CHAPTER 5
DISCUSSION AND CONCLUSION

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5.0 DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter will summarise the findings, discuss the results, and present managerial implications, limitations and suggestions for future research. The final conclusion will be presented in this chapter.

5.2 Discussion of the Results

This section will answer all the research questions developed in chapter one, which lead the flow of the discussion.

1. What is the relationship between consumer values (altruistic values, egoistic values, anthropocentric values, ecocentric values) and consumer awareness of the consequences?

   In this study, Pearson correlation analysis is used to analyse the relationship between consumer values (altruistic values, egoistic values, anthropocentric values and ecocentric values) and consumer awareness of the consequences. According to the results, all consumer values have a positive relationship with consumer awareness of the consequences.

   *Consumer altruistic value is positively correlated with consumer awareness of the consequences*
Consumer altruistic value is positively related to consumer awareness of the consequences. This means that if a consumer has high altruistic value, that particular individual will feel they have the obligation to reduce pollution or use green products in order to reduce the threat to non-human species and the environment. Referring to the results in the previous chapter, the altruistic value has a significant unique contribution to predict the consumers’ use of non-woven bags, and, hence, this value can be considered as among the factors that encourage consumers to use non-woven bags. Industry players and the government can use this important value to plan their marketing strategies.

Egoistic value is positively correlated with consumer awareness of the consequences

Consumer egoistic value is positively related to consumer awareness. This means that if a consumer has egoistic value, that particular individual will evaluate and weigh the threat of the environment and the cost incurred; if the cost of personal happiness is higher than the benefit that could be received, then the particular individual will not behave in an environmentally friendly way even though they are aware that the damage to the environment could be huge in the future, and vice and versa. Referring to the multiple regression analysis in the previous chapter, we confirm that this value does not make a significant unique contribution to encourage consumers to use non-woven bags. This might be because the cost of using non-woven bags is high
compared to plastic bags, and that consumer feel that it is more convenient to use plastic bags or that consumers do not practice taking non-woven bags when shopping. The government could introduce a higher levy if consumers use plastic bags, which might motivate/force consumers to use non-woven bags. In addition, industry players can also give a discount to those who bring non-woven bags or recycle bags while shopping to encourage them to use non-woven bags.

*Anthropocentric value is positively correlated with consumer awareness of the consequences*

Consumer anthropocentric value is positively related to consumers’ awareness of the consequences. This means that if the consumers have greater anthropocentric value, they will buy green products if they perceive the benefit of getting a healthy and sustainable environment for better living. However, this value does not make a unique contribution to encourage consumers to use non-woven bags. This might be because consumers do not perceive any benefit of a sustainable environment. Education and creating awareness are essential to promote a high usage rate of non-woven bags.

*Ecocentric value is positively correlated with consumer awareness of the consequences*

In this study, the ecocentric value is positively related to consumer awareness of the consequences; this means that if the consumers have greater
ecocentric value they will buy green products if they perceive the benefit for the ecosystem and biosphere as a whole. Even though this value is positively related with consumer awareness they do not contribute significantly to encouraging consumers to use non-woven bags. This might be because consumers lack the knowledge or are not concerned about the importance of the ecosystem. This study provides a very important insight, which is that the Government should create more awareness and educate the public. The government can provide more resources to schools and educate the students about the importance of the ecosystem and the impact of using plastic bags.

2. What is the relationship between the consumer awareness of the consequences and attribution of responsibility?

From the data analysis in the previous chapter, the consumer awareness of the consequences is positively correlated with the attribution of responsibility. This means that if a consumer has a high awareness of the consequences, that particular individual will buy green products when there are unpleasant consequences to others or the belief that the environment will be threatened if they do not use green products. Therefore, that particular individual has a feeling of personal responsibility towards pro-environmental behaviour. However, consumer awareness of the consequences is not significant in encouraging consumers to use non-woven bags, which fits with the VBN model, because, this variable is a mediator in this model.
3. **What is the relationship between consumer attribution of responsibility and personal norms?**

From the data analysis in the previous chapter, the consumer attribution of responsibility is positively correlated with personal norms. This means that if a consumer has a high attribution of responsibility, that particular individual will buy green products if he/she believes that his/her action can reduce the threat to the environment. Therefore, that particular individual has an obligation and is willing to act pro-environmentally. However, consumer attribution of responsibility is not significant in encouraging consumers to use non-woven bags, which fits with the VBN model, because, this variable is a mediator in this model.

4. **What is the relationship between consumer personal norms and actual usage of non-woven bags?**

From the data analysis in the previous chapter, consumer personal norm is positively correlated with the actual usage of non-woven bags. This means that if a consumer has high personal norms it will encourage them to use non-woven bags. This is because that particular individual has accepted this important value, and believes they can mitigate the possible dangers or threat and restore the values, which, subsequently, encourage the personal obligation to act more pro-environmentally.
5. **How can the Value-Belief-Norm Theory explain the consumers’ use of non-woven bags?**

This study used the Value-Belief-Norm (VBN) Theory, which was chosen to support the explanation of using eco-friendly products, which is one of the aspects of sustainable behaviour. This theory has highlighted that values, beliefs and personal norms can activate the actual behaviour of consumers concerning the usage of non-woven bags. All the hypotheses developed are accepted, however, in the model, only two variables – altruistic values and personal norms – significantly contribute, which means that only altruistic values and personal norms can encourage consumers to use non-woven bags. Overall the result is positive, which shows that the VBN model is valid in this aspect; however, it cannot be generalized to the Malaysian context due to the small sample size. A summary of the hypotheses is shown below:

### Table 5.1 Summary of Hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Altruistic value is positively related to awareness of the consequences.</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 Egoistic value is positively related to awareness of the consequences.</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 Anthropocentric value is positively related to awareness of the consequences.</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 Ecocentric value is positively related to awareness of the consequences.</td>
<td>Supported</td>
</tr>
<tr>
<td>H5 Awareness of the consequences is positively related to attribution of responsibility.</td>
<td>Supported</td>
</tr>
<tr>
<td>H6 Attribution of responsibility is positively related to personal norms</td>
<td>Supported</td>
</tr>
<tr>
<td>H7 Personal norms is positively related to consumers actual use of non-</td>
<td>Supported</td>
</tr>
</tbody>
</table>
5.3 Contribution of the Study

This study has highlighted the factors that encourage consumers to use non-woven bags. This study has provided important insights to industry players and the Government as well as a better understanding of the problems that occur, and can assist them to rectify the problems. The factors discussed in the previous section can assist them to plan their marketing and promotion strategies more effectively and efficiently.

5.4 Managerial Implication

The main objective of this study is to investigate the implications of the Value-Belief-Norm theory on consumer’s actual behaviour of using non-woven bags. In referring to the results, the Value-Belief Norm Theory is valid; therefore, this study can help the relevant industry players and government departments to understand consumer behaviour in respect of their use of non-woven bags.

5.4.1 Advertising

Altruistic value significantly contribute to encouraging consumers to use non-woven bags. The government can use the print and broadcast ads, which have the elements of altruistic values to promote public the use of non-woven bags. The priority of the media is using television as it can target wider populations, followed by use of the Internet, as the Internet is an effective and efficient tool to
create word of mouth and buzz within the society. In addition, industry players such as Tesco, Giant, and Carrefour can set up ads at point-of-purchase to remind and raise the awareness of the public. Printed ads in newspapers and magazines are another option to encourage the public to use non-woven bags.

5.4.2 Event and Experience
The government has implemented the no-plastic bag campaign on every Saturday and this event has received a good response from the public. Currently, this event is only practiced once a week except in Penang State, which practices it three times a week. The Government can consider increasing the frequency in order to increase the participation rate. In addition, the government can set up street activities to highlight the weakness of using plastic bags and the impact of plastic bags on the ecosystem. In addition to the Government’s efforts, all the industry players can participate in promoting the public use of non-woven bags by giving non-woven bags as their door gift at their events. This can encourage more people to use non-woven bags.

5.4.3 Increase the Levy and Tax Rebate
According to the results in Chapter 4, egoistic value is positively related to consumer awareness of the consequences; however, this value is not a significant contribution factor in encouraging consumers to use non-woven bags. This reflects that consumers are not bothered by the levy imposed or that the non-woven bags are relatively more expensive compared to plastic bags.
Therefore, the government can consider increasing the levy in order to encourage the public to use non-woven bags. In addition, the government can consider giving a tax rebate to those companies that produce non-woven bags. This would be an incentive to manufacturers to make the effort to promote non-woven bags.

5.4.4 Education and Awareness

Referring to the results in Chapter 4, ecocentric value is positively related to consumer awareness of the consequence, however, this value is not a significant factor in encouraging consumers to use non-woven bags. This reflects that consumers might not have in-depth knowledge concerning the impact of plastic bags on the environment. Therefore, a variety of programmes such as road shows and exhibitions can be designed to raise the awareness and educate the public to use more non-woven bags instead of plastic bags. Schools and educational institutions can play an important role in educating students to use non-woven bags. Efforts from educational institutions can instil moral values in the students as they are young and it will eventually lead to them behaving pro-environmentally.

5.4.5 Improve the packaging

Currently non-woven bags in the market are less attractive in terms of colour and design. Many studies have highlighted that packaging can affect the sales of the
products, and, hence, we believe that with the greater aesthetic value of the non-woven bags, more people will be willing to use them. Non-woven bags producers should improve the aesthetic value such as the colour, text and graphics in order to motivate the public to use non-woven bags. In addition, the functionality of the non-woven bag is one of the factors to encourage consumers to use them. If the new generation of non-woven bags is foldable, easy to hold and squeezable, the responding rate of using non-woven bags will increase.

5.5 Research Limitations
Throughout this study, there are a few limitations that have been identified, which are presented below:

1. In this study, the geographical areas we covered were limited. Therefore we could not generalize this study in the Malaysian context.

2. Respondents’ demographics are not normally distributed, which is not convincing for representing the population of Malaysia.

3. This study only focuses on those respondents who have been use non-woven bags, therefore, a comparison between consumers who use and those who do not use non-woven bags should be conducted.

4. Some of the respondents might using fabrics recycle bags instead non-woven recycle bags, therefore a comparison between consumers who use fabric recycle bags and non-woven recycles bags should be conducted.
5.6 Recommendations for Future Research

Several recommendations are suggested below in order to improve future studies on consumers’ use of non-woven bags.

1. Increase the sample size so that it can be generalized to the population of Malaysia.
2. A comparison between those consumers using non-woven bags and not using non-woven bag should be conducted.
3. The demographics of the respondents might influence the usage of the non-woven bags; therefore, exploring the impact of the demographics of respondents in respect of using non-woven bags is important.

5.7 Conclusion of the Study

In this study, we can accept that the Value-Belief-Norm Theory is able to explain why consumers use non-woven bags while shopping. Based on this study, all independent variables have a positive relationship with the dependent variable, therefore, we can summarize that the altruistic, egoistic, anthropocentric, and ecocentric values and consumer awareness of the consequence have a positive correlation. In addition, awareness of the consequences and attribution of responsibility have a positive correlation. The attribution of responsibility is positively related to personal norms and consumers’ personal norms are positively related to the actual behaviour of the usage of non-woven bags. Only altruistic values and personal norms significantly contribute to encouraging
consumers to use non-woven bags, and, hence, some of the managerial implications were based on this finding. Even though some of the variables did not significantly contribute to encouraging consumers to use non-woven bags, the study provides new insights and understanding of consumer behaviour. This chapter answered all the questions developed in Chapter 1, and the managerial implications, research limitations and future studies were presented.