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**Institute of Foreign Language**

**Department of English**

**Research Methodology 301**

**Research Proposal**

**Title:**

**Student's Perspective on banning plastic product on IFL ground**

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## **ABSTRACT**

The aim of this study was to explore IFL student's perspective on banning plastic products at campus. Therefore, this study was conducted the in-depth interview on 18 respondents who will be selected randomly by the cross-sectional around IFL campus. The ANOVA test, analysis of variance, will be employed to analyze the research data in order to finalize conclusion.

*Keywords: Persepective, plastic products, banning*

## Introduction

Plastic bags were introduced in 1930's (Jambeck, Geyer et al. 2015) and have become an increasing popularity amongst consumers and retailers in marketplaces due to its feature, price, flexibility, and conveniences. Moreover, in a throwaway society, many people tend to spend more on the resources that are unnecessary (Vince 2012, Rajagopal 2017). The manufacturers keep making more products for their large number of customers (Fagan 2003) while those goods are being upgraded from time to time, and it becomes a culture that we need to buy many more accessories or replace with the updated one (Vince 2012). However, this discompose plastics mixed up with other waste materials. Instead of being made into another useful thing, it will only increase the vast amount of various shapes waste in the landfill. That vast consumption of merchandises for using only a short period of time and then throw away contributes to the pollution on the environment and human health (Rajagopal 2017). Based on the prediction, around 500 billion plastic bags will be used every year globally (Spokas 2008), and around 4.8–12.7 Mt of plastics entered the oceans globally in 2010 (Jambeck, Geyer et al. 2015). This widespread of plastic bags utilization will become a vast majority of throw out bags after a single use. Hence it causes acute environmental problems that can be effected in many ways.

Every day, environment has been changing and becoming a challenge in the very unhealthy fact that every nation is struggling to develop their living life form without considering of environmental problems (Jalil, Mian et al. 2013). The death of wildlife, domestic animals, marine and potentially human are the most concern because of the plastic bags persistence and effects. (Jambeck, Geyer et al. 2015). It causes a serious environmental problem required to be solved by exchanging perspectives and experiences globally. This really need effective method to protect global endangered species by having an interaction between the organizations and the people in the society.

The government has the power to promote official advice to general about the quality of the environment and set the standard methods of waste management to business industries, while the public should control their own waste that is harmful to the environment; the governors themselves cannot deal with the waste pollution without involving the key players for modifying their waste production as well as social unity (Fagan 2003). Thus, the performance in solving waste pollution becomes soft and invalid. However, it is common to have some difficulties while processing plans and policies. Encouragement for participating could be the best resolution for this global issue.

Everyone needs to be educated to responsible for the human footprint understanding and reducing the amount of plastic bags as much as possible.(Sheavly and Register 2007)

## **Research background and Motivation**

While Cambodia is a developing country, it is a bit challenging to face with this significant problem. All the wastes are not properly controlled since there is only one waste collecting company in the country, Cintri. Therefore, most of the waste collected as discarded plastic products that is thrown into the dumpsite without any regulation and recycling. Pollution also poses a big problem for Cambodia. 80% of Cambodia's export contributed to the nation's economy are coming from the industry(UNDP 2018). Though it causes by the blockage of sewerage systems or the incapacity of the sewerage system, plus the public plastic products over consumption that leads to severe environmental problems such as water pollution, air pollution. It directly and indirectly effects to wildlife and plants on earth, especially to people's health. Plastic products are consumed for the human convenience but it makes human health more harmful compared to bio-domestic wastes(Adane and Muleta 2011). The government have a significant contributed to deal with these environmental problems, but the solutions are not effective. The results of the collaboration are concluded with only clear guidance and the monitoring system over the waste disposal. The government alone will not be enough without the engagement of business owner, and citizens. All in all, the organization that relevant waste management in Cambodia should find other possible solutions to make effective.

## **Problem Statement**

In the present day, in order to deal with current environmental problems, Cambodia has tried to apply the domestic waste management by separating trash into their categories, and apply recycling, reduce and reject strategies, but it seems ineffectively practice. The huge amount of plastics has been heavily used by human all around the country and only a small percentage of it is being recycle in a thousand year(Barlaz 2006). As a result of this, massive of plastic wastes are now piling up both on land and in water. Cambodia is no exception because the plastic waste is a global matter which cannot be overlook. In Phnom Penh the city of Cambodia is now starting to fill with lot of plastic waste that are being dump from inside and outside of the country.

Due to this problem a particular university in Phnom Penh call Royal University of Phnom Penh (IFL) will set a policy to all the student study there to cut down on the plastic and start using the non-plastic

product, and ban students from using plastic products in campus. The university also encourage the student to recycle the plastic product and reuse it as possible. Thus, this study explores the IFL student's perspective toward the banning plastic products at university campus.

### **Research Objectives and Questions**

This study will conduct in-depth interview as the research design to find out the IFL student's perspective on banning plastic products at campus. Based on research motivation and research contribution, the following research questions and research objectives are developed.

1. To find out the most factor that motivates IFL students to use plastic products.
2. To measure the IFL student's perception on banning plastic products at campus.

To achieve the above-mentioned research objectives, two research questions formulated to understand better the theoretical and practical issues are listed as the following:

1. What are the most important factors influencing IFL students to consume plastic products?
2. How is the IFL student's perception to banning plastic products at campus?

To answer these research questions, this project empirically invited consumers to participate in the in-depth interview. Qualitative design was conducted to explore student's perception of banning plastic products which leads to their decision to stop or reduce their plastic usage.

### **Research Contribution**

This study was expected to contribute significant results to the following sectors:

**Academic communities:** this study would serve as a material of reference and provides essential information, knowledge, concepts and its result to readers who aim to improve their knowledge in order to enlarge a study similar to environmental protection.

**Environmental Authorities:** this study would help authorities to understand better about current environmental situation and environmental problems leading to finding out the solution so that they can introduce the right strategy to protect our communities. Thus, it would help the communities to design right environmental future plan effectively.

**Citizen:** this study would provide people with a fundamental knowledge of how can general people can help environment by reducing plastic consumption; therefore, they can make a wise and effectively change into the global protection.

## **Literature review**

### **History of Plastic**

In 1856, the earliest form of plastic called Parkesine was made by English chemist Alexander Parkes. Parkesine is a material that obtain from cellulose which can be molded when it is heated and fixed its shape when cooled. He showcased his works at the International Exhibition of London in 1862 and during Exposition Universal of Paris he displayed a series of products that created by the semisynthetic resin which is called ivory.

The problem is that ivory become scarce and needed to find a new substitute product. So, in 1869 the American typographer John Wesley came up with celluloid after many experiments with Parkesine. Celluloid is derived from cellulose and alcoholized camphor (Mary, 2020).

In 1907, Belgian chemist Leo Hendrick Baekeland came up with a new material call Bakelite that became a successor to the earlier artificial plastic materials. Bakelite is an improved version of phenol-formaldehyde reaction and also it is a first completely synthetic resin to be success. It takes over the world of plastic for half a century. This material is so popular because it can be colored and polished. So, it was made into many domestic electrical products.

In 1913, another invention of plastic was created called cellophane. Cellophane is a thin, transparent material made from cellulose, used as a moisture-proof wrapping for foods, tobacco, etc (Your Dictionary). Its properties are that it is transparent and impermeable which used in a lot of packaging field.

In 1935, a different type of plastic was created by the American chemist Wallace Carothers at the chemical laboratory of Dupont. It is mainly used in textile industry. After few years, Rex Whinfield and James Tennant Dickson obtain a patent for the polyethylene terephthalate (PET). It begins to took off when after the second World War as they use it for parachutes, sweaters and shirts that doesn't required ironing.

March 11<sup>th</sup> 1954 was the years of plastic began to took off, Giulio Natta wrote in his diary "Made the polypropylene". Plastic product start to took over the tradition material like metal or steel. It was used in almost products from toys, bowls, to some parts of car. It continues to take over the use of other material and make it available for everyone.

After that, it was used as a food packaging in 1973, when American engineer Nathaniel Wyeth was challenge and try to find a way to replace glass container with plastic base product. This process took him many tests until in 1977 when a new method of producing plastic bottles appear. The process is to use a special mold to lessen the fibers so the molecules of the material can align properly and make it stronger.

In the 90s up until now, people start to see how plastic damage the environment. So, they start to find a way to create it with less impact on the earth.

### **Reason why people use plastic**

Plastic are now in every products of our living life. According to the plastic industry, 90 percent of grocery bags in the U.S. are still plastic. Plastic has a property that are strong, lightweight, and moldable which make it the perfect material for packaging, used in transportation parts, energy efficiency, and electronics. Also, there are many researches trying to measure whether paper or plastic is good for the environment and it come down to how it is measured (Brown, 2014). For example, it takes twice the amount of energy to make paper bags than to make plastic. In addition, paper bags production emits two times more pollution and more waste. Furthermore, plastic bags production cost 1 to 2 cents compare to paper bag that run for 4 to 5 cents. That is why people use plastic over other material.

### **The effect of over-plastic consumption on animal and people**

Since the population growth rapidly over the last century. Therefore, the amount of plastic consumption increases every year as well. In 1950, There was only 2.5 billion people on our plastic and they dispose plastic only 1.5 Million tons a year. While the population in 2016 growth triple times if we compare to the population in 1950, and the plastic waste that people produced every year, is also increase from 1.5 Million tons a year to 320 Million tons a year (Sewage, n.d.). Sooner or later, there will become a huge issue for all societies the world, and it will impact a lot to people and environment in respect of plastic pollution. Generally, it's harmful for animal. In some countries around the world, plastic waste end up in water stream such as sea or river. Therefore, some marine mammals eat it as food, and the plastic stuck in their stomach (Post, 2018). Moreover, it indirectly affects to the human's health. By this mean that, people was taken a chemical substance through their food chain (UNnews, 2011). Therefore, some institute or government try to address this issue.

### **Solutions for addressing plastic issues**



Since the Plastic Pollution become one of the major issues in every society, people try to find any alternative to solve this issue; and there is some possible solution for solving this problem. Firstly, educate the business or corporation is one of the most effective solution. Rinkesh tries to detail that business or corporation should replace their packing or using plastic by using other material instead. For example, instead of using Plastic strew, they use bamboo strew (RinKesh, n.d.). Furthermore, 3 Rs is the one of the most effective for dealing with this challenging issue. Reduce, Reuse, and Recycle could help deal with any issue such as plastic pollution, global warming. etc. Moreover, banning plastic has become one the most popular solution for solving this problem which it has been implemented in many countries already such as Thailand. Thailand was completely banned plastic bag in 2020 and they were a topped sixed country that dumped waste into the sea, but after application of this banning plastic bag policy, Thailand was dropped to topped tenth country that dumped waste into the sea (Chankaew, Thailand kicks off 2020 with plastic bag ban, 2020). While banned plastic has become a popular solution for people to use it, so how people think about this alternative.

### **People attitude and perspective from Asian Member country**

Plastic Pollution do not only impact environment; but also, effects on people's health by absorbing chemical substance through food chain (UNnews, 2011). Therefore, it leads government to take an action to reduce plastic pollution as well as some university are trying to banned plastic consumption in their campus. With this new policy, there's always some positive perspective and negative perspective.

Recently Thai authority are trying to ban plastic consumption and expecting that it will be completely banned in 2021 and there's some perspective regarding first plastic ban's rule; they said first they don't used to it because normally they go shopping without bring bag or anything to keep their staff (Chankaew, Thailand kicks off 2020 with plastic bag ban, 2020). Similarly, in Singapore, National university of Singapore (NUS) has banned plastic straw in their campus because every year Singaporean use approximately 37 million straws, and some people give speech about straw banned in the campus that by banning straw is just a reason to reduce expense and save their reputation and they also added that straw is useful for certain group of people as they have a sensitive tooth. (Hicks, 2018).

## **Research Methodology**

To answer the question about how student will react to the banning of plastic products on IFL ground, it is crucial to find the right approach and tools for this research.

### **Research Design**

Cross-sectional study design will be used in this research because of limited resources. It will be done with the help of the year 2 and 3 students of DOE in IFL as participants. Random people from sophomore and junior year will be selected as they have studied and experienced IFL more than a year; thus, they can express their perspective clearly than freshman. Moreover, qualitative research will be used as a research approach because of a few reasons. Firstly, the unstructured and flexible nature of this method will allow the researcher to get more in-dept information about student's perspective on the banning of plastic product on IFL ground. Secondly, the researcher can retrieve more insights or finding on the topic that he or she would not initially expect. Lastly, by interviewing different people will give the research diverse insight of the study, which will be analyzed and studied and help the research answer his research question and also reach the conclusion.

### **Sampling**

As mentioned before, in this research, 15 participants will be selected randomly from year 2 and 3 from DOE in IFL. By selecting the sampling from these academic levels, it can allow the research to get a relevant and valid information as they have already spent their time in IFL over a year. Besides, in order to get accurate data, student from all shifted will be selected for the interview and 5 students will be selected from morning, afternoon and evening shift.

### **Research Instrument**

Secondary data from other authors and research alone cannot fill the gap of the study, so the primary data will be collected by the researcher from the participants through an in-dept interview following by unstructured and semi-structured format to ensure that participant feel free to express their personal experiences and view on the topic. The format may differ from one participant as it can also allow the researcher to engage with them easily and receive more in-dept insights. By doing so, it allows the researcher to receive differ response and accurate data. Besides, semi-structured format will be used as a leading question to keep the participant from providing wrong information, and also

to give them time to think of new idea that might occur during the interview. Moreover, the researcher will ask for participants' consent for recording the interview for analyzing later.

### **Data Analysis**

In order to keep all of this data, SPSS, data management software, will be used to help managing the data which will be analyzed and translated into information for the study.

### **Ethical Issue**

Before conducting the interview, the researcher will ask for the participant's consent and make sure that all of the information that receive from the participants will be kept with confidentiality and anonymity. All participants join the interview voluntary and have the right to stop their participation at any time.

### **Problem and Limitation**

The main issue of this study is the process of finding participant for the interview as it is hard to approach them and find the right time for every participant. Another issue is that the participants might not give sufficient information for our study which can also lead to inaccurate data. It is also concerned that the study's question might not meet the researcher's purpose; thus, it will lead to inaccurate and invalid data.

### **Working Plan:**

After selecting a topic to work on, our team started by reviewing the past literature work from another author that worked on the same topic. Then, we tried to combine all the ideas together and draw out the similarity of their works with our and find the gap of their study. Next, we started to conducting a research question for our study and this will be answered after we get all the information from the participants. By the end of February, we have finished our literature review and research question. In march, we will start designing interview questions for our participants and starting to select the participants from each year and shift. The process of gathering the participant is long as it is hard to find the right participant and time for them to join. We start our interviewing in the early April, and the interview will probably last a day, if we can find the right time for our participants. After the interview, we will collect all the data and transfer it to SPSS for further analyze and interpret into useful information for our study. By the middle of May, we will have our first draft of the research. After that, we will consult it with our Lecturer for other errors and problems from the study.

Finally, we hope to submit the final draft of our study by the end of June. The working plan can be found in the appendix and is put as figure 1.

### **Conclusion**

In conclusion, by the end of this research, we hope to find the answer to our questions which are to understand the reason behind why they like to use plastic product and the reaction of IFL student when plastic product is banned on university ground. We will use qualitative method follow up by an in-dept interview to have a clear understanding on their perspective and to answer our question. The challenge for this study is the process of gathering the participant for our study, but we believe that IFL student are opened up for this research. The result and finding will carefully check over the time to provide the best answer for the research.

### **Appendix:**

|   | Jan | Feb | Mar | Apr | May | June |
|---|-----|-----|-----|-----|-----|------|
| <b>Selecting Research topic</b>                                 | ✓   |     |     |     |     |      |
| <b>Conducting Literature Review</b>                             |     | ✓   |     |     |     |      |
| <b>Conducting a Research Question</b>                           |     | ✓   |     |     |     |      |
| <b>Designing a research question and selecting participants</b> |     |     | ✓   |     |     |      |
| <b>Conducting an interview</b>                                  |     |     |     | ✓   |     |      |
| <b>Analyzing and interpreting the data</b>                      |     |     |     | ✓   |     |      |
| <b>First draft of the study</b>                                 |     |     |     |     | ✓   |      |
| <b>Final submission</b>   |     |     |     |     |     | ✓    |

Figure 1: Working plan

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