysia, 2009/2010). Water, electricity, gas and other fuels are among the highest contributors of total monthly household expenditure at 15.1 percent, which is RM496 in 2009/2010 as compared to RM430 in 2004/2005. In addition, the average household income in Malaysia has also increased by 9.2 percent with RM4,025 in 2009 as compared to RM3,686 in 2007. This shows that most of the consumer's income are spent on goods and services that may have adverse effects on the environment as well as to their well-being.

In Malaysia, the management and care of the environment is still not sustainable enough though Malaysia is a rapidly developing country (Fatimah, 2007). According to statistics from the Ministry of Housing and Local Government (2007), more than 1.5 kg to 15,000 tonnes of waste is produced each day in Malaysia. The average resident in this country produces 0.8 kilograms of solid waste per day in 2008 compared to 1.7 kg of solid waste per day in 2006 (Melati, 2008), indicating a slight decline but still considered too much solid waste discarded. At present, there are about 230 landfills in Malaysia, which is between 20 to 150 acres each, depending on the location and volume of waste disposed. With the growing amount of

waste, there will be an increase in disposal sites that would invade human living space. The Tenth Malaysia Plan (RMK-10, 2010), states that Malaysians recycling rate is at 10.5 percent per annum. The Ministry of Housing and Local Government (2006) reported that the increase in recycling rate is estimated at one per cent per annum (Azrina, 2003), which gives a 22 percent increase among the Malaysian population in 2020 (RMK-10, 2010).

Sustainable consumption is a concept that emphasises on conservation and preservation of natural resources in all our activities. It is not limited to any mere activity, but is broad and is closely related to human lives on earth. Moreover, it is an activity using goods and services to meet basic needs toward a better quality of life while minimising the use of natural resources, toxic materials and production of waste and pollutants, so as not to sacrifice the needs of future generations (Fuchs & Lorek, 2005; Ministry of Environment Norway, 1994). In 1992, the Earth Summit (Rio Earth Summit UNCED) has approved the Agenda 21 introduced by world leaders resulted from the dissension on the concept of sustainable consumption. Agenda 21 focuses on consumers' habits or practices which also outlines that the decline in the quality of life and environment is caused by consumers and industry practices that are not sustainable and thus emphasise the importance of sustainable consumption in achieving sustainable development. This clearly shows the role to be played by the consumers in ensuring improved human well-being through sustainable consumption. The sustainability can be realized through the practice of simple living and consumption (Syuhaily, 2011).

Hence, this study is carried out to identify sustainable consumption practices as well as to determine the relationship between the practices of sustainable consumption and well-being of consumers.

Literature Review

Sustainable consumption practices actually involve businesses, communities and households that contribute to the quality of the environment through the production and efficient use of resources, reduced waste and optimised goods and services. The use of goods and services certainly has an impact on the environment before and after the purchase or consumption (Syuhaily, 2011). Various efforts are made at the local level to ensure sustainable consumption practices are successfully implemented. A study carried out by Zuroni and Ten (2006) discovered that the extent of local public awareness on the importance of sustainable consumption is low, while the knowledge and attitude of Malaysian consumers, whether in urban or rural areas are high. However, sustainable consumption practices among respondents in this study are still low with 58 percent of the respondents do not exercise good

sustainable consumption practices. Leena (2007) also found that level of education also affects sustainable use practices, where there is a positive relationship between higher education and concern for the environment. Another study related to sustainable consumption is the research by Nurizan, Laily, Sharifah, Norhasmah, Aini, and Naimah (2004) in which they stated that sustainable consumption practices is influenced by an understanding of the basic concepts such as the concept of need, and the general knowledge related to the environment, waste disposal and consumer rights.

The relationship between sustainable consumption and well-being has been researched in a number of empirical studies (Diener, Sandik, Seidlitz, & Diener, 1993; Husniyah, 2011; Mumtazah & Norhafidah, 2009; Schyns 2003; Veenhoven, 2008). Happiness is used to determine the well-being of individuals (Diener *et al.*, 1993). Sustainable consumption is an aspect of studying the correlation between consumer behaviour with happiness. Studies at the micro level involved sustainable consumption of individuals whereby it determines whether the individuals involved in sustainable consumption tend to be happier than those who do not adopt sustainable consumption (Diener *et al*., 1993; Husniyah, 2011; Schyns 2003; Veenhoven, 2008). In those studies it is also noted that happiness is not necessarily caused by consuming, but also by other reasons. One reason is that high-income earners are more active and healthier and they are thus happier. In addition, sustainable consumption practices also contribute to the well-being of the environment and enhancing the quality of life. Thus, the individual activities can ensure that well-being and the quality of the environment can be achieved (Mumtazah & Norhafidah, 2009). According to Mumtazah and Norhafidah (2009) again, sustainable consumption practices can contribute to the well-being of the environment and enhance the quality of life.

Sustainable consumption will be able to increase the happiness of the present and future generations if the practice of sustainable consumption can reduce major catastrophe on the ecological system. At the same time, it requires some sacrifices in terms of limiting the use of resources whereby the present generation can still experience well-being even with minimal consumption. Moral awareness on the importance of sustainable consumption can lead to sustainable consumption practices without affecting happiness and well-being in the long run (Husniyah, 2011). Similarly, according to Magrabi, Chung, Cha, and Yang (1991), and Nurizan *et al.* (2004), their studies indicate that sustainable consumption have a direct relationship with well-being. The sustainable consumption can also often be used to gauge the quality and level of individual and community life. This clearly shows that there are roles to be played by each individual to ensure their well-being and quality of the environment be achieved through sustainable consumption.

Methodology

This study was conducted on 400 household respondents in Peninsular Malaysia via questionnaires. The practice of sustainable consumption was measured with a frequency scale (1 = Never to 5 = Always) while well-being was measured using a Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Measurements for the practice of sustainable consumption statements were built by Mumtazah and Norhafidah (2009) while well-being measurement was developed by Diener *et al.* (1993); Husniyah (2011); Schyns (2003); and Veenhoven (2008). Multistage random sampling was used for the selection of samples; the first stage of the sampling was made on the states in the four zones of Peninsular Malaysia. The four states selected were Penang (North), Selangor (Central), Pahang (East) and Negeri Sembilan (South). From each of the selected state, one city was drawn from the list of Municipal Council. For Penang state, two cities selected were Bukit Mertajam and Butterworth, as well as for Selangor (Kajang and Subang Jaya), Pahang (Kuantan and Temerloh) and Negeri Sembilan (Nilai and Seremban). Trained enumerators were assigned to collect data by distributing questionnaires to the respondents in those urban housing areas. Data collected was analysed using the SPSS for Windows version 18 program.

Result and Discussion

Respondents' background

Table 1 summarizes the background information of the 400 respondents from Penang, Selangor, Pahang and Negeri Sembilan. Demographic variables discussed are gender, ethnic, education level, marital status and household income. Respondents comprised of 52.2% males and 47.8% females. For age category, 27 to 36 years old has the highest number of respondents (40.8%) and the lowest number is for the age group 57 to 66 years old (2.2%). In addition, the majority of the respondents are Malays/Bumiputeras with 57.5%.

In terms of education background, almost half of the respondents acquired secondary school education which is the highest (46.7%) and only 20.7% possessed at least a Bachelor's Degree. The majority of the respondents (60.5%) are married. For household income, the majority of respondents are in the income range category between RM2,000 to RM4,000 (71.3%) while 26.9% of the respondents earn more than RM4,000 per month.

Table 1: Respondents' Background

Background Information	Frequency (n=400)	Percent (%)
Location		
Penang	100	25
Selangor	101	25.2
Pahang	100	25
Negeri Sembilan	99	24.8
Gender		
Male	209	52.2
Female	191	47.8
Age		
17 – 26 years	87	21.8
27 – 36 years	163	40.8
37 – 46 years	87	21.8
47 – 56 years	54	13.5
57 – 66 years	9	2.2
Ethnic		
Malay / Bumiputera	230	57.5
Chinese	123	30.8
Indian	47	11.7
Level of Education		
No Formal Education	1	0.2
Primary School	11	2.8
Lower Secondary School	57	14.2
Higher Secondary School	130	32.5
Certificate / Diploma	118	29.5
Bachelor's Degree	73	18.2
Masters / PhD	10	2.5
Marital Status		
Married	242	60.5
Single	153	38.2
Others	5	1.2
Household Income		
RM2000-RM4000	285	71.3
RM4001-RM6000	60	15
RM6001-RM8000	27	6.7
RM8001-RM10000	11	1.0
>RM10000	17	4.2

The sustainable consumption practices

Table 2 shows the number of statements under three categories which are reduce, recycle and rethink which were measured by five scales (1 = Never to 5 = Always). The study found that the highest mean score of 4.31 is for the

statement "I switch the light/fan off when leaving a room". The standard deviation range for this statement is the lowest (SD = 0.995), which shows that this statement is near to the mean score in the distribution. This is followed by a mean score of 4.02 for the statement "I open the windows when at home". This indicates that the respondents did those practices to save electricity and their expenses.

Table 2: Sustainable Consumption Practices

Statement	Mean Score	SD
1. I choose not to use air conditioner (air-cond) at home.	3.20	1.297
2. I use energy saving refrigerator.	3.37	1.221
3. I switch the light/fan off when leaving a room.	4.31	0.995
4. I use a compact fluorescent bulb.	3.12	1.299
5. I collect clothes up to the maximum capacity before using a washing machine.	3.86	1.216
6. I open the windows when at home.	4.02	1.161
7. I plant at least two trees around my house.	3.22	1.318
8. I refuse a paper or plastic bag when I only have few items.	3.16	1.233
9. I recycle trash that can be recycled such as old clothes/bottle/newspaper.	3.48	1.313
10. I will purchase an environmentally friendly version of a product even when they are expensive.	2.75	1.111
11. I will purchase food labelled 'organic' or 'natural'.	3.12	1.137
The Overall Mean	**3.42**	

For the statement in the recycling category "I recycle trash that can be recycled such as old clothes/bottle/newspaper", the mean score is 3.48. This may reflect that the practice is still being performed by the people. The practice which has the lowest mean score of 2.75 is "I purchase an environmentally friendly version of a product even when they are expensive". The respondents may be more likely to buy the environmental-friendly products if the price is affordable. The overall mean score for sustainable consumption practices are 3.42, indicating that the respondent's sustainable consumption practices are at a moderate level. This reflects that the respondents do the above sustainable consumption practices in their daily lives although not always.

As a whole, the total score is computed for all eleven statements and later the scores are grouped into three categories. Majority of the respondents are in the moderate level (60.5%) while only 3.8% are in the low level category (Figure 1). This shows that most of the respondents are already aware of sustainable consumption practices and that these activities will bring benefit

to their daily lives. This study is supported by Mumtazah and Norhafidah (2009) who found that the majority of respondents have a moderate sustainable consumption practices (75%).

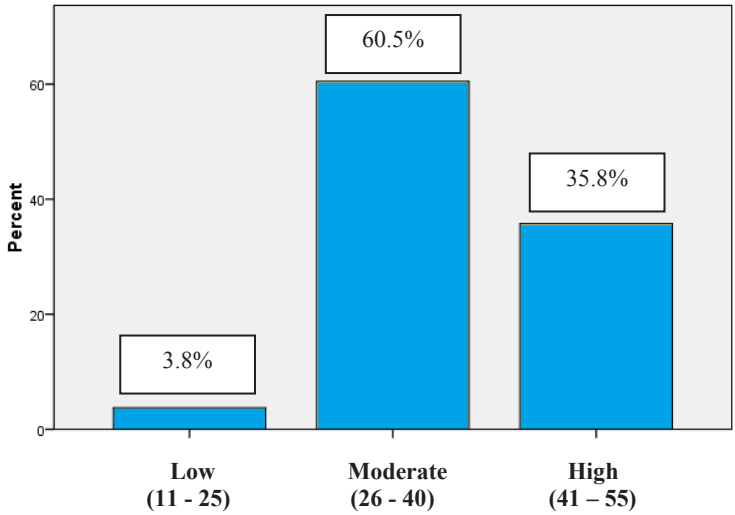


Figure 1: The Sustainable Consumption Practices Category

Well-being

Table 3 shows the well-being of the respondents. The scales are five statements representing each individual's well-being. The statement with the highest mean score of 3.37 is "Currently I am satisfied with my life", followed by a score of 3.36 for "Generally, my life is almost perfect". The mean standard deviation range for this statement is the smallest value of 0.953 which is close to the mean score in the distribution.

Table 3: Well-Being

Statement	Mean Score	SD
1. Generally, my life is almost perfect.	3.36	0.953
2. My life situation is excellent.	3.28	1.001
3. Currently I am satisfied with my life.	3.37	1.005
4. Until now I have got everything I want.	3.10	1.070
5. If I could turn back, I would not change anything about my life.	2.77	1.330
The Overall Mean	**3.18**	

The moderate score applies to "My life situation is excellent" with a mean score of 3.28. Hence, almost all of the mean scores are at a moderate level. This shows that respondents feel satisfied with their lives. However, the statement having the lowest mean score (2.77) "If I could turn back, I would not change anything about my life" shows that the respondents wish to change something in their lives if they are given the opportunity.

Figure 2 shows the well-being of most of the respondents were at a moderate level (62.2%) and 26.2% of the respondents are at a high level, while only 1.5% of respondents are at the low level. This clearly shows that the respondents have a good well-being. Prior studies also indicated the well-being of respondents are in the moderate level, where generally they are more likely to be satisfied with their present life (Husniyah, 2011).

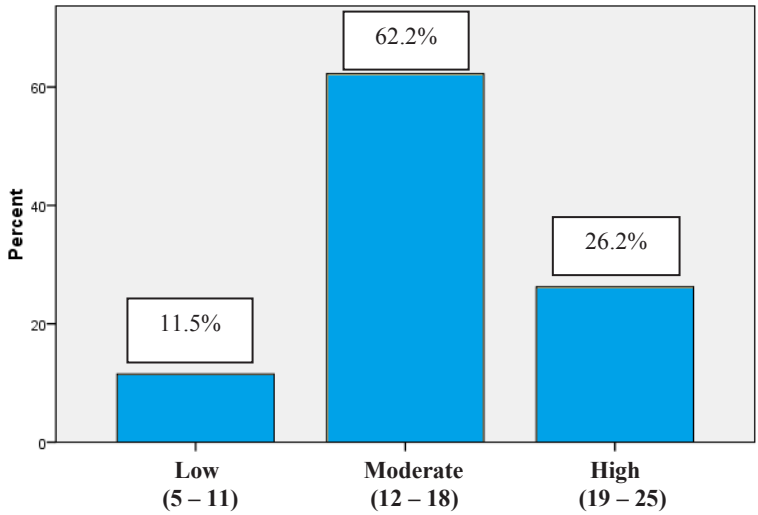


Figure 2: Well-Being

Sustainable consumption practices and well-being

The Pearson correlation test is used to determine the relationship between sustainable consumption practices and well-being (Table 4). Based on this result, it shows that sustainable consumption practices is significantly related to well-being ($r = 0.282$, $p = 0.0001$). This shows that there is a positive relationship but the relationship is relatively weak. Thus, if the consumers practice sustainable consumption, their well-being will be enhanced. Consequently, the household well-being is affected by the sustainable consumption practices committed by them in their everyday life. This is

evidenced by studies done by Diener *et al.* (1993); Husniyah (2011); Schyns (2003); and Veenhoven (2008), in which sustainable consumption is an aspect in the study of consumer behaviour to be correlated with happiness.

Table 4: The relationship between sustainable consumption practices and their well-being

	Well-Being	
	R	**p**
Sustainable Consumption Practices	0.282**	0.0001

Significant at the level $p \leq 0.01$

Conclusion

In conclusion, it can be seen that the level of sustainable consumption practices and well-being among Malaysian consumers are at a moderate level. This result shows that sustainable consumption practices are highly and significantly related with household well-being. In addition, the sustainable consumption practices also have a positive correlation with their well-being. This shows that the adoption of sustainable consumption practices in life will bring better quality of life. Households that adopt sustainable consumption practices are more likely to be happier and more prosperous compared to those who do not. With this, campaigns and ongoing programmes are needed to increase the sustainable consumption practices and give them greater awareness on the issues and the importance of sustainable consumption. Therefore, all parties can work together to play a role in understanding issues related to sustainable consumption practices in their daily lives in order to achieve the well-being of individuals and families. However, to achieve the goal to create understanding, and to promote sustainable consumption practices in a short time, is actually quite impossible since it requires the government to give extensive coverage to sustainable consumption practices and to set up certain laws on this matter. Although there is an effort to promote a balance of rights and responsibilities among consumers by the producers via the National Consumer Policy (NDP), the manufacturers and the government need to promote sustainable consumption to achieve the National Vision in ensuring the well-being and welfare of the consumers. However, this policy has not been fully extended to consumers or the society as a whole. Instead, its success depends on the individual's own awareness of these practices. Under the Earth Summit (Rio Earth Summit UNCED) Agenda 21 which was approved in 1992, it focused on consumers' habits or practices, which outlines that the decline in the quality of life and environment is caused by consumer and industry practices. Therefore, the importance of sustainable consumption needs to be emphasized in order to achieve sustainable development. Finally, when the consumers have a good

practice of sustainable consumption, this can improve the quality of their lives and at the same time all Malaysians will be able to increase their level of well-being.

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