INVESTIGATING INTERNAL AND EXTERNAL FACTORS AFFECTING ADOLESCENT CONSUMERS’ PURCHASE INTENTIONS ON ENVIRONMENTAL FRIENDLY PRODUCTS

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Abstract

Purpose - The purpose of this study is to identify the internal and external factors affecting adolescent consumers purchase intentions on environmental friendly products.

Design/methodology/approach - The population is people age between 15 to 24 years old. The convenience sampling was used in this study and conducted at Siam Center in Bangkok, Thailand. The sample group was 400 respondents.

Finding - This study shows that all internal factors have a positive relationship with green purchase intentions of adolescents. Four from five of external factors except family have a positive relationship with green purchase intention of adolescents Demographic variables are not statistical significantly related to their green purchase intentions and purchase behaviors. This research contributes to the theoretical and practical implications of consumer behaviors on environmental friendly products.

Research limitations/implications - The sample group is limited by a group of people living in Bangkok area. The data results on the sample may not be generalized to represent the results of all adolescents who live in Thailand. However, this study provides some guidelines to the green marketers on formulating their various strategies on how to attract customers to purchase their environmental friendly products.

Keywords: Internal Factors, External Factors, Purchase Intentions, Environmental Friendly Products, Adolescent Consumers
1. Introduction

Environmental pollution is the core cause of many problems such as nature, ozone depletion, loss of biodiversity, carbon footprint, global warming, earthquake, tsunami, and flood as recently. The society has become increasingly aware of environmental issue as the rise of environmentalism due to the environmental situations. It seems to continuously worsen and leads to an interminably public concern in many countries. Nowadays, everyone in the world agree that global warming has become a big crisis. Many countries pay attention to the green movement for preservation of the environment. Environmental pollution and natural disasters increasing rapidly both are the problems that effect Thailand and other countries all over the world and has made people's lifestyles changing very fast when compared to few decades ago.

Pavan (2010) stated that “green products” and “environmental products” are the business terms that are used commonly to describe products that protect or enhance the natural environment by conserving energy and/or resources and reducing or eliminating use of toxic agents, pollution, and waste. In general, green products are known as ecological products or environmental friendly products that have less of an impact to the environment (Ottman & Rielly, 1998). Pavan (2010) defined the characteristics of green products, which consist of original grown, recyclable, and reusable products, natural ingredients, recycled content, approved chemical, unpolluted environment, and untested animals. Over the last decade, concerning for the environment has been steadily increasing due to increased media coverage, greater awareness of environmental problems, the impact of major industry disasters, and the rise of activist groups on the environment (Kalafatis, Pollard, East, & Tsogas, 1999). Moreover, the marketers need to respond to these environmental consumptions because it has become an important branch of learning (Finisterra & Raposo, 2008).

The aims of this research are (1) to examine the factors influencing adolescent consumers purchase intentions, and (2) to investigate the relationships among demographic characteristics and adolescents purchase behaviors on environmental friendly products in Bangkok, Thailand. This research especially identifies the internal and external factors affecting adolescent consumers purchase intentions on environmental friendly products.

2. Literature review

This part explains the concept of green marketing, environmental friendly products, consumer behavior theory, and the internal and external factors affecting adolescent consumers purchase intentions on environmental friendly products.

2.1 Green Marketing

Today many consumers are paying more attention to the environmental efforts of businesses and support companies that use green marketing (Kassaye, 2001; McDaniel & Rylander, 1993; Pujari & Wright, 1996). Green marketing is considered as one of the major trends in a business, which concerns about environment. According to the concept of green marketing “green or environmental marketing consists of all activities designed to generate and
facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs with minimal detrimental impact on the natural environment” (Polonsky, 1994, p.4). A majority of people believe that green marketing refers solely to the promotion or advertising of products with environmental characteristics. In terms like Phosphate Free, Ozone Friendly, Recyclable, Refillable, and Environmentally Friendly are some of the things consumers most often link to green marketing (Polonsky, 1994). However, with similar points of view, green marketing or environmental marketing relates to facilitate exchanges to satisfy consumer needs and wants by minimizing the impact of these activities on the physical environment.

2.2 Environmental Friendly Product

Environmental friendly products or green products are commonly used to describe products that protect or enhance the natural environment by conserving energy and/or resources and reducing or eliminating use of toxic agents, pollution, and waste (Pavan, 2010). In other words, environmental friendly products refer to the products that under 3R strategies that are recycle or renewable resources efficiently, reused product by repair the old product, and reduced packaging or using less toxic materials to reduce the impact on the natural environment and energy.

2.3 Consumer Behavior Theory

Consumer behavior is the study of when, why, how, and where people do or do not buy products. The factors influencing the consumer decision-making process can be the internal and external factors. Internal factors include motivation, learning, memory, emotions, perception, attitudes, personality, and lifestyle, while external influences on the consumer are culture (subcultures), demographics, opinion leader, reference groups, social class, and marketing campaigns. Customer behavior study is based on consumer buying behavior, with the customer playing the three distinct roles of user, payer and buyer (Hawkins, Roger, & Coney, 2001). However, Blackwell, D’Souza, Taghian, Miniard, and Engel (2006) had suggested with a similar perspective in that the factor influencing purchase decision has two main factors which are individual and environmental influences. Individual influences include demographics, personality, value, lifestyle, consumer resources, motivation, knowledge, and attitudes. External factors include culture, social class, family, and situation. These both factors can affect to the consumer purchase decision process.

2.4 Purchase Intention and Purchase Behavior on Environmental Friendly Product

2.4.1 Purchase Intention on Environmental Friendly Product

Purchase intention on environmental friendly product is conceptualized as the probability and willingness of a person to give preference to products having eco-friendly features over other traditional products in their purchase considerations. Purchase intention on environmental friendly product is a particular type of environmental friendly behavior which is exhibited by consumers to show their concern for the environment. The green purchase intention of consumers is like a substitute for actual purchase behavior of consumers. (Ramayah, Lee, & Mohamad, 2010).
2.4.2 Purchase Behavior on Environmental Friendly Product

Regarding to Schiffman and Kanuk (2000), consumer behavior relates to how persons make a choice to spend their accessible resources. It includes how to select, obtain, use, and remove the goods and services. The concept of purchasing behavior on environmental friendly products is similar to the concept of green purchasing behavior. Lee (2009) noted that green purchasing behavior can be translated to the act of consuming products that are conservable, beneficial for the environment, and responding to environmental concern. Responding to environmental concern, one of the way related to waste management system is by doing the 3R (Reduce, Reuse, and Recycle). From the research of Beckford, Jacobs, Williams, and Nahdee (2010) and Chan (2001), green purchase intention is a significant predictor of green purchase behavior, which means that purchase intention is positively affect the probability of a customer decision that he/she will buy green products.

2.5 Internal Factors Influencing Consumer Purchase Intention

2.5.1 Environmental knowledge

Chan and Lau (2000) found that Chinese people with more ecological knowledge had a stronger intention to involve in green purchasing which were more likely to conduct green purchase. Fryxell and Lo (2003) defined environmental knowledge as “a general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems” (p.45).

2.5.2 Environmental attitude

According to Ajzen and Fishbein (1980), the instant determining factor of an individual’s beliefs is the individual’s attitude. An individual’s beliefs toward a certain object might be a lot, yet that individual has to merely attend to a limited number of beliefs. Paco and Raposo (2009) concluded that consumers were more likely to buy green products if they were more closely involved with the environment.

2.5.3 Self-image

Self-image is the conception of oneself. Self-image of consumers can influence their purchase behaviors when choosing the products. Pickett-Baker and Ozaki (2008) found that the pro-environmental self-images were influenced green behaviors. Lee (2008) also agreed that self-image was the third predictor on green young consumers’ purchasing behavior in Hong Kong.

2.6 External factors influencing consumer purchase intention on environmental friendly product

2.6.1 Family

In a study of Caruana and Vassallo (2003) had found parental influence on purchasing behavior acts as a main role for children. Cotte and Wood (2004) found parental influences not only exist in the purchase decision-making process, but also shape the behavior of young children. In addition, parents who hold strong desire to consume material goods, their children also value material goods in a similar way like their parents do (Chaplin & John, 2010).
2.6.2 Peer group or reference group

Reference groups refer to those groups or group members who are “psychologically significant for one’s attitudes and behaviors” (Turner 1991, p.5). Peer pressure refers to the psychological pressure which each agent experiences when comparing his/her actions with those of others (Cohan, 2009). Childers and Rao (1992) found that peer and reference group could influence on consumer decision-making.

2.6.3 Media Exposure

People are likely to seek information from print and broadcasted entertainment (Speck & Elliott, 1997). Mazis and Raymond (1997) also suggested that advertisers should use a variety of media to communicate product benefits to a target audience.

2.6.4 Eco-label

Eco-label is a synonymous descriptor that refers a product provides information about the environmental impacts associated with the production or usage of a product (Rotherham, 1999). The environmental labels are increasingly being utilized by marketers to promote the identification of environmental friendly products (D’Souza, Taghian & Lamb, 2006).

2.6.5 Perceived quality

Steenkamp and Meulenberg (1986) found that perceived food quality was associated with keep ability, wholesomeness, appearance, well-known brands, taste, price, and nutritional value.

Based on the literature review, conceptual framework is developed as figure 1.

Figure 1 Conceptual framework of adolescents’ purchase intentions on environmental friendly products.
3. Research Methodology

The target population was the adolescent consumers who are age between 15 years to 24 year old living in Bangkok, Thailand. The convenience sampling method was used to collect the data. The sample size in the study was 400 respondents at Siam Center. The questionnaire was adapted from Promotosh and Sajedul (2011), Wahid, Rahbar, and Shyan (2011), Pickett-Baker and Ozaki (2008), Lee (2008), Mei, Ling, and Hooi (2012), Iravani, Zadeh, Forozia, Shafaruddin, and Mahroeian (2012), as well as Kuo, Wu, and Deng (2009). Research questionnaire had four parts, whereby the first part was demographic information about gender, age, education level, and income. The second part asked about purchase behavior on environmental friendly product by using multiple choices. In the third and fourth part asked for variables affecting purchase intentions on environmental friendly product of adolescent consumers in Thailand by using a five-point Likert scale for asking the respondent to rate in each item.

To test the differences among demographic characteristics and purchase intentions on environmental friendly product, ANOVA analysis was used. When testing the relationships between internal, external factors, and purchase intentions, the multiple regressions analysis was used. Regarding the relationships of demographic characteristics and purchasing behavior, this Chi-square test was applied in this study, furthermore using the Phi and Cramer's V values to judge the level of association.

4. Research Results

The results of demographic characteristics of respondents and hypotheses testing are showed as follows.

4.1 Demographic of respondents

Table 1 The Data of Demographic Characteristics

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Frequency (N=400)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>196</td>
<td>49</td>
</tr>
<tr>
<td>Female</td>
<td>204</td>
<td>51</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 – 18 years old</td>
<td>112</td>
<td>28</td>
</tr>
<tr>
<td>19– 21 years old</td>
<td>163</td>
<td>40.8</td>
</tr>
<tr>
<td>22 –24 years old</td>
<td>125</td>
<td>31.2</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>143</td>
<td>35.75</td>
</tr>
<tr>
<td>Diploma</td>
<td>86</td>
<td>21.5</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>171</td>
<td>42.75</td>
</tr>
<tr>
<td>Monthly Income (Bath)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 4,000 Baht</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>4,001-8,000 Baht</td>
<td>75</td>
<td>18.75</td>
</tr>
<tr>
<td>8,001-11,000 Baht</td>
<td>69</td>
<td>17.25</td>
</tr>
<tr>
<td>11,001-15,000 Baht</td>
<td>89</td>
<td>22.25</td>
</tr>
<tr>
<td>More than 15,000 Baht</td>
<td>87</td>
<td>21.75</td>
</tr>
</tbody>
</table>
From table 1, the respondents consisted of 204 females (51.00%) and 196 males (49.00%). The highest sample of age group was 19 – 21 years old (163 respondents or 40.80%), the second group was 22-24 year old (125 respondents or 31.20%), and the third group was 15-18 year old (112 respondents or 28.00%). For the education levels, most respondents held the bachelor degree with 171 respondents, (42.75%), followed by high school (143 respondents, with 35.75%), and diploma (86 respondents, with 21.50%). The highest rate of income was 11,001-15,000 Baht with 89 respondents or 22.25%. In terms of purchase behavior, there were 369 respondents (92.25%) who ever bought the environmental friendly products, whereas there were 31 respondents (7.75%) who never bought environmental friendly products.

4.2 Results of Hypotheses Testing

H1: Internal factors have a positive relationship with adolescent purchase intentions on environmental friendly products.

Table 2 Multiple Regression of Internal Factors and Purchase Intentions

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.916</td>
<td>0.167</td>
<td>5.483</td>
<td>0.000</td>
<td>0.587</td>
</tr>
<tr>
<td>Environmental</td>
<td>0.297</td>
<td>0.048</td>
<td>0.320</td>
<td>6.161</td>
<td>0.000**</td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.202</td>
</tr>
<tr>
<td>Environmental</td>
<td>0.122</td>
<td>0.049</td>
<td>0.128</td>
<td>2.480</td>
<td>0.014*</td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.025</td>
</tr>
<tr>
<td>Self-image</td>
<td>0.309</td>
<td>0.047</td>
<td>0.309</td>
<td>6.525</td>
<td>0.000**</td>
</tr>
</tbody>
</table>

Note: ** Significant level at 0.00, * Significant level at 0.05

Multiple regression analysis identified that all three factors of the internal factor positively influenced adolescents purchase intentions on environmental friendly products. These were environmental knowledge (t = 6.161, p < 0.01), environmental attitude (t = 2.480, p < 0.05), and self-image (t = 6.525, p < 0.01). It referred that the more adolescent consumers had environmental knowledge, environmental attitude, and self-image; the more they tended to purchase environmental friendly products. Therefore, H1 was fully supported that all internal factors had positive influence to adolescent purchase intentions on the environmental friendly products. The coefficient of determination ($R^2$), documenting these three predictors (environmental knowledge, environmental attitude, and self-image) was able to explain the variation in purchase intention on environmental friendly products (with 41.00%). The F-test was 91.775, considering the result of significant level was 0.000.

H2: External factors have a positive relationship with adolescents purchase intentions on environmental friendly products.
Table 3 Multiple Regression of External Factors and Purchase Intentions

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.296</td>
<td>0.160</td>
<td></td>
<td>1.858</td>
<td>0.064</td>
</tr>
<tr>
<td>Family</td>
<td>0.036</td>
<td>0.031</td>
<td>0.036</td>
<td>1.148</td>
<td>0.252</td>
</tr>
<tr>
<td>Peer group</td>
<td>0.127</td>
<td>0.039</td>
<td>0.131</td>
<td>3.215</td>
<td>0.001**</td>
</tr>
<tr>
<td>Media Exposure</td>
<td>0.417</td>
<td>0.045</td>
<td>0.435</td>
<td>9.339</td>
<td>0.000**</td>
</tr>
<tr>
<td>Eco-label</td>
<td>0.222</td>
<td>0.042</td>
<td>0.243</td>
<td>5.323</td>
<td>0.000**</td>
</tr>
<tr>
<td>Perceive Quality</td>
<td>0.114</td>
<td>0.042</td>
<td>0.111</td>
<td>2.742</td>
<td>0.006**</td>
</tr>
</tbody>
</table>

Note: ** Significant level at 0.01, * Significant level at 0.05

Multiple regression analysis identified four out of five external factors had a positive influence on purchase intentions on environmental friendly products. Specifically, media exposure ($t = 9.339$, $p < 0.00$), eco-label ($t = 5.323$, $p < 0.00$), peer or reference group ($t = 3.215$, $p < 0.01$), and perceive quality ($t = 2.742$, $p < 0.00$) contributed to adolescent consumers purchase intentions on environmental friendly products. It implied that the more adolescents were influenced from peer or reference group, media exposure, eco-label, and perceived quality, the more they would purchase environmental friendly products. However, the family did not affect to the purchase intention at a statistically significant level. Therefore, H2 was partially supported, in that four out of five elements of external factors were related to purchase intention on environmental friendly products. The coefficient of determination ($R^2$), documenting those five predictors (family, peer or reference group, media exposure, eco-label, and perceive quality) were able to explain the variation in purchase intention on environmental friendly products (with 63.10%). The F-test value was 134.986 and the significant level was 0.000.

H3: Adolescents with different demographic characteristics intend to purchase on environmental friendly products differently.

Demographic characteristics consisted of gender, age, income, and educational levels. All these dimensions did not affect to adolescents purchase intentions. These mean that the demographic characteristics had no impact on purchase intention on environmental friendly products. The result found that females had a little mean (Mean = 3.6005, S.D. = 0.60096) less than males had (Mean = 3.6684, S.D. = 0.64179) with the t value being 1.092 and p value being 0.224 ($p > 0.05$). In addition, all age groups of respondents tended to purchase environmental friendly products similarly ($F = 0.141$, $p$-value = 0.868). For the education level, $F$ was 1.169 and $p$ value was 0.312, which mean that education level did not affect to adolescents purchase intentions. The result of ANOVA testing also shown that adolescents with different income did not relate to the difference of purchase intentions on environmental friendly products ($F = 1.618$, $p$-value = 0.169). This result contradicted with the study of Torgler, Garcia-Valinas, and Macintyre (2008) found that the demographic variables such as age and gender affected ecological conscious consumers. In addition, with respect to gender of consumers, this result was
also contrast with the study of Tikka, Kuitunen, and Tynys (2000); Brown and Haris (1992); Zelezny, Chua, and Aldrich (2000); Stern, Dietz, and Kalof (2005);

H4: Adolescents with different demographic characteristics tend to purchase on different types of environmental friendly products.

The results found that there were not statistically significant differences in adolescent’s consumer purchase behaviors regarding the types of environmental friendly products based on demographic characteristic (gender, age, education, and income).

H5: Adolescents who have different demographic characteristics will buy environmental friendly products in different place.

The results found only gender affected to the place of buying environmental friendly products. Most males purchased environmental friendly products from street store, followed by hypermarket, flea market, shopping mall, and the internet respectively. Women purchased environmental friendly products from street store, followed by flea market, hypermarket, shopping mall, and the internet respectively.

H6: Adolescent consumers with different demographic characteristics will relate to the frequency of buying environmental friendly products differently.

The results found that there were not statistically significant differences in adolescent consumer purchase behaviors based on demographic characteristics (gender, age, education, and income).

H7: Different adolescents’ demographic characteristics will purchase a different amount of purchase environmental friendly products.

The results found that adolescents with different ages and genders would not purchase environmental friendly products in different amount. However, adolescents holding different incomes and educational levels would purchase a different amount of purchase environmental friendly products.

**Table 4 Education Levels and Amount of Purchase**

<table>
<thead>
<tr>
<th>Education</th>
<th>Amount of purchasing per month</th>
<th>≤ 500 baht</th>
<th>501-1,000 baht</th>
<th>&gt; 1,000 baht</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school</td>
<td>Count</td>
<td>71</td>
<td>52</td>
<td>9</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>19.20%</td>
<td>14.10%</td>
<td>2.40%</td>
<td>35.80%</td>
</tr>
<tr>
<td>Diploma</td>
<td>Count</td>
<td>44</td>
<td>27</td>
<td>8</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>11.90%</td>
<td>7.30%</td>
<td>2.20%</td>
<td>21.40%</td>
</tr>
<tr>
<td>Bachelor</td>
<td>Count</td>
<td>76</td>
<td>42</td>
<td>40</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>20.60%</td>
<td>11.40%</td>
<td>10.90%</td>
<td>42.80%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>191</td>
<td>121</td>
<td>57</td>
<td>369</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>51.80%</td>
<td>32.80%</td>
<td>15.50%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Pearson Chi-Square 43.992, df 8, Sig. 0.000**
Phi value 0.345, Cramer's V value 0.244
Note: ** Significant level at 0.01
From the table 4, there was a statistical significant relationship between education and amount of purchasing environmental friendly products per month. Adolescents who held bachelor degree were likely to purchase environmental friendly product more than the other groups did. Moreover, The Phi value was 0.345 and the Cramer's V value was 0.244, which mean that the relationship between education and amount of purchase environmental friendly products per month was a moderate association.

### Table 5 Incomes and Amount of Purchase

<table>
<thead>
<tr>
<th>Education</th>
<th>Amount of purchasing per month</th>
<th>≤ 500 baht</th>
<th>501-1,000 baht</th>
<th>&gt; 1,000 baht</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 4,000 baht</td>
<td>Count</td>
<td>40</td>
<td>31</td>
<td>5</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>10.80%</td>
<td>8.40%</td>
<td>1.40%</td>
<td>20.60%</td>
</tr>
<tr>
<td>4,001-8,000 baht</td>
<td>Count</td>
<td>37</td>
<td>24</td>
<td>6</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>10.00%</td>
<td>6.50%</td>
<td>1.60%</td>
<td>18.20%</td>
</tr>
<tr>
<td>8,001-11,000 baht</td>
<td>Count</td>
<td>34</td>
<td>22</td>
<td>5</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>9.20%</td>
<td>6.00%</td>
<td>1.40%</td>
<td>16.50%</td>
</tr>
<tr>
<td>11,001-15,000 baht</td>
<td>Count</td>
<td>41</td>
<td>30</td>
<td>13</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>11.10%</td>
<td>8.10%</td>
<td>3.60%</td>
<td>22.80%</td>
</tr>
<tr>
<td>&gt; 15,000 baht</td>
<td>Count</td>
<td>39</td>
<td>14</td>
<td>28</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>10.60%</td>
<td>3.80%</td>
<td>7.70%</td>
<td>22.00%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>191</td>
<td>121</td>
<td>57</td>
<td>369</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>51.80%</td>
<td>32.80%</td>
<td>15.50%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Pearson Chi-Square 80.903, df 16, Sig. 0.000**
Phi value 0.468, Cramer's V value 0.234
Note: ** Significant level at 0.01

When using the Chi square test for the relationship between income and amount of purchasing per month, the result found that there was the relationship between income and the amount of purchasing (p = 0.000) (see table 5). Adolescents who had less income tended to purchase environmental friendly products less than adolescents who had higher income did. However, Phi value was 0.468 and Cramer's V was 0.234 which indicated that the relationship between income and amount of purchasing per month was a moderate association.

### 5. Conclusion

This study aims to investigate the internal and external factors affecting adolescent consumers’ purchase intentions toward the environmental friendly products. The results found that all internal factors (attitude, knowledge, and self-image) significantly influenced their purchase intentions to those products. The result of this study is similar to the study of Wahid et al. (2011) and Ooi, Kwek, & Tan (2012) which showed that environmental knowledge should also be enhanced by raising expectations and be positively related to purchase intentions on environmental friendly products. In terms of external factor, the results found only four out of five external factors affecting adolescents’ purchase intentions on environmental friendly products. These are the media exposure, eco-label, peer or reference group, perceive quality, except for family. These results are consistent with Wahid et al. (2011) who suggested that eco-label and perceive quality would be antecedence of consumers’ purchase intentions. And with
similar to the research result of Ooi et al. (2012) who found that eco-label and peer influence positively effects Malaysian adolescents’ purchasing green products. Promotosh and Sajedul (2011) found that family, peer, and media were positively associated with purchase intentions on environmental friendly products. Furthermore, this study examined the relationship between demographic characteristics and adolescent’ purchase intentions on environmental friendly products. The result showed that gender, age, education, and income were not significantly related to adolescent purchase intention on environmental friendly product. This result contradicts with the results from the previous studies. Torgler et al. (2008) found that the demographic variables such as age and gender affecting with ecological conscious consumers. Tikka et al. (2000); Brown and Haris (1992); Zelezny et al. (2000); Stern et al. (2005); and Lee (2009) shown significant differences in environmental attitudes between men and women. Men have more negative attitudes towards the environment compared to women. Moreover, the result of this research found some demographic characteristics of adolescents influencing some patterns of their purchase behaviors. The amount of purchasing environmental friendly products depended on their income and education levels.

6. Implication for Business

This research provides some guidelines to the green marketers on formulating their various strategies on how to attract adolescent customers to purchase their environmental friendly products. The study has proposed the findings that are useful to marketers who are willing to participate in green marketing activities. Marketers should aware that adolescent consumers do associate certain determinants toward their purchase intentions on environmental friendly products. The powerful antecedents in affecting the purchase intentions on environmental friendly products of adolescent consumers are environmental knowledge, environmental attitude, self-image, peer pressure, media exposure, eco-label, and perceive quality. In order to success in business, the companies should understand the adolescents’ environmental knowledge and self-image on environmental friendly products. Then, marketers should improve their marketing campaign to ensure that they are conveying the message on how their products can help to reduce environmental problems. Furthermore, the marketers might plan the place of selling their environmental friendly products different between males and females. In addition, the marketers should consider income and educational levels of adolescents in order to promote their amount of purchasing.

7. Recommendation for future research

There are several recommendations for future research based on the current study and its findings. There are some discrepancies between the current research and previous research that have been done. The next researchers who are interested in this topic can focus more on the other areas out of Bangkok. Their results would compare to the results of this study. Future study may investigate more on variables relating to purchase intentions on environmental friendly products for deeply understanding of the factors affecting adolescents purchase intentions on these products. Moreover, the next future researcher should use qualitative research to collect data in order to explore additional factors relating to purchase intentions on environmental friendly products. According to the factors resulted from qualitative research will be used to better understanding the reasons for adolescents purchase intentions on environmental friendly products.
References


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