

## **CHAPTER 2**

### **FACTOR INFLUENCING**

This chapter covers the ideas, theories, and earlier research that are pertinent to younger people's intentions and behaviour when it comes to cutting down on plastic waste through online purchasing. The application of the Theory of Planned Behaviour (TPB) is used to explain how attitude, subjective norms, and perceived behavioural control affect people's intentions to engage in pro-environmental intention. This chapter also emphasizes the growing problem of plastic trash brought on by the quick growth of e-commerce.

#### **2.1. Extended Theory of Planned Behavior**

The Theory of Planned Behavior (TPB) proposed by Ajzen (1991) explains that behavioural intention is the most significant predictor of actual behavior and is influenced by three main constructs: attitude, subjective norms, and perceived behavioural control. In recent studies, TPB has been extended to better explain complex behaviours, particularly in the context of pro-environmental actions and digital consumption. This extended framework allows us to capture both internal psychological factors and external constraints that influence individual decision-making.

Attitude refers to an individual's evaluation of a behavior, where positive environmental awareness tends to strengthen the intention to reduce plastic waste (Sun & He, 2023). Subjective norms reflect perceived social pressure from family, peers, and digital communities, which play a significant role in shaping pro-

environmental behavior, especially among younger generations (Herabadi et al., 2023). Meanwhile, perceived behavioural control (PBC) refers to the perceived ease or difficulty of performing a behavior and is often found to be one of the strongest predictors of intention in sustainability-related studies.

Behavioural intention represents an individual's readiness to engage in a particular action and is directly influenced by attitude, subjective norms, and PBC (Ajzen, 1991). However, previous research highlights the existence of an intention–behavior gap, where individuals may have strong pro-environmental intentions but fail to translate them into actual behavior. In the context of online shopping, limited control over packaging decisions further complicates the relationship between intention and behavior.

## **2.2. Online Shopping Behavior and Its Impact on Environment**

Online shopping has transformed consumer behavior by offering convenience, accessibility, and efficiency through digital platforms. However, this shift has also introduced environmental challenges, particularly in the form of increased packaging waste. Unlike traditional retail, e-commerce requires individual packaging for each transaction, often involving multiple layers of plastic materials such as bubble wrap and plastic mailers.

As a result, online shopping generates significantly more waste compared to offline shopping. A study found that online shopping produces approximately 4.8 times more packaging waste than offline retail for the same level of expenditure (Nguyen et al., 2022). On a global scale, plastic packaging production reaches

around 86 million tons annually, with less than 14% being recycled, highlighting the inefficiency of current waste management systems (World Economic Forum, 2020).

Furthermore, the rapid growth of e-commerce continues to drive the demand for plastic packaging, contributing to environmental degradation. The widespread use of single-use plastics not only increases landfill waste but also contributes to marine pollution and microplastic contamination (Jambeck et al., 2015). These findings indicate that online shopping plays a significant role in accelerating plastic waste generation, making it an important area of study in understanding sustainable consumer behavior.

### **2.3. The Increase of Plastic Waste**

Plastic waste has become a major global environmental issue due to increasing production and consumption patterns. Global plastic production has reached approximately 460 million tons annually, with a significant portion ending up as waste (OECD, 2022). A large share of this waste comes from single-use plastics, which are designed for short-term use but stays in the environment for hundreds of years (UNEP, 2021).

The environmental impact of plastic waste is particularly evident in marine ecosystems, where approximately 11 million tons of plastic enter the oceans each year, posing serious threats to biodiversity (UNEP, 2021). In addition, only about 9% of plastic waste is recycled globally, while the rest is either landfilled or

improperly disposed of, contributing to long-term environmental pollution (OECD, 2022).

In recent years, the rise of digital consumption has further intensified plastic waste generation. The growth of online shopping has increased the demand for single-use plastic packaging, adding to the existing environmental burden. This highlights the importance of understanding how modern consumption patterns, particularly in e-commerce, contribute to the ongoing plastic waste crisis.

The crisis has been increasing each year , so it creates a big pile of junk of plastic waste that is uncontrollable and mismanaged each year. Digital platform has become the main drivers of the pile of the plastic waste. Ever since e-commerce has engaged in people's daily activities, which gave them the convenience and the more time efficient options to shop for their daily needs.