

MAKING IT GREEN: THE FOOD PACKAGING PERCEPTIONS AND PRACTICES OF YOUNG CONSUMERS

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ABSTRACT

Food handler still fails to play their part even when the government imposes “No Plastic Bag” campaign and a ban on polystyrene foam to pack foods. This research focuses on eco-friendly food packaging based on the perception and practice of young consumers, especially the undergraduates of Mara University of Technology Penang Campus (UiTMPP). Questionnaire was constructed and distributed to 315 respondents. The collected data were analyzed with simple descriptive statistic of frequency, mean and standard deviation. Most of the respondents are aware on eco-friendly food packaging. They agreed that the university should propose some alternative to control and reduce non-biodegradable food packaging.

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1.0 INTRODUCTION

According to European Union (EU) reports by European Environment Agency (2010) it is about an average 17,000 tons of domestic waste per day and Malaysia is expected to produce 30,000 tons per day in 2020. Statistics from the Environmental Protection Agency (EPA) reports that paper packaging alone generated 1.5 million tons of waste and similar figures were found for plastic packaging with over 13 million tons generated as reported by European Environment Agency (2010). Malaysian consumers are becoming more aware of the food safety while purchasing food products (Rezai et al., 2012). Many organizations and environmentalist in all nations put an effort to promote the green concept, in the same time they are looking for new ways to reduce costs while still providing new innovative packaging (Jayaraman et al., 2011).

Eco-friendly products have been drastically introduced in the market by corporations. Hypermarkets such as TESCO, Giant, Mydin Mall, and AEON, local supermarket and convenient store fully participate in this campaign. Educational institution co-op and cafes, as well as some street vendors and food hawkers, also help to play a part in this effort. Šataliæ et al., (2007) stated that university students being young adults mostly eat out or take away food. This is proven with a research by Gan et al., (2011) which found that about 62.0% students from various universities in Malaysia reported that they choose to eat at hawker stall and food court daily. This study aims at finding out UiTMPP student's perceptions and practices on eco-friendly food packaging. The two major objectives of this study are:

1. To find out the influencing factor to the students' perception and the practice regarding eco-friendly food packaging.

2. To investigate the differences between the students' perception and the practice on eco-friendly food packaging.

2.0 LITERATURE REVIEW

According to Jayaraman et al., (2011) it is common foods and drinks to be packed or take away from the canteen, cafeteria, and shopping malls, to be put together in a plastic bag and polystyrene. When food products are packaged, the food is having a direct contact with the inside surface of the packaging (Kirwan & Strawbridge, 2003). Chemicals which has been found in polystyrene are styrene and benzene which are suspected carcinogen and neurotoxins that can intimidate human health and reproductive system. (Environmental Climate Change, 2014).

Owing to this, strict laws are imposed by some countries to cope with this issue. Takeout food packaging from polystyrene foam is forbidden by some authorities in the United States. On the other hand, foamed plastic packaging is also prohibited in Chinese cities, including Beijing. Move on to other countries jurisdiction, these countries controlled the use of non-reusable packaging in restaurant and store (Xing, 2009). On the other hand, plastic bags also are regulated by many authorities, primarily because they are the cause of huge litter. In particular, Corsica is the earliest state in French which expelled on the non-biodegradable plastic bags since 1999, and the comparable ban was launched in Paris in 2007.

University student as reported by the Ministry of Higher Education, (2011) belongs to the highest number of population of students in Malaysia. At the same time, they are also a huge group that often consumes takeout food. This is in line with the statistic from Sunway University which revealed that cafeteria operator approximately polystyrene foam food

service on approximately 54,000 polystyrene foam clamshell containers and 63,000 foam polystyrene cups in the year 2009 (Environmental Climate Change, 2014).

2.1 Consumer Perception and Practice for Usage Eco-Friendly Food Packaging

Specifically, in Malaysia, there is limited information about consumer's perceptions and their practice towards going green (Rezai et al., 2012). Manget et al. (2009) discovered that almost half of the respondents in a multi-country survey indicated that green products offer comparable or superior quality over conservative alternatives. On the other hand, Golnaz et al. (2011) found that consumers value quality over the price for products. Many people do not put dollars and cents first when going green, basing their judgment instead primarily on ethics and their desire to help the planet (Golnaz et al., 2011).

In the middle of the government-imposed green campaign, Universiti Sains Malaysia also launches The White Coffin campaign which is an interesting and the most successful student-driven project within the university. A group of students initiated this campaign and then were encouraged with the full support from the university's top management and guidance from the Kampus Sejahtera secretariat to take the lead against the use of polystyrene on campus (Mok, 2012). Activities conducted during the campaign were the Polystyrene Free Day, meetings with cafeteria operators, My Pledge (for a sustainable world) and students campaigning, enforcing and introducing the use of biodegradable or own food containers to pack food as environmentally friendly alternatives than using polystyrene food containers, with the success of the White Coffin campaign, Kampus Sejahtera launched another campus-wide campaign to reduce and stop the usage of plastic on campus,

which is known as the Say No to Plastic campaign (Mok, 2012).

3.0 METHODOLOGY

Initially, this section will start with the research design. Subsequently, the research instrument design on the development of the questionnaire is being carried out before going to the data collection process. Finally, reliability test will be discussed and explained at the end of this section. As stated by Kumar et al. 2013, descriptive study was carried out consecutively to describe something which could be a phenomenon, a current situation or the characteristic of a group, organization and people. By looking at the nature of this study, descriptive research was used and the best way in conducting by using a qualitative approach. Due to some difficulties, a quantitative research was decided for this study, which requires less in depth during data collection but more respondents are able to be assessed (Kumar et al., 2013).

3.1 Research Sample and Plan.

Questionnaire survey was chosen to be the method of assessing the students as the respondents with setquestions and answers that the respondents tick from a predefined selection. Answers can be measured in the strength of feeling such as “strongly agree” “disagree” or number such as the scales out of 5. This form of research is very flexible in terms of how it is carried out such as through the post, online or even over the phone (Kumar et al., 2013). In addition, the sample size for a survey is calculated by statisticians using formulas to determine how large a sample size will be needed from a given population in order to achieve findings with an acceptable degree of accuracy. Questionnaire survey was

chosen to gain the required data. This method was selected to ensure that the obtained data from the respondents are based upon their actual practice and perception (Byrne, 2002).

The study was carried out within UiTMPP. There are numerous reasons in choosing this relative location. In determining the sample size for research activities based on Krjcie& Morgan (1970), the following formula was used

$$s = \frac{X^2 NP (1 - P) d^2 (N - 1) + X^2 P (1 - P)}{d^2}$$

s = required sample size
 X² = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).
 N = the population size
 P = the population proportion (assumed to be .50 since this would provide maximum sample size)
 d = the degree of accuracy expressed as a portion (.05).

Following the formula above, the population of bachelor students in UiTMPP is 2328. Thus, the sample size required for this study is 329 respondents, both male and female aged between 18 and 35 years old from the three main faculties in UiTMPP campus PermatangPauh. The data collection process was conducted on weekdays, within the respective UiTMPP area in the month of October 2014. There are 327 questionnaires prepared and distributed. 315 were able to be collected and found useful. Hence, the data were coded and keyed in Social Statistical Packages (SPSS) version 20.

4.0 RESULTS AND DISCUSSIONS

The three part of the questionnaire were scrutinized separately using descriptive statistic. Reliability is concerned with stability and consistency in measurement, it is to indicate

the extent to which the measure is without bias (error face) and hence offers consistent measurement across time and across the various items in the instrument (Sekaran, 2003). In testing the internal consistency and reliability with regard in Part B Cronbach's Alpha is .779 (n=9) in indicating student's food habits & Factor Influencing Perception and Practice were obtained and Part C Cronbach's Alpha .768 (n=10) identifying the level of perception towards eco-friendly food packaging. Without a doubt, the result from three sections on its reliability was satisfactory and more than appropriate to carry on with any further testing.

Female respondents are more participating in this research compared to the male respondent. The differences between the respondents who are between 18 and 35 years old which is relevant because most of the respondent in this age group still young adults because most of them furthering their degree straight after finished their diploma and also most of them from Sijil Tinggi Pelajaran Malaysia (STPM). The majority of the respondents are from students of Faculty Hotel & Tourism as they are easy to approach due to researcher also from the same faculty.

The student's food habits factor influenced their perception and practice towards eco-friendly food packaging. Most of them stated that the causing factor that influences their perception and practice on eco-friendly food packaging is because of lack of cooking facilities make them often buy packed from outside. Due to this in a likely manner that they claimed they often bought packed food from outside because it is easy, fast, and there is nobody to cook for them owing to living far away from parents. In the same way, goes to the other factor which is they buy packed food on the weekend when hanging out with friends and also they claimed they sometimes use eco-friendly food packaging because they are aware of the environment.

Table 1: Factors Influencing Students Perceptions and Practice

Items	Mean
I often buy packed food from outside because it is easy.	3.63
I often buy packed food from outside because it is fast.	3.57
I often buy packed food from outside because the lack of cooking facilities.	3.81
I often buy packed food from outside because my friend asked me to join them to buy packed food outside the campus.	3.06
I often buy packed food from outside because of the advertisement power (eg. Pizza Hut, KFC advertisement).	3.08
I often buy packed food from outside because I am far away from parents (nobody to cook).	3.58
I often buy packed food during the weekend while hanging with friends	3.40
I am practicing the use of eco-friendly food packaging because of environmental awareness.	3.24
I will be perceived by others as 'outdated' if I do not support environmental protection	2.82

Looking into the awareness about the environment among the respondent revealed the perceptions of respondents towards eco-friendly food packaging that a large number of them agreed food and drinks (hot) packed in plastic bags and polystyrene pose a health hazard. Furthermore, the respondent shares the same opinion that by practicing use eco-friendly food packaging will help in reducing pollution. With that perception, it shows that most of the respondent think that Malaysia's environmental problem is worsening because the community is lacking exposure on eco-friendly food packaging. This is supported by Lee (2008) who discovered that young adults deemed the significance of environmental

issues as the least important factor that influenced them to follow the go green behavior.

Table 2: Perceptions towards Eco-Friendly Food Packaging

Items	Mean
I think Malaysia's environmental problem is worsening	3.98
I think Go Green Campaign is informative for me to know how I can perform green.	3.90
I think the campaign is at the right time.	3.61
I think that, charges for a plastic bag in Penang impose burden, especially for a student.	3.19
I agree that food stall/food court should use paper bags instead of plastic bags	3.84
I have taken responsibility for environmental protection since I was young	3.84
Eco-friendly food packaging helps in reducing plastic bag and polystyrene to be used as a parcel to pack foods and drink.	4.05
In general, food and drinks (hot) packed in plastic bags and polystyrene pose health hazard	4.17
Practicing the use of eco-friendly food packaging will help to reduce pollution	4.15
I agree that the Malaysian community is lack of exposure on eco-friendly food packaging	4.18

5.0 CONCLUSION

Practicing the used of eco-friendly food packaging should be started within one own self. The young adults must give a full effort to sustain this green move. The findings demonstrate that the respondent seems to be influenced by advertisements which convey the information about eco-friendly food

packaging. With this intention, promotional campaign need to be maintained by putting more advertisements in food court, cafeteria or even in any food outlets in order to create interest among them to use green food packaging. Nowadays, young adults (18-25 years) pay much attention to social media and online apps on their gadget so online advertising could be the best medium to convey the information about eco-friendly food packaging. The information about green food packaging needs to be comprehended because the more people who get the knowledge about environmentally friendly food packaging the more people will believe in the green claimed and it can be referred in the findings of the previous section that people who have more knowledge concerning the eco-friendly food packaging are believed to be practicing it. It is important to realize that it is vital to ensure young adults get early exposure because they are the consumers of tomorrow.

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