

CHAPTER I

INTRODUCTION

1.1 Background

Plastic bag was created to save the environment in the first place by a Swedish engineer named Sten Gustaf Thulin. Thulin was born in the year 1914, at that time consumers only had paper bags as it were the only bag of choice to carry their goods from store to home. Thulin was fed up that when the increase in the usage of paper bags, the increase in the usage of paper bags leads to more trees being torn down just to fulfil consumer's needs. In 1965 Thulin invented the modern-day plastic bag and officially introduced it to the world after a packaging company that he worked for named Celloplast (Skager, 2022). Since then, plastic bags quickly began to replace cloth and paper bags in Europe to carry from store to home (United Nations Environment Programme, 2018). Plastics bags was introduced towards the consumers of Indonesia by the 1960s right after Thulin introduced invented it (Hanggoro, 2019). After the plastic bag was introduced in Indonesia the production became massive and it became popular and a tool that is simple, cheap, lightweight, and portable to carry goods after shopping.

The main goal of the invention of plastic bag was to save the environment as paper bags and cloth bag needed a lot of natural resources to create such as water, while plastic uses fewer natural resources. What made plastic dangerous of today is our behaviour as consumers not using plastic bag wisely, consumers often use plastic bag once after they buy groceries and always ask more when they go grocery shopping again rather than bringing their plastic bags from home for shopping. According to an article on sustainable shopping by National Geographic, Plastic bags that are not handled properly end up becoming litter, which makes plastic bag doing more harm in today's world to the environment than good, In 2019 a young whale died in the gulf of Davao, Philippines. Researchers found that the whale had starved to death because it consumed 90 lbs or equivalent to 40 kg of plastic from the ocean (Borunda, 2019). The effect of consumers on the irresponsible use of plastic leads the government in many countries worldwide in creating certain limitations in the spread of plastic bags. South Africa banned the use of plastic in

2003, Somalia in 2005, Tanzania in 2006, in Kenya, Uganda, Belgium in 2007 while Italy and France banned the use of plastic bags in 2010 (Ari & Yilmaz, 2017).

In recent years, public concerns about Indonesia's environmental safety have been increasing (World Bank, 2021). One of the indicators is the increase in the consumption of plastic bags. *Kementrian Lingkungan Hidup dan Kehutanan* or the Indonesian Ministry of Environment and Forestry estimates that the consumption of plastic bags in Indonesia reaches 9.8 billion by 2016 (SEA Circular, 2019). The concerns have created changes in consumers perspectives towards sustainability. The definition of "sustainability" varies, the definition of sustainability that suits for this research is the consumption which explains the purchase, use and disposal of products in a manner which reduces environmental harms (Chang & Chou, 2018). Today many consumers are aware about sustainability and are willing to act to contribute towards creating a better environment. In practice some consumers may pretend to adopt greener options when they are surveyed (Chang & Chou, 2018) As an example plastic bag, consumers are aware that plastic bag is causes a lot of harm to the environment, however, consumers tend to prefer to use plastic bags as long it is provided and available in shops due to its convenience (Ari & Yilmaz, 2017; Chan et al., 2008; Lan Vi & Dinh Minh Tri, 2020).

Indonesia is home to the world's largest archipelago with more than 17,000 islands and it ranks as the fourth most populated country in the world with a population of 273 million people (*Population, Total - Indonesia | Data*, 2022), which stands behind China, India, and the United States. Which is not a big surprise if Indonesia contributes lots of plastic waste. The amount of plastic waste generated in Indonesia is growing in an unsustainable level (National Plastic Action Partnership, 2020). Cities and municipality in Indonesia produce an estimated 105 thousand tons of solid waste. per day, a number that is expected to increase to 150 thousand tons by 2025 (World Bank, 2021). Fifteen percent of waste in Indonesia comes from plastic (Gultom, 2020).

Table 1. 1: Waste estimates in 2010 for top twenty countries ranked by mass of mismanaged plastic waste (in units of millions of metric tons per year)

Rank	Country	Econ. classif.	Coastal pop. [millions]	Waste gen. rate [kg/ppd]	% plastic waste	% mismanaged waste	Mismanaged plastic waste [MMT/year]	% of total mismanaged plastic waste	Plastic marine debris [MMT/year]
1	China	UMI	262.9	1.10	11	76	8.82	27.7	1.32–3.53
2	Indonesia	LMI	187.2	0.52	11	83	3.22	10.1	0.48–1.29
3	Philippines	LMI	83.4	0.5	15	83	1.88	5.9	0.28–0.75
4	Vietnam	LMI	55.9	0.79	13	88	1.83	5.8	0.28–0.73
5	Sri Lanka	LMI	14.6	5.1	7	84	1.59	5.0	0.24–0.64
6	Thailand	UMI	26.0	1.2	12	75	1.03	3.2	0.15–0.41
7	Egypt	LMI	21.8	1.37	13	69	0.97	3.0	0.15–0.39
8	Malaysia	UMI	22.9	1.52	13	57	0.94	2.9	0.14–0.37
9	Nigeria	LMI	27.5	0.79	13	83	0.85	2.7	0.13–0.34
10	Bangladesh	LI	70.9	0.43	8	89	0.79	2.5	0.12–0.31
11	South Africa	UMI	12.9	2.0	12	56	0.63	2.0	0.09–0.25
12	India	LMI	187.5	0.34	3	87	0.60	1.9	0.09–0.24
13	Algeria	UMI	16.6	1.2	12	60	0.52	1.6	0.08–0.21
14	Turkey	UMI	34.0	1.77	12	18	0.49	1.5	0.07–0.19
15	Pakistan	LMI	14.6	0.79	13	88	0.48	1.5	0.07–0.19
16	Brazil	UMI	74.7	1.03	16	11	0.47	1.5	0.07–0.19
17	Burma	LI	19.0	0.44	17	89	0.46	1.4	0.07–0.18
18*	Morocco	LMI	17.3	1.46	5	68	0.31	1.0	0.05–0.12
19	North Korea	LI	17.3	0.6	9	90	0.30	1.0	0.05–0.12
20	United States	HIC	112.9	2.58	13	2	0.28	0.9	0.04–0.11

*If considered collectively, coastal European Union countries (23 total) would rank eighteenth on the list.

Source: (Jambeck et al., 2015)

Previous research done by (Jambeck et al., 2015) shows the waste input towards the ocean, it is also stated that there is an economic classification. The classification is based on the measure of the national income per individual, which are categorized into four income groups: HIC (High Income) are countries that has a gross national income (GNI) per capita of \$12,375 or more, UMI (Upper to Middle Income) are countries that have a GNI per capita between \$3,996 and \$12,375, LMI (Lower to Middle Income) are countries that have a GNI per capita between \$1,026 and \$3,996, and LI (Lower Income) are countries that have a GNI less than \$1,025 (Prydz & Wadhwa, 2019). Indonesia ranks in the second place and stands in the lower to middle income category with 10,1% of plastic waste is mismanaged.

Reducing the use of plastic bags is important to create a greener environment, since (Arı & Yılmaz, 2017). By 2018 the consumption of plastic bags in Indonesia reaches 10,72 billion (Arief, 2020). Plastic bags has become popular because of their durability but, it creates an environmental damage since it takes a long time to biodegrade (Hohmann et al., 2016). Plastic takes time to fully

biodegrade, they break into smaller pieces which release toxic gas into the air and contaminate the environment, in addition to plastic bags, the lightweight design causes plastic bags to travel easily through air and water, in some cases plastic bags ends up creating fields of litter and clogging sewers and rivers which leads disasters such as flooding.

In Jakarta, the capital city of Indonesia, the consumption of plastic bags is estimated to reach 5,2 to 6,5 tons of plastic bags per day with the population of 11,25 million (Kusnandar & Mutia, 2021) and at the same time, total of plastic waste of the city reaches 978 pieces per day (Wijaya, 2019). To reduce the waste and spread of plastic bags, the government made a regulation (*Surat Edaran Nomor: S.120/PSLB3-PS/2016*) on the mechanism to add a fee for single-use plastic bags in modern retail stores nationwide in the *surat edaran*. It is agreed by APRINDO (*Asosiasi Pengusaha Ritel Indonesia*) or Retail Association of Indonesia, that the minimum fee for single-use plastic bags is set at Rp 200/piece include Value Added Tax which is applied in certain provinces (Lusnita, 2019). Studies have proven that the use of plastic bags would be easy to avoid if there is an availability for other substitutes (Hohmann et al., 2016).

There has been several campaigns on stopping the spread of plastic bags in Indonesia by NGO's and multinational companies such as “#Nostrawmovement” in 2017 by KFC Indonesia, where KFC Indonesia does not provide straw to its consumers anymore (KFC Indonesia, 2017), “#Berubahdarirumah” which translates to change from home, *Gerakan Indonesia Diet Kantong Plastik* (Indonesia Plastic Bag Diet), and McDonalds Indonesia (*#Mulaitanpasedotan*) on its campaign on banning straws for consumers in 189 of its chain stores nationwide (McDonald's Indonesia, 2018). Unfortunately, the campaigns have not helped reduce the usage of plastic significantly in Indonesia. The campaigns that are proposed is only effective towards big shops or shops that have a franchise across Indonesia, since they have a brand, association that the members are nationwide, close relations to the government, and do not rely on only one location to operate their businesses. On the other hand, the campaigns did not reach small businesses or SME's as most small businesses are independent and do rely a lot on their

consumers, which would not be easy for them to just leave and not provide simple convenient courier bags such as plastic bags for their customers.

Bali is one of the most visited islands in the world by local and foreign tourist, with the population of 4,320,000 (Badan Pusat Statistik Provinsi Bali, 2021) the population of male is 2,219,600 by 2022 and 2,195,500 by 2022 for the population of female (Badan Pusat Statistik Provinsi Bali, 2021). The minimum wage in Bali is Rp. 2,516,971,00 by 2022. In 2021, the average non-food expense in Bali is Rp. 840,152,00/year and the minimum wage in 2021 is Rp. 2,493,523,00 (Badan Pusat Statistik Provinsi Bali, 2021).

Before the COVID-19 pandemic occurred in 2020, by 2019, Bali received six million tourists, by 2021 it reached its lowest point in history where only 45 tourists who visited Bali for holiday (Bostock, 2021). The tourism industry in Bali contributes up to 40% of Indonesia's national foreign exchange, with the Domestic Regional Product of Rp 99,5 billion (Khamdevi & Bott, 2018). The tourism industry helps the growth of Bali's economy, but the downside of tourism in Bali before the pandemic occurred was over tourism. Over tourism is when there are too many tourists or visitors at a particular destination. Over tourism leads to environmental and social damage, the social damage is the culture, and the residents that must cope with the density of visitors, while the environmental damage leads to plastic pollution because the people visit the more waste gets left behind (DeSmit, 2019; Peeters et al., 2018).

In Bali there has been a campaign that helped push the government to act and ban the use of plastic bags, the campaign was proposed by two young lady named Melati (18 years old) and Isabel Wijisen (16 years old). The name of the campaign is Bye Bye Plastic, where they got the idea after a class lesson at school talking about influential world change makers such as Nelson Mandela in South Africa, Martin Luther King Jr in the United States, and Mahatma Gandhi in British India (Which is India and Pakistan) who made changes to their nations and inspired the world. The siblings put a word out through one of the biggest tools in the world today to spread their campaign which is social media. One local media noticed the sibling's campaign and that is when they caught the governor's named I Made

Mangku Pastika. Pastika called the siblings and signed a Memorandum of Understanding (MoU) with the siblings to work together and help Bali to clean its plastic mess (Sullivan, 2019). Unfortunately there is no clear data or research that studies on the consumer intention on using alternatives of plastic bags in Bali and how far does the campaign help shift consumers motives. Bali is also one of the 34 provinces in Indonesia that agrees to ban the spread and use of plastic bags and act by making a governor regulation.

When Wayan Koster the new governor of Bali took oath in 5th of September 2018, He accepted the recommendations from the previous governor and campaigns from individuals to regulate and ban the use, spread of plastic bags, polystyrene, and plastic straws (Hasan & Kurniawati, 2018). Koster issued a Governor regulation no. 97 which regulates on the spread of plastic was applied from modern to traditional shops in municipalities and cities across the island. To fulfil consumers needs to replace plastic bags, shops have been providing alternatives to substitute plastic bags (Gapura Bali, 2019). The governor regulation helped to shift consumers towards a greener lifestyle and reduce plastic waste in Bali.

Since the new governor regulation was applied, consumers had no choice but to leave the habit of using plastic bags for shopping. Shops are obligated to provide other alternatives of shopping courier for their customers, to encourage consumers to leave the dependability of using plastic bags, some of the alternatives that are introduced by shops in Bali are: Cardboard boxes, Cassava bags, Cloth bags, and Paper bags. The reason five of the substitutes are chosen is because it has the same durability as plastic bag, and it can be reused for shopping.



Figure 1. 1: Marketing campaign to use cloth bags for shopping

Source: (Putri, 2019), (Accessed on the 9th of March 2022)

The picture above is a campaign that is made by Transmart Carrefour, they would like to motivate and help consumers to shift their consuming behaviour from using plastic bags so that consumers could use cloth bags as an alternative for carrier more than once for shopping.



Figure 1. 2: A photo of a paper bag from KFC Indonesia
Source: <https://twitter.co/KFCINDONESIA>, (Accessed on the 4th of April 2022)



Figure 1. 3: A picture of cardboard boxes that are used to substitute plastic bags in Bali

Source: (Windri & Budiarti, 2019), (Assessed on the 2nd of April 2022)



Figure 1. 4: Cassava based shopping bag

Source: Avanieco.com (accessed on 2nd of April 2022)

In 2020, when the COVID-19 pandemic occurred, the spread of plastic bags began to take place again in Bali, during the early day's governor Koster was in office, the usage of plastic bags and Styrofoam had a significant downfall, but when the COVID-19 pandemic happened there has been an increase in the usage of plastic bags and Styrofoam. Consumers are seen to be consuming plastic bags and Styrofoam for packaging take away foods (Dhae, 2021). Hence, the researcher thinks that there needs to be researched to better understand the consumer intention on what motivates consumers to choose alternatives of plastic bags.

Based on the background that the researcher elaborates, the researcher would like to propose and conduct research on consumer intention on the usage of grocery shopping bags (alternatives of plastic bags). This research will be using the Theory of Planned Behaviour (TPB) which includes Attitude, Subjective Norms, Perceived Behavioural Control, Behaviour towards the Intention, and Intention in using alternatives of plastic bags. Two added variables that is cited from (Chang & Chou, 2018) which are Deontological Evaluation and Teleological Evaluation to better understand the intention behind the usage of grocery bags and what motivates

consumers to still use alternatives to substitute plastic bags. The title of this research would be “DEONTOLOGICAL AND TELEOLOGICAL EVALUATION INFLUENCE ON THE CONSUMER INTENTION IN USING ALTERNATIVES OF PLASTIC BAGS”.



1.2 Research Problem

Based on the background described above and previous study mention in the introduction part above, the research problems is described as below:

1. Is there a positive effect between Deontological Evaluation towards Attitude, Subjective Norm, And Perceived Behavioural Control in the intention of using alternatives of plastic bags?
2. Is there a positive effect between Teleological Evaluation towards Attitude, Subjective Norm, and Perceived Behavioural Control in the intention of using alternatives of plastic bags?
3. Does Attitude affect the intention towards using alternatives of plastic bags?
4. Does Subjective Norm affect the intention towards using alternatives of plastic bags?
5. Does Perceived Behavioural Control affect the intention of using alternatives of plastic bags?

1.3 Research Objectives

According to the research problem formulated above, the research objective of this research are as follows:

1. To examine the influence of Deontological Evaluation on the intention to use alternatives of plastic bags.
2. To examine the influence of Teleological Evaluation on the intention to use alternatives of plastic bags.
3. To examine the influence of Attitude of shopping on the intention to use alternatives of plastic bags.
4. To examine the influence of Subjective Norms on the intention to use alternatives of plastic bags.
5. To examine the influence of Perceived Behavioural Control on the intention to use alternatives of plastic bags.

1.4 Research Limitation

To keep the research according to the main goal, there are some limitations towards this research, which is:

1. The subject of this research is focused on respondents who at least has used alternatives of plastic bags such as cardboard boxes, cassava bags, paper bags and cloth bags or bring their own bag for shopping who live in Bali.
2. The object of this research is the alternatives of plastic bags which are cardboard boxes, cassava bags, paper bags, and cloth bags.
3. The variable of this research is divided into two parts which are dependent variable and independent variable. The dependent variable in this research are Deontological Evaluation and Teleological Evaluation. While the dependent variable consists of Attitude (ATT), Subjective norm (SN), Perceived Behavioural Control (PBC), and Intention to use alternatives of plastic bag (INT).

1.5 Research Contributions

This research is conducted to meet the expectation to contribute in some aspects based on the problem and objectives are as follows:

1. Implication for Practitioners

The researcher wishes that this study gives a deeper understanding and knowledge for others especially for businesses that can benefit from understanding the consumers intention on using alternatives of plastic bags policy makers should spend more time and reshape consumers attitude on using alternatives of plastic bags

1. Theoretical Application

The researcher wishes that this study could give a new contribution and knowledge to the readers and hope that the readers could benefit Theory of Planned Behaviour and understand what influences the consumer's intention in using alternatives of plastic bags.

1.6 Writing Systematic

This research is going to be written with the systematic order as follows:

CHAPTER I Introduction

This chapter consists background of the research, the research problem, research objectives, research contribution, and research structure.

CHAPTER II Literature review

This chapter consists of the basic theory, the explanation of theories related to previous research and study, definition and explanation of terms, research framework and the hypothesis development.

CHAPTER III Research Design

This chapter contains research methods consists of time and place in the research, sample population, sampling method, data gathering method, instrument testing method and the analysis method.

CHAPTER IV Data Analysis & Discussion

This chapter consist of the explanation of data analyses and the discussion of the result of this research.

CHAPTER V Conclusion and Suggestion

This chapter contains the conclusion, the limitation, and the suggestion for further research.