

**INTENTION TO RECYCLE ON WASTE AMONG  
MICRO-ENTREPRENEURS IN KOTA BHARU  
KELANTAN**

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**DEGREE OF BACHELOR OF ENTREPRENEURSHIP (COMMERCE) WITH  
HONOURS**

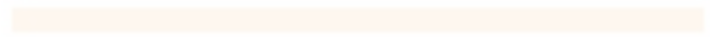
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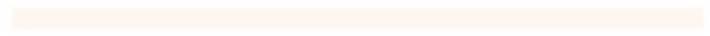
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**INTENTION TO RECYCLE ON WASTE AMONG  
MICRO-ENTREPRENEURS IN KOTA BHARU  
KELANTAN**

by

**Iryne Athirah Binti Shahrol Anuar, Lau Wen Yong,  
Nur Syaamimi Binti Hassan, Waffa Irdani Eyrma Binti Saimon**

A thesis submitted in fulfillment of the requirements for the degree of  
Bachelor of Entrepreneurship (Commerce) With Honours

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**Faculty of Entrepreneurship and Business  
UNIVERSITI MALAYSIA KELANTAN**

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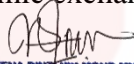
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1.	<b>Content (10 MARKS)</b> (Research objective and Research Methodology in accordance to comprehensive literature review)  Content of report is systematic and scientific (Systematic includes Background of study, Problem Statement, Research Objective, Research Question) (Scientific refers to researchable topic)	Poorly clarified and not focused on Research objective and Research Methodology in accordance to comprehensive literature review.	Fairly defined and fairly focused on Research objective and Research Methodology in accordance to comprehensive literature review.	Good and clear of Research objective and Research Methodology in accordance to comprehensive literature review with good facts.	Strong and very clear of Research objective and Research Methodology in accordance to comprehensive literature review with very good facts.	____ x 1.25  (Max: 5)	
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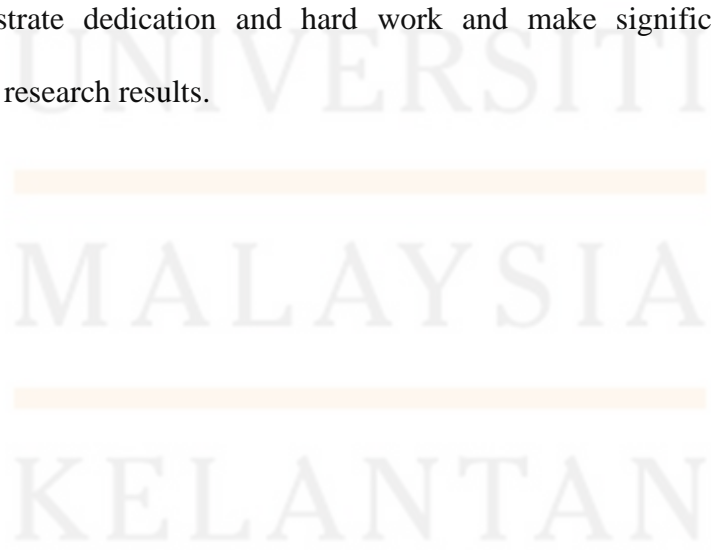
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		Data analysis is not supported with relevant output/figures/tables and etc.	Data analysis is fairly supported with relevant output/figures/tables and etc.	Data analysis is adequately supported with relevant output/figures/table and etc.	Data analysis is strongly supported with relevant output/figures/table and etc.	___ x 1 (Max: 4)
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		<b>TOTAL (50 MARKS)</b>				

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## LIST OF ABBREVIATIONS

No.		
1	A	Attitude
2	SN	Subjective Norm
3	PCB	Perceived Behavioral Control
4	IV	Independent Variable
5	DV	Dependent Variable
6	H1	Hypothesis One
7	H2	Hypothesis Two
8	H3	Hypothesis Three
9	Sig	Significant
10	MSW	municipal solid waste
11	SME	Small Medium Enterprise
12	MSMEs	Micro, Small and Medium Enterprises
13	KBMC	Kota Bharu Municipal Council
14	MSBR	Malaysian Measurable Business Registry
15	DOSM	Department of Measurement and Measurement Malaysia
16	SDG	Sustainable Development Goal
17	TPB	Theory of Planned Behavior

## ABSTRAK

Kajian ini bertujuan untuk mengkaji hasrat kitar semula sisa dalam kalangan usahawan mikro di Kota Bharu, Kelantan. Ini adalah reka bentuk kuantitatif di mana soal selidik telah digunakan sebagai alat untuk pengumpulan data. Melalui kemudahan dan teknik persampelan berstrata, 341 usahawan mikro di Pasar Siti Khatijah, Pasar Besar 12, Pasar Wakaf Che Yeh dan Bazar Tok Guru terlibat dalam kajian ini. Analisis deskriptif digunakan untuk menerangkan latar belakang demografi responden, manakala Korelasi Spearman digunakan untuk menganalisis hubungan pembolehubah menggunakan perisian *The Statistical Package for Social Science (SPSS)* versi terkini. Dapatan kajian menunjukkan bahawa sikap dan norma subjektif mempunyai hubungan positif yang sederhana dengan niat kitar semula sisa, manakala kawalan tingkah laku yang mempunyai hubungan yang rendah dengan niat kitar semula sisa. Dari segi perkaitan praktikal, kajian ini dapat membantu peniaga kecil dan sederhana serta pihak lain yang berkaitan supaya lebih cakna tentang usaha menyelamatkan alam sekitar daripada kemusnahan akibat pengurusan sisa yang tidak betul.

Kata kunci: Sisa, Kitar Semula, Sikap, Norma Subjektif, Kawalan Tingkah Laku yang Ditanggap, Usahawan mikro, Teori Tingkah Laku Berencana

## ABSTRACT

This study aims to examine the intention on waste recycling among micro-entrepreneurs in Kota Bharu, Kelantan. This is a quantitative design where questionnaires have been used as a tool for data collection. Through convenience and stratified sampling technique, 341 micro-entrepreneurs in Pasar Siti Khatijah, Pasar Besar 12, Pasar Wakaf Che Yeh and Pasar Tok Guru involved in this study. Descriptive analysis was used to describe the demographic background of the respondents, whilst Spearman Correlation was employed to analyse the relationship of the variables using The Statistical Package for Social Science (SPSS) software latest version. The findings indicate that attitudes and subjective norms have a moderate positive relationship to the intention to waste recycling, while perceived behavioral control has a low relationship with the intention to waste recycling. As of practical relevance, this research can help the small medium traders and other related parties become more aware on saving the environment from the destruction caused by improper waste recycling.

**Keywords:** Waste, Recycle, Attitude, Subjective Norm, Perceived Behavioral Control, Micro-entrepreneur, Theory Planned Behavior

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# CHAPTER 1

## INTRODUCTION

In recent years, the global community has witnessed an escalating concern for environmental sustainability, with waste management emerging as a critical facet of this discourse. As Malaysia strives to navigate the challenges of rapid industrialization and economic growth, the management of waste has become an imperative aspect of sustainable development. Within this context, the role of micro-entrepreneurs in waste recycling is gaining prominence as a potential catalyst for positive change.

The purpose of this research paper is to delve into the intentions on waste recycling among micro-entrepreneurs in Kota Bharu, Kelantan. Micro-entrepreneurs, often operating at the grassroots level, play a pivotal role in the nation's economic landscape. Understanding their perspectives, motivations, and challenges in adopting and promoting waste recycling practices is crucial for formulating targeted policies and interventions that can enhance sustainable waste management in the country.

Malaysia, with its diverse economic activities and increasing urbanization, is grappling with a growing volume of waste. The proper management of this waste is essential not only for environmental conservation but also for mitigating the social and economic impacts of inadequate waste disposal. Micro-entrepreneurs, ranging from small businesses to individual entrepreneurs, are uniquely positioned to contribute to the recycling ecosystem, given their proximity to local communities and potential to drive grassroots initiatives.

This research aims to address several key questions, including the factors influencing micro-entrepreneurs' intentions to engage in waste recycling, the perceived benefits and barriers they face, and the potential impact of their involvement on the overall waste management



landscape in Malaysia. By gaining insights into the motivations and challenges faced by micro-entrepreneurs can collaboratively design strategies that foster a more sustainable and circular economy. Ultimately, this research aims to contribute to the growing body of knowledge on waste management, with practical implications for fostering a culture of recycling among micro-entrepreneurs and promoting a greener, more sustainable future for Malaysia.



## 1.1 Background of the Study

Managing waste is a significant issue in Malaysia, where the rate of waste production exceeds the country's recycling rate (Shakil et al., 2023). According to the International Trade Administration, Malaysia disposes of more than 30,000 tons of municipal solid waste (MSW) every day and produces a daily per capita waste generation of 117 kg. The main contributor to MSW in Malaysia is food waste followed by plastics, paper, organic mixtures, wood and other materials. As the population of Malaysia continues to grow, the amount of waste disposed also increases, most of which ends up in landfills (Shakil et al., 2023). Currently, Malaysia has 165 landfills. Eight of these are sanitary landfills, and three are inert landfills for materials such as sand and concrete. However, according to experts in the field of environmental issues, there will be no land available for waste disposal by 2050 if no action is taken to reduce waste.

When a country fails to effectively manage its waste, it can have far-reaching and detrimental consequences on various aspects of economy, society, and the environment (Ferronato & Torretta, 2019). Some of the potential economic impacts of inadequate waste management are lost economic opportunities (Diggle & Walker, 2022). This is because effective waste management can create economic opportunities through recycling and resource recovery industries (Diggle & Walker, 2022). Failing to capitalize on these opportunities can result in lost jobs and economic growth. Small businesses may be particularly affected by inadequate waste management. They may lack the resources to properly handle and dispose of waste, leading to additional costs and compliance challenges (Diggle & Walker, 2022). Next, failure in waste management also impacts society because it can lead to the spread of diseases, attract pests and vectors and expose people to hazardous materials, all of which can lead to illness and sometimes even fatalities (Moyo, 2020). Other than that, a cluttered or unsightly environment due to improper waste management can deter customers from visiting local businesses (Koliotasi et al., 2023). Customers may be less inclined

to patronize shops or establishments in an area that appears neglected or unclean (Koliotasi et al., 2023). For environmental reasons, inadequate waste management means missing out on opportunities to recover valuable resources through recycling or reuse (Diggle & Walker, 2022). This can lead to increased demand for raw materials, potentially driving up costs for businesses that rely on these resources. Moreover, environmental impacts from poor waste management can disrupt supply chains, especially for businesses that rely on natural resources, clean water, or a healthy environment for their operations (Masrom et al., 2018). Disruptions can lead to delays, increased costs, and potential loss of revenue (Masrom et al., 2018). Therefore, to avoid economic, social, and environmental issues caused by poor waste management in Malaysia, appropriate measures should be taken.

To ensure that waste in Malaysia can be managed properly, proper waste management needs to be carried out. One of the ways to do waste management correctly is through recycling (Zakaria & Singh, 2023). Recycling is the process of collecting, processing, and reusing materials that would otherwise be discarded as waste (Naderi Kalali et al., 2023). The primary goal of recycling is to reduce the consumption of raw materials, energy usage, and the overall environmental impact associated with the production of new products. Moreover, recycling helps conserve natural resources, reduce pollution, and decrease the amount of waste sent to landfills. It also plays a crucial role in sustainable waste management. In addition, recycling is closely tied to economic considerations (Naderi Kalali et al., 2023). It contributes to resource efficiency, job creation, innovation, and cost savings across various sectors, making it a crucial component of a sustainable and economically viable society (Ferronato & Torretta, 2019). For this reason, governments all over the world, including Malaysia, have put laws into place, reduced waste, and

established recycling and trash reduction initiatives in an effort to save resources and leave a sustainable environment for coming generations (Naderi Kalali et al., 2023).

Therefore, to ensure the Malaysian government's goal of increasing the recycling rate, all parties need to play a role in making it successful, including Micro-entrepreneurs. Waste recycling is of paramount importance among micro-entrepreneurs as it not only aids in mitigating environmental degradation but also serves as a catalyst for economic growth at the local level. Micro-entrepreneurs, with their small-scale businesses deeply rooted in communities, play a pivotal role in reducing the strain on natural resources, diverting materials from landfills, and creating jobs through recycling activities. Their active involvement fosters community engagement and awareness, driving innovation in sustainable practices. By embracing recycling, micro-entrepreneurs not only comply with environmental regulations but also enhance their reputation among environmentally conscious consumers, contributing to a more resilient and environmentally friendly future.

## 1.2 Problem Statement

According to The Star, 5 August 2023, the recycling rate in Malaysia is currently at 33.17%, which is comparatively lower than neighboring countries such as Singapore, Taiwan, Korea, and Thailand (Zainal, 2023). This shows that public awareness of recycling among Malaysians remains low. To improve this rate, the Malaysian Federal Government has set a target of 40% of recycling rate by 2025 (Zainal, 2023). Although the recycling rate in Malaysia shows an increase, it is still not satisfactory when compared to the amount of waste produced in this country (Shakil et al., 2023).

Furthermore, efforts to increase the recycling rate in Malaysia need to be carried out more widely by various parties in Malaysia (Razali, F & Wai, 2019). An effective recycling program requires initiative and cooperation from both governments and residents, especially business owners, who play an important role in supplying consumables to the general public (Razali & Wai, 2019). The active involvement of micro-entrepreneurs in recycling brings about positive social, economic, and environmental impacts. Their contributions, when combined with supportive policies and community engagement, create a more sustainable and resilient approach to waste management. Micro-entrepreneurs supply everyday consumables to large communal groups, which are assumed to be a significant part of the recycling issue (Al Mamun et al., 2019). However, in Malaysia, there are several waste recycling issues among Micro-entrepreneurs, namely lack of awareness, knowledge, and attitude issues.

First, lack of awareness about proper waste disposal among micro-entrepreneur is one of the issues of recycling in Malaysia including in Kelantan. Lack of awareness about the environmental impact of their operations can result in a lower priority given to recycling initiatives (Asmawati et al., 2011). According to the newspaper Daily News on 25 August 2023, there is lack

of awareness on the significance of proper waste management and the environmental effects of improper disposal. This leads to inappropriate waste management techniques and littering.

Next, micro-entrepreneurs often face attitude issues surrounding waste disposal. Many micro-entrepreneurs may not fully understand how their actions impact the local environment and community health. Based on news Physorg on 1 February 2023, researchers looked at factors that drove or limited people's abilities to reduce, reuse, and recycle what they consume, as well as factors that affected people's attitudes and behaviors towards plastic. According to the New Straits Times on 6 December 2018, entrepreneurs should change attitudes and help to reduce, reuse, and recycle garbage to protect our environment.

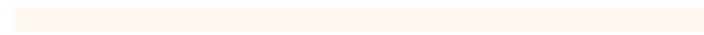
In addition, many people may lack knowledge about available recycling options (Hassan, 2022). Therefore, implementing awareness campaigns and educational programs can help enhance their knowledge and encourage positive attitudes towards recycling (Hassan, 2022). Nonetheless, Malaysian micro-entrepreneurs are still unaware of the recycling campaign. There are still a lot of entrepreneurs who need to learn more about recycling to include recycling practices in their business activities. Based on the Daily News on March 1, 2023, the domestic waste recycling campaign may be considered a failure due to a lack of knowledge of the importance of recycling among micro-entrepreneurs. Many individuals still do not understand the negative effects if waste is not disposed of properly.

Therefore, to ensure that recycling practices are carried out more vigorously among traders in Kota Bharu in the future, it is crucial to study the intention on waste recycling among micro-entrepreneurs in Kota Bharu, Kelantan. Other than that, as recycling is associated with various environmental benefits, it is important that it is encouraged in Malaysia. Taking the disappointingly low recycling rate in Malaysia as its backdrop, the purpose of this paper is to

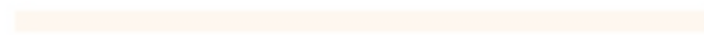
examine waste recycling intentions among micro-entrepreneurs in Kelantan, Malaysia, drawing on the theory of planned behavior.



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### **1.3 Research Question**

Based on the intention on waste recycling among micro-entrepreneur in Kota Bharu, Kelantan, the research questions to be answered in this research are as follows:

- I. What is the relationship between attitudes and intention to recycle waste among micro-entrepreneurs in Kota Bharu Kelantan?
- II. What is the relationship between subjective norms and intention to recycle waste among micro-entrepreneurs in Kota Bharu Kelantan?
- III. What is the relationship between the perceived behavioral control and intention to recycle waste among micro-entrepreneurs in Kota Bharu Kelantan?

### **1.4 Research Objectives**

The overall objective of this study is to determine the intention on waste recycling among micro-entrepreneur in Kota Bharu, Kelantan.

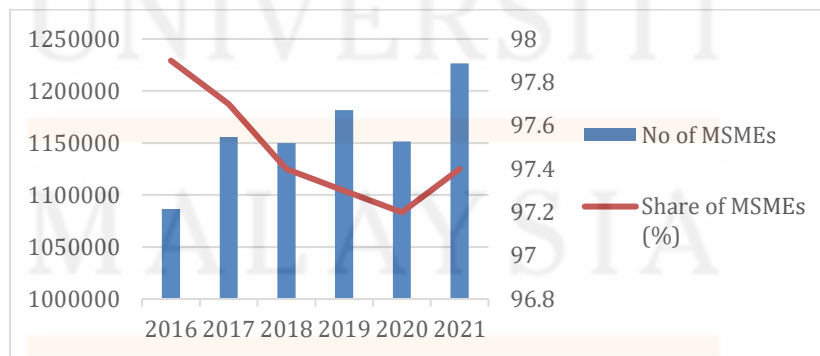
The research objectives of this study are:

- I. To determine the relationship between attitude and intention to recycle waste among micro-entrepreneur in Kota Bharu Kelantan.
- II. To determine the relationship between subjective norm and intention to recycle waste among micro-entrepreneur in Kota Bharu Kelantan.
- III. To determine the relationship between perceived behavior control and intention to recycle waste among micro-entrepreneurs in Kota Bharu Kelantan.



### 1.5 Scope of the Study

This study focuses on micro-entrepreneurs in Kota Bharu, Kelantan, recognizing them as pivotal contributors to the local economy, given that a significant portion of the citizenry engages in business activities. According to the authoritative website SME Corp Malaysia (2022), as shown in Figure 1, the development status of MSMEs from 2016 to 2021 is impressive. According to the latest information released by the Malaysian Measurable Business Registry (MSBR), the Department of Measurement and Measurement Malaysia (DOSM) said there were overall 1,226,494 MSMEs in 2021, accounting for 97.4% of the general foundation of Malaysia. This represents an increase of approximately 140,000 enterprises compared to the total number of MSMEs of 1,086,533 in 2016, resulting in a typical growth rate of 5.2% per year over a six-year time horizon. The research, situated in Kota Bharu, will investigate the nature of businesses in the area, considering their diversity and scale. The primary content of the study centers on waste management and the recycling intentions of these micro-entrepreneurs, aiming to explore their attitudes, subjective norm, and perceived behavior control impact of their practices on both the local economy and environmental sustainability.



Total Small Medium and Enterprise (SMEs) Establishment in Malaysia for 2021

## 1.6 Significance of Study

This study on the intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan is critical and resonates beyond the business sector. Waste management is a pressing issue closely related to environmental protection, public health and overall quality of life. Exploring micro-entrepreneurs' intentions for waste recycling is more than an academic pursuit; it is key to creating a cleaner, healthier living environment for communities. The impact extends into the collective consciousness, potentially triggering a wave of awareness about the critical role of recycling. Beyond this, this has the transformative potential to shape a more sustainable, eco-conscious society in Kota Bharu, Kelantan, positively impacting the lives of its residents.

This research contributes to the existing body of knowledge by shedding light on a specific and underexplored area of waste recycling among micro-entrepreneurs. It adds empirical evidence and insights into the factors that influence recycling intentions at the micro-enterprise level, potentially providing a valuable reference for future studies in the field of environmental entrepreneurship, sustainability, and waste management. This knowledge can be used by researchers, academics, and practitioners to build upon and refine existing theories and practices.

The findings of this study can have a direct impact on policy makers and local authorities, such as the Kota Bharu Municipal Council (KBMC). Understanding the intentions and challenges faced by micro-entrepreneurs in waste recycling can help shape more effective and targeted policies and regulations. Thus, it can encourage and support micro-entrepreneurs in their recycling efforts, fostering a more sustainable waste management ecosystem in Kota Bharu. The study's recommendations can assist policy makers in crafting strategies that promote eco-friendly practices and align with broader environmental and sustainability goals for the region.

In addition, the findings of this study also benefit the Sustainable Development Goals (SDG). The Sustainable Development Goals (SDGs) are a set of 17 global goals established by the United Nations in 2015. These goals are interconnected and address a wide range of social, economic, and environmental challenges faced by countries around the world. Research study on waste recycling among micro-entrepreneurs can provide valuable insights into their contributions to various sustainable development goals, demonstrating the importance of their role in fostering environmental, social, and economic sustainability.

Furthermore, a study on waste recycling intention among micro-entrepreneurs holds significant importance for SDG 12 as it provides critical insights into the sustainable consumption and production practices within this specific business sector. The findings of such a study can contribute to the promotion of circular economy principles, offering potential economic benefits for micro-entrepreneurs, reducing environmental impact through enhanced recycling practices, and informing targeted policies and interventions. Moreover, understanding the behavioral factors influencing micro-entrepreneurs' recycling intentions can facilitate the development of effective awareness campaigns and training programs, fostering positive changes in waste management practices at the local level while aligning with global sustainability goals.

## 1.7 Definition of Term

**Table 1.1: Definition of Term**

Term	Definition	Source
Recycling	<ul style="list-style-type: none"> <li>● Recycling is the process of collecting, sorting, and transforming materials which are typically regarded as waste into new goods.</li> <li>● Recycling aims to lessen the need for conventional waste disposal techniques like landfilling and incineration, which in turn decreases the usage of new raw materials and energy use, also, reduces air pollution, and water pollution.</li> <li>● Common materials that are often recycled include paper, cardboard, glass, metals (aluminium, steel), and various types of plastics.</li> <li>● Many communities have established recycling programs to encourage residents and businesses to participate in sustainable waste management practices.</li> </ul>	Letcher, T. M. (Ed.). (2020). <i>Plastic waste and recycling: Environmental impact, societal issues, prevention, and solutions</i> . Academic Press.
Micro-entrepreneur	<ul style="list-style-type: none"> <li>● A micro-entrepreneur, also known as a micro-entrepreneur or microenterprise owner, refers to an individual who operates a very small business, typically employing fewer than five people, including the owner.</li> <li>● Micro-entrepreneurs often work in sectors such as agriculture, retail, services, or small-scale manufacturing.</li> <li>● They may operate from their homes or small premises and usually have limited access to capital, technology, and formal business networks.</li> <li>● micro-entrepreneurship is frequently linked to local economic activity and may be a significant source of income and subsistence for people and families around the world.</li> <li>● These small-scale businesses contribute to economic development by generating employment, improving local economies, and fostering innovation.</li> </ul>	Jayachandran, S. (2021). Microentrepreneurship in developing countries. <i>Handbook of labor, human resources and population economics</i> , 1-31.
Attitude	<ul style="list-style-type: none"> <li>● Attitude refers to a psychological construct that represents a person's overall evaluation, feelings, or opinions towards a particular</li> </ul>	Karatekin, K., Haçat, S. O., Demir, F. B., & Author, C. (2023). Investigation of

	<p>object, person, group, idea, or situation. It encompasses a range of emotions, beliefs, and behavioral tendencies that shape an individual's approach and response to the target of their attitude (Li et al., 2023).</p> <ul style="list-style-type: none"> <li>● Attitude toward recycling is an individual's overall evaluation, beliefs, and feelings regarding the practice of recycling waste materials. It encompasses individual's perception of the importance of recycling, their willingness to engage in recycling behaviors, and their general disposition towards environmental sustainability efforts (Karatekin et al., 2023).</li> <li>● In the Theory of planned behaviour, attitude reflects a person's evaluation, whether positive or negative, of performing a specific behaviour. It reflects the individual's thoughts and emotions on the related behaviour (Ajzen, 1991).</li> </ul>	<p>Attitudes towards Solid Waste and Recycling from a Social Perspective*. <i>Türk Akademik Yayınlar Dergisi (TAY Journal)</i>, 2023(1), 152–178.</p> <p>Li, X., Dai, J., Zhu, X., Li, J., He, J., Huang, Y., Liu, X., &amp; Shen, Q. (2023). Mechanism of attitude, subjective norms, and perceived behavioral control influence the green development behavior of construction enterprises. <i>Humanities and Social Sciences Communications</i>, 10(1).</p> <p>Ajzen, I. (1991). The theory of planned behavior. <i>Organizational behavior and human decision processes</i>, 50(2), 179-211.</p>
<p>Subjective Norm</p>	<ul style="list-style-type: none"> <li>● Subjective norm is a person's view of the social pressure or influence that friends, family, or coworkers place on them about particular acts or behaviors. It represents the perceived expectations and viewpoints of important people about whether or not the person ought to participate in specific actions (Hameed et al. 2022).</li> <li>● A person's impression of social pressure or influence on their recycling behavior from their social circle, which includes family, friends, coworkers, and the community, is referred to as their subjective norm toward recycling (Li et al., 2023).</li> <li>● Subjective norms characterize how much a person feels influenced by society and the degree to which they think that social norms or expectations influence their decision to occupy in a certain behavior. Stated</li> </ul>	<p>Hameed, I., Khan, K., Waris, I., &amp; Zainab, B. (2022). Factors influencing the sustainable consumer behavior concerning the recycling of plastic waste. <i>Environmental Quality Management</i>, 32(2), 197–207.</p> <p>Li, X., Dai, J., Zhu, X., Li, J., He, J., Huang, Y., Liu, X., &amp; Shen, Q. (2023). Mechanism of attitude, subjective norms, and perceived behavioral control influence the green</p>

	<p>differently, subjective norms represent perceived social pressure to participate in an activity or not participate in an activity.(Ajzen, 1991).</p>	<p>development behavior of construction enterprises. Humanities and Social Sciences Communications, 10(1).</p> <p>Ajzen, I. (1991). The theory of planned behavior. <i>Organizational behavior and human decision processes</i>, 50(2), 179-211.</p>
<p>Perceived Behavioral control</p>	<ul style="list-style-type: none"> <li>● Perceived behavior control pertains to an individual's perception of the ease or difficulty of an action. It includes things like an individual's view of their abilities, their available resources, and outside limitations that can have an impact on their capacity to engage in the action (Lim &amp; Weissmann, 2023).</li> <li>● Perceived behavior control with regard to recycling is the belief that one can engage in recycling activities in a particular situation, taking into account factors like personal capabilities, resources, and external constraints. It reflects a person's confidence in their capacity to overcome obstacles and effectively engage in recycling activities (Li et al., 2023).</li> <li>● Perceived Behavioral Control is an individual's perception of how simple or complex an action is to carry out. It expresses the individual's belief in their capacity to carry out what they want to do (Ajzen, 1991).</li> </ul>	<p>Lim, W. M., &amp; Weissmann, M. A. (2023). Toward a theory of behavioral control. <i>Journal of Strategic Marketing</i>, 31(1), 185-211.</p> <p>Li, X., Dai, J., Zhu, X., Li, J., He, J., Huang, Y., Liu, X., &amp; Shen, Q. (2023). Mechanism of attitude, subjective norms, and perceived behavioral control influence the green development behavior of construction enterprises. Humanities and Social Sciences Communications, 10(1).</p> <p>Ajzen, I. (1991). The theory of planned behavior. <i>Organizational behavior and human decision processes</i>, 50(2), 179-211.</p>

Thus, all the definitions of terms cited in Table 1.1 have been applied in this study.

## 1.8 Organization of the Research Report

The research proposal consists of five chapters, namely Chapter 1 is introduction, Chapter 2 is literature review and Chapter 3 is research methodology.

As for Chapter 1, it discusses the overview of the study which was mainly on waste and its disposal management. Next, the problem statement will also be highlighted and leads to the research question and objectives of the study. Scope of the study also will be discussed followed by significance of the study. Lastly for this section of this chapter is the definition of terms which conclude all the terms that will be used mainly in this research.

In Chapter 2, the journals and articles studied are available in terms of literature. This second chapter covers the whole in terms of basic theory, past studies, hypothesis statements, conceptual frameworks and a summary of the literature review.

Next, Chapter 3 discusses the research methods carried out. Through this chapter create greater knowledge about the research topic because this chapter will interpret some strategies or processes and techniques that will be used in data collection or evidence from data analysis.

In this Chapter 4, it discusses data analysis and findings. Begin with the introduction, preliminary analysis, and demographic profile of respondents. Next, descriptive analysis, validity and reliability test and normality test. Other than that, hypotheses testing and lastly, summary or conclusion.

Chapter 5 of these studies describes discussion and conclusion. Begin with introduction, key findings, and discussion about hypotheses. Next, implications of the study, limitations of the study, recommendations for future research and lastly overall conclusion of the study.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

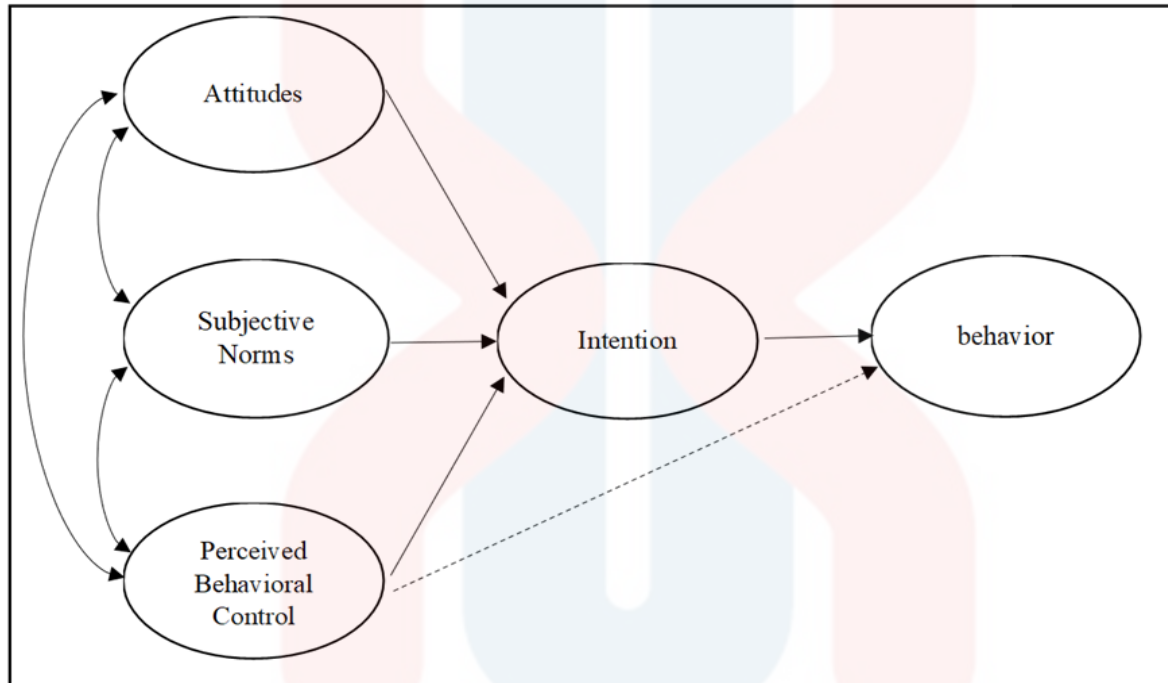
In this chapter, the research investigated the underpinning theory that will be applied in this study. In this chapter, the research conducted will be investigated using the basic theory in the study. Chapter 2 also looks at the literature review on the dependent variable, which is the intention to recycle waste among micro-entrepreneurs in Kota Bharu Kelantan, while the independent variable is attitude. This chapter also includes a conceptual framework that links independent and dependent variables. The researcher also developed several hypotheses based on independent factors from the conceptual framework to determine the most important link between the independent factors and the dependent variable. Throughout the literature review section, it helps the researcher in developing a clear and in-depth knowledge of the views on past work related to the research questions and objectives.

#### 2.2 Underpinning Theory

The Theory of Planned Behavior (TPB) was developed by psychologist Icek Ajzen. Ajzen first introduced the theory in 1985 through his publication "From Intentions to Actions: A Theory of Planned Behavior." It is a psychological theory that is used to understand and predict human behavior (Ajzen, 2020). In addition, TPB theory has been widely applied in various fields, including health psychology, environmental psychology, consumer behavior, and organizational behavior (Wan et al., 2017). The theory suggests that behavioral intentions are influenced by three main factors: attitudes toward the behavior, subjective norms (perceived social pressure), and



perceived behavioral control (the perceived ease or difficulty of performing the behavior). These three factors collectively shape an individual's intentions, which, in turn, are considered the immediate antecedents of behavior.



**Figure 2.1 Theory of Planned Behavior (TPB)**

According to the Theory of Planned Behavior (TPB), attitude refers to an individual's overall evaluation or appraisal of performing a particular behavior (Ajzen, 1991). Specifically, it reflects the positive or negative feelings, beliefs, and perceptions that a person associates with engaging in a specific action. Attitude is one of the key components in TPB that influences an individual's behavioral intentions and, subsequently, their actual behavior (Karatekin et al., 2023). Understanding attitudes is crucial in predicting and influencing behavior, as it provides insights into the motivational factors that guide individuals in deciding whether to engage in a specific action (Karatekin et al., 2023). The purpose of this study is to find out if the attitude of micro-entrepreneurs in Kota Bharu affects their intentions towards waste recycling. This involves the

individual's beliefs about waste recycling, such as understanding its environmental benefits, resource conservation, and waste reduction.

Next, the subjective norm refers to an individual's perception of social pressure or social influence related to performing a particular behavior (Ajzen, 1991). It is one of the key components that influences an individual's behavioral intentions and subsequent behavior. Subjective norm in TPB captures the social aspect of decision-making by considering the influence of perceived social expectations and the individual's motivation to adhere to those expectations (Hameed et al., 2022). In the context of this study, the expectations of significant others, such as friends, family, or colleagues, regarding waste recycling must be considered as the influence of micro-entrepreneurs' intention toward waste recycling.

Perceived behavioral control (PBC), as used in the Theory of Planned behavior (TPB), refers to an individual's beliefs about their capacity to carry out an action, taking into account both internal and external elements that might help or hinder the activity (Ajzen, 1991). The concept of perceived behavioral control plays a crucial role in TPB because it recognizes that an individual's ability to carry out a behavior may still be influenced by perceived control factors, even if they have positive attitudes toward the behavior and believe that significant others expect them to perform it (subjective norm) (Lim & Weissmann, 2023). In this study, external factors, such as the availability of recycling bins, community support for recycling, and the overall ease of the recycling process is an important factor that influence Micro-entrepreneur in Kota Bahru intention to waste recycling.

Therefore, this study adapted this theory in the context of waste recycling intentions among micro-entrepreneurs in Kota Bharu, Kelantan.

### 2.3 Intention to Recycle Waste

Recycling is defined as the process of conversion of previously used resources and objects into some other forms with economic value (Chao et al., 2021). The recycling process is a dimension of environmental sustainability efforts that is regarded as one of the most efficient tools of environmental sustainability and mitigation of environmental deterioration. Successful recycling requires adequate awareness and knowledge in individuals to enable adequate distinguishing and separation of generated waste to enable the right recycling techniques to be applied to the generated waste (Fan et al., 2019). Recycling is a very complex and tedious process that requires complex designed processes for efficiency. Studies carried out to determine the influencing factors of recycling practices have revealed some of the critical influencing factors are planned behavior, and behavioral intentions in individuals (Dixon & Parker, 2022).

There are various literatures that have studied recycling intentions by understanding the model and variables involved based on a social psychological perspective (Wan et al., 2017). Recycling has a great impact on environmental sustainability. According to the European Commission, recycling practices are one of the most high-impact sustainability practices that have ever been practiced in the efforts of environmental sustainability and mitigation of global climate change (Cho, 2019).

According to Linda Godfrey (2021), as a result of the increasing recycling problem, this causes environmental management and planning activities to become a priority for a developed and developing country. California has mandated its citizens and businesses to separate food waste and other waste to keep organic waste out of landfills. This intention is a good thing, but the organic waste is still contaminated when taken (Philip Palmer 2023)

Various literature has explored recycling intention by understanding the models and variables involved based on a social psychology perspective (Wan et al., 2017). Recycling is an effective means of sustainable urban development, which can turn waste into treasure (Rhodes et al., 2015; Marino et al., 2018).

**H1:** There is a relationship between waste recycling and intention among micro-entrepreneurs in Kota Bharu Kelantan

## 2.4 Attitude

The Theory of Planned Behaviour (Ajzen, 1991) defines a person's attitude as how they feel about doing a certain behavior, whether they like it or not. This shows what the person thinks and feels about the behavior in question. Li et al. (2023) explain that an attitude is a psychological concept that shows how someone thinks, feels, or acts towards a certain thing, person, group, thought, or situation. It comprises a variety of affective states, convictions, and inclinations towards conduct that influence an individual's methodology and reaction towards the target of their attitude.

Different kinds of research have come up with different results about how people feel about their plans to recycle waste. According to research by Al Mamun et al. (2019), attitude influences recycling desire favorably and statistically significantly. Furthermore, it was shown that perceptions about recycling waste were little impacted by environmental consciousness. A stratified random sampling approach and a cross-sectional design were employed in the study to choose 200 informal micro-entrepreneurs from Kota Bharu, Kelantan. Next, structured interviews were employed to gather quantitative data. The data in this study were analyzed using variance-based structural equation modeling.

In addition, according to Latip and Sharkawi (2021), the attitude has a big impact on micro-entrepreneurs' decisions to recycle or use an eco-friendly management system. Furthermore, extensive knowledge has the potential to significantly alter one's perspective (Latip & Sharkawi, 2021). Attitude can be influenced by one's level of knowledge; therefore, a high level of knowledge will result in a positive attitude. This study used the non-probability sampling method. This means that it is not possible to say how likely it is that each person in the community will be chosen.

Furthermore, environmentally conscious decision-makers were able to successfully adopt recycling in their businesses (Khan et al., 2020). Hence, Khan (2020) posits that organizations are more inclined to adopt optimal waste recycling practices when their decision-makers maintain favorable attitudes towards recycling. This study employs both a quantitative research approach and a random probability sampling method.

Subsequently, attitude has been identified as the most reliable predictor of waste recycling intention, according to Wan (2021). According to Wan et al. (2021), individuals who possess a positive tendency towards recycling are more likely to sustain this habit and exhibit enhanced recycling practices over an extended period of time. This study collects data through an online survey conducted in Hong Kong. Subsequently, the results are examined through the application of partial least squares modeling of structural equations.

Lastly, according to Eremionkhale et al. (2021), Attitudes are positively related to recycling intentions. Attitudes are believed to affect behavioral intention directly due to the assumption essentially borne out in research on the relationship between attitudes and attitudes toward recycling. This study uses quantitative analysis to investigate the recycling behaviors within the proposed augmented TPB model. The target population of this study is Lagos, Nigeria, a

representative city of developing countries. Positive attitudes mean the optimistic belief in an individual self-such as the belief that recycling would lead to environmental sustainability (Eremionkhale et al., 2021). This study has shown that when individuals have a positive attitude towards their intention to recycle, it increases participation in that behavior.

Therefore, considering the above, this study posits the following:

**H2:** There is a relationship between attitude and intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan.

## 2.5 Subjective Norm (SN)

SN refers to the social pressure that individuals perceive to perform or refuse to perform a specific behavior (Ajzen, 1991). Ajzen (1991) and Fishbein and Ajzen (2010) refined the subjective norm construct by adding descriptive norms to existing injunctive norms. De Leeuw et al. (2015) divided the more formally subjective norm into two distinct constructs, namely injunctive norms, on the one hand, and descriptive norms, on the other. Injunctive norms refer to individuals' perceptions of what important others (e.g., family, friends, colleagues, social circles) believe they should do (Rivis and Sheeran, 2003). By contrast, descriptive norms relate to beliefs regarding what other people actually do (Rivis and Sheeran, 2003). The results on the impact of both norms on intentions are mixed. On the one hand, some studies report that descriptive norms are significantly related to intentions while injunctive norms are not (de Leeuw et al., 2015). Alternatively, past research also found that descriptive norms exert a higher effect on an individual's behavior than injunctive norms (Keizer et al., 2011). On the other hand, the waste minimization literature reports a significant impact of injunctive norms, while descriptive norms were not considered but replaced by moral norms instead (Stancu et al., 2016). Therefore, no study

tested for the simultaneous impact of both injunctive and descriptive norms on waste minimization behavioral intentions.

Social pressures from other people or groups to engage in a particular behavior or not are known as SN. Family, friends, neighbors, or anybody else who holds personal significance might exert pressure on you (Fauk, Seran et al., 2022). According to Ang, Wei, et al. (2021), SN in the Theory of Planned Behaviour model refers to an individual's perceived social pressure, coming from societal standards created by others, to act or not act. A person may believe that damaging behavior, such as littering, is normal or even the social norm in an area full of rubbish and graffiti when they observe the physical surroundings of those neighborhoods (Liu, Wu et al. 2019).

Conversely, those who live in environments that are of excellent quality will be more conscious of environmental preservation and social norms, which will lead to a desire to keep the environment in good condition (Si, Shi et al. 2020). People are more likely to engage in the community environment when they believe it to be of high quality, which fosters an environment that is favorable to surrounding conservation (Krettenauer & Lefebvre 2021). The influence increases with the number of inhabitants who link them to significant others (family, friends, etc.).

**H3:** There is a relationship between subjective norm and intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan.

## 2.6 Perceived Behavioral Control (PBC)

PBC plays a crucial role in shaping individuals' engagement in waste recycling behaviors (Muniandy & Anuar, 2020). Perceived behavioral control, as defined in the Theory of Planned Behavior (TPB), refers to an individual's perception of the ease or difficulty of performing a specific behavior (Ajzen, 1991).

PBC is also an insignificant predictor of return/recycling intention, according to Khan et al. (2019). Opportunities availability and self-efficacy combine to generate perceived behavioral control. Based on the study's findings, it can be inferred that people's lack of intention to recycle stems from a lack of facilities, infrastructure, and resources (Khan et al., 2019).

According to the earlier research, a person's behavior depends on a variety of circumstances, including PBC, in addition to their own free choice (Muniandy & Anuar, 2020). Regarding the subject matter under investigation, PBC comprises a range of perceived control variables, including convenience and opportunity; enabling variables, such as awareness of what, how, and where of recycling; and availability of recycling resources (Muniandy & Anuar, 2020).

Furthermore, Muniandy et al. (2021) defines PBC as the feeling that one can carry out the intended activity based on how easy or difficult it is regarded to do so. This variable reflects one's comprehension of how well one can control variables that limit the course of action necessary to address a given circumstance. An individual's self-efficacy and likelihood of recycling are positively correlated with their perceived behavioral control for recycling and friendly environmental behavior (Muniandy et al., 2021).

Next, PBC and waste recycling intention are positively correlated, according to Islam (2021). PBC was defined in this study as "the individual's belief regarding the likelihood of an

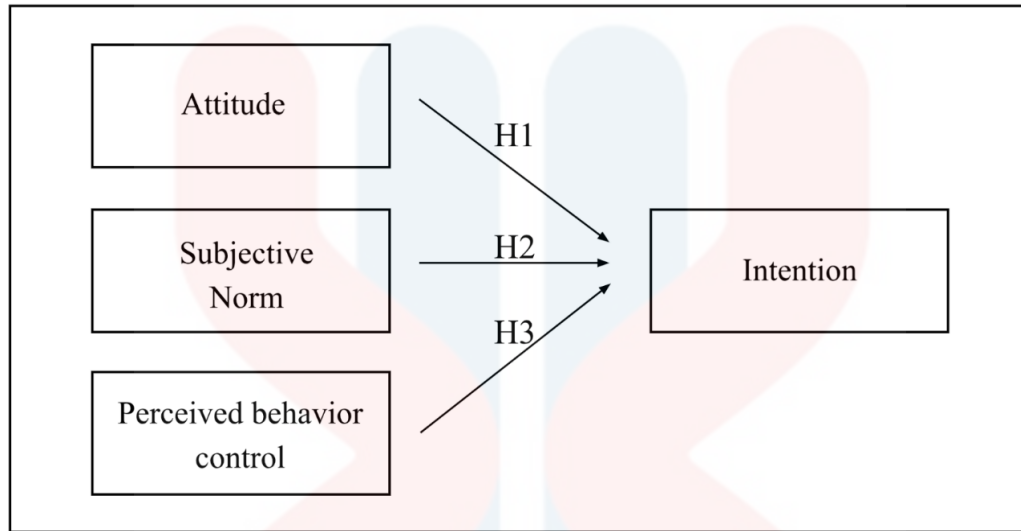


easy or difficult behaviour." PBC gauges a person's opinion about their capacity to carry out the relevant activity (Islam, 2021).

Furthermore, PBC was the most significant predictor of recycling intention, according to Al Mamun (2018). Despite the notion that purpose is the direct cause of conduct, many actions include execution issues that impair volitional control (Al Mamun, 2018). Therefore, in order to directly anticipate behaviour, it is helpful to take PBC into account in addition to intention (Al Mamun, 2018).

**H4:** There is a relationship between perceived behavioral control and intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan.

## 2.7 Conceptual Framework



**Figure 2.2: Conceptual Framework  
(Adapted from Theory Planned Behavior, Ajzen 1991)**

The independent variable (IV) and dependent variable (DV) used in this study are as shown in the diagram above. The independent variable, which is attitude, subjective norm, and perceived behavioral control is a criterion that plays an important role in waste recycling intention among micro-entrepreneurs. Meanwhile, the dependent variable is waste recycling intention among micro-entrepreneurs in Kota Bharu, Kelantan. Based on the hypothesis made, there are three hypotheses that focus on attitude, awareness, and knowledge that influence the intention to recycle among micro-entrepreneurs in Kota Bharu, Kelantan.

The definition of recycling intention is an individual's self-commitment to recycling (Park & Ha, 2014). A social psychology perspective on the models and factors involved has been used in a variety of literature to investigate recycling intention (Wan et al., 2017). This variable evaluates the micro-entrepreneurs' readiness or desire to use recycling techniques in their companies. It consists of beliefs, arbitrary standards, and the idea of behavioural control.

A psychological concept known as "attitude" is a person's general assessment, sentiments, or beliefs on a certain thing, someone, organisation, concept, or circumstance. It includes a variety of feelings, convictions, and behavioural patterns that influence how someone approaches and reacts to the object of their attitude (Li et al., 2023).

A person's view of the social pressure or influence that friends, family, or coworkers place on them about particular acts or behaviours is known as a subjective norm. It expresses the opinions and expectations of significant individuals on whether or not the subject should engage in particular activities (Hameed et al., 2022).

PBC is defined by Ajzen (1991) and Fishbein and Ajzen (1975) as prior experience with the success of behaviour and possible obstacles to behaviour. Thus, a person's propensity to engage in behaviour increases with their level of confidence. Additionally, personal beliefs are necessary to control or carry out behaviours, and PBC also refers to individual assessments of the degrees of difficulty in conducting a behaviour (Ajzen et al., 2009).

## 2.8 Summary

Lastly of this study, this research concluded that a variable is an attribute that is a short statement that will be expressed in a certain way. Based on observation, variables are objects of study that can be monitored, calculated and exploited. This research uses the Theory of Planned Behavior (TPB) to create IV as well as DV. Through this study, the researcher has identified the relationship between the IV and the DV, as well as the conceptual framework discussed in each section of this chapter. In conclusion, this literature review highlights the importance of understanding the factors influencing waste recycling intentions among micro-entrepreneurs in Kota Bharu, Kelantan. By examining existing research and identifying gaps in knowledge, this review provides the basis for future research and policy decisions aimed at promoting recycling practices in this specific context.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

The research method is an essential component of any study as it outlines the procedures and techniques that will be used to collect and analyze data. It provides a systematic approach to address the research questions or objectives and ensures the reliability and validity of the findings. In the context of the study on waste recycling intentions among micro-entrepreneurs in Kota Bharu, Kelantan, an appropriate research method is crucial to gather relevant and accurate data. This section will outline the research design, data collection methods, and data analysis techniques that will be employed in the study.

#### 3.2 Research Design

The research design for this study will be quantitative in nature. A cross-sectional survey design will be adopted, as it allows for a snapshot of the current waste recycling intentions among micro-entrepreneurs in Kota Bharu, Kelantan. This design also enables the examination of multiple variables simultaneously to determine their relationships and influences on recycling intentions. Quantitative research studies are research studies that use quantitative data that can be measured and calculated to answer research questions. This research involves collecting data through research, experiments or statistical analysis as well as using statistical methods to analyze and interpret the data. This quantitative research study is usually done to examine the relationship between variables, testing hypotheses. This quantitative research study can provide very credible and reviewable information because the data collected can be evaluated objectively.

### **3.3 Data Collection Procedure**

Data will be collected through a structured questionnaire administered to micro-entrepreneurs in Kota Bharu, Kelantan. The questionnaire will be developed based on the relevant literature review findings and will include items related to demographic information.

#### **3.3.1 Source of data**

Primary data has been used for collecting data from respondents through Google Form. Besides that, secondary data was also used in this research. According to Marican (2005), secondary data is a reference to data that has been collected by previous researchers. For example, previously collected data for research purposes. The data is still relevant to be used to answer research questions and be developed into new information or conclusions for research. Information that has been collected by other researchers can be used as reference material to create new information to solve problems that will arise in the present or in the future.

### **3.4 Study Population**

The population in this study will be the micro-entrepreneur who operates in the markets of Kota Bharu, Kelantan. This study will be focusing on four markets in Kota Bharu, which are Pasar Besar Siti Kadajah, Pasar Borong Wakaf Che Yeh, Pasar Berek 12, and Pasar Tok Guru. There are many small traders in these areas who sell various items such as food, clothes, etc.

The total of trader on these markets are as follows:

**Table 3.1 Market Population**

<b>Market</b>	<b>Total Trader</b>
Pasar Besar Siti Kadijah	2,720
Pasar Borong Wakaf Che Yeh	276
Pasar Berek 12	179
Bazar Tok Guru	300

Sources: Kota Bharu Municipal Council (KBMC)

### 3.5 Sample Size

According to Nishat (2021), sample size is the number of units selected to represent the target population. To achieve a proper sample size, the number of participants in this study was determined by utilizing a table developed by Krejcie and Morgan (1970). The chart by Krejcie and Morgan (1970) states that a minimum sample size of 341 respondents is needed for a population of 3475. As a result, 341 micro-entrepreneurs from the chosen market in Kota Bharu, Kelantan, would be the study's responders. 267 or 78% respondent will be selected from Pasar Besar Siti Khadijah, 27 or 7% from Pasar Borang Wakaf Che Yeh, 29 or 8.5% from Bazar Tok Guru, and 18 or 5% from Pasar Berek 12.

The sample sizes of Krejcie and Morgan are shown in Table 3.1 below.

**Table 3.2: Krejcie and Morgan Table**

Table for Determining Sample Size from a Given Population					
N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368



### 3.6 Sampling Method

In terms of sampling, this study adopts a combination of stratified and convenient sampling. Using stratified sampling, the population is split up into smaller groups or strata according to attributes that are pertinent to the study. Convenience sampling is chosen according to their accessibility and availability. Combination of both sampling, dividing population into strata based on certain criteria. Then, within each stratum, use convenience sampling to select participants. This can ensure representation from different segments of the population while still making the sampling process more practical and accessible. This approach allows us to capture insights from different markets while ensuring that the sample is somewhat representative of the diverse population visiting these markets.

### 3.7 Research Instrument Development

Research Instrument is one of the tools that researchers frequently employ to get information from respondents. The purpose of the research instrument is to gather, quantify, and evaluate study-related data. This research tool may be used as a scale, questionnaire, survey, test, or checklist. Research tools are crucial for gathering more precise data from respondents so that the study may produce more accurate results (Gumberg, 2022). Questionnaires are used in this study to gather data.

In Section A, demographic data was gathered, including gender, age, monthly income, ethnicity, marital status, and educational attainment. Respondents will be questioned on waste management under Section B. In this section, we will inquire if the participants are aware of waste. Before moving on to the next research question, the responder is required to provide an

answer to this one. The respondent may complete their own version of the questionnaire in this section.

Additionally, as this question pertains to independent variables, the respondent must answer to sections C, D, and E. In this part, information is collected about the three factors which are attitude, subjective norms, and perceived behavioral control. Micro-entrepreneurs use it to determine how they become aware of garbage recycling. The Likert scale, which has a 5-point scale in this questionnaire, will be used in parts C, D, and E. In section F, the micro-entrepreneur's intention to waste recycling is one of the dependent variables that are the subject of questions in section F. The purpose of the inquiry is to gather information about micro-entrepreneurs' understanding of waste recycling.

### **3.8 Measurement of the Variables**

The research will collect and evaluate data to determine the statistical inference test for every variable on the scale. This online survey used both nominal and ordinal measurement scales (Likert-scale). The questionnaire is divided into three sections: section A asks questions about the respondent's demographic profile; section B asks questions about dependent variables; and section C asks questions about independent variables.

#### **3.8.1 Nominal Scale**

A nominal scale is used in this study to measure qualitative variables related to the demographics of the respondents. This is the easiest and least expensive way to measure. Responses on the nominal scale are either categorized or named. In addition, surveys will be employed to gather information from respondents. Every response to a question is determined

using the nominal scale, particularly the respondent's demographic profile. The target respondents' gender, age, status, and educational attainment are all taken into consideration.

### **3.8.2 Ordinal Scale**

An ordinal variable is a kind of quantitative measuring variable that takes values and arranges them in a certain rank or order. It is the subset of the nominal variable and ranks second in the measurement. From the least to the greatest, the items on this scale are arranged in ascending order of agreed level. Unlike nominal scales, ordinal scales allow for the comparison of two subjects' levels of the dependent variable. One of the scales that was most frequently used in this study was the Likert scale. The questionnaires are used to gauge the respondents' level of agreement or disagreement with the statements by using a 5-point Likert scale: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). Therefore, in order to assess each item in Sections B and C of this questionnaire, the Likert scale was also used.

### 3.9 Data Analysis Procedure

The data analysis procedure in this research study will use IBM SPSS Statistic 23 as a tool, covering the two primary requirements of editing and coding. The process of transforming unprocessed data from target respondents into something useful and educational for study utilizing questionnaires is known as data analysis. The reliability analysis, the descriptive analysis, and the Pearson Correlation Coefficient are the three (3) different types of data analysis. Descriptive analysis and inferential analysis are the only two methods the researcher employs when using the SPSS method.

A form of data analysis known as descriptive analysis aids in the constructive explanation, display, or summarization of data points, allowing patterns to emerge that meet all of the requirements for the data. As a result, researchers need to give more specific details about their age, gender, marital status, and educational background. The SPSS program will be used to conduct this analysis. The probability that respondents will agree or disagree with the argument in the questionnaire is determined using the variance of the mean table.

**Table 3.3: Indicator of Linkert Scale**

Mean	Standard of Agree
5	Strongly Agree
4	Agree
3	Neutral
2	Disagree
1	Strongly Disagree

In contrast, the relationship between the independent and dependent variables was examined in an inference analysis. In order to investigate recycling among micro entrepreneurs in Kota Bharu, Kelantan, the researcher will use Spearman's Correlation in inferential analysis to

ascertain the strength of the relationship between the independent variables, namely attitude, subjective norms, and perceived behavioral control.

### **3.9.1 Reliability test**

Pilot test research refers to small-scale preliminary studies conducted before a major research project. The purpose is to test the feasibility and potential effectiveness of research methods, data collection tools, and procedures to be used in a larger study. Through this, questionnaires will be distributed to micro entrepreneurs in Kota Bharu, Kelantan. The pilot test will take about a week to collect all the data.

Reliability and validity tests are techniques used in research to ensure the accuracy and consistency of results. Both reliability and validity tests are important to ensure that the results of the study are accurate and meaningful. Reliability ensures that measurements of waste recycling practices among micro-entrepreneurs are consistent over time and across different conditions.

### **3.9.2 Descriptive Analysis**

Descriptive analysis is vital in researching waste recycling among micro-entrepreneurs as it helps summarize key aspects of recycling practices. It provides a snapshot of the current state, highlighting the frequency and types of recycling activities. This analysis allows for comparisons between different groups, revealing patterns and trends such as gender, age, marital state, and monthly income. Visualizations aid in easy comprehension, making it useful for policymakers and stakeholders. Insights from descriptive analysis can inform targeted interventions, policy development, and public awareness campaigns. By identifying successes and challenges, this approach serves as a foundation for further research and initiatives aimed at promoting sustainable waste management practices among micro-entrepreneurs.

### 3.9.3 Spearman's Correlation Analysis

Spearman's Correlation Analysis is used in this study to evaluate the research objective. It is helpful to look at the relationship and connection between each IV and DV. The critical value of the correlation between variables varies between 0 and 1.

**Table 3.4: Correlation Coefficient Indicators**

<b>Value of the Correlation Coefficient</b>	<b>Strength of Correlation</b>
1	Perfect
0.7 – 0.9	Strong
0.4 – 0.6	Moderate
0.1 – 0.3	Weak
0	Zero

### 3.10 Summary

In this chapter, researchers discuss the waste recycling intentions among micro-entrepreneurs in Kota Bharu Kelantan. All the material in this chapter depends on the data. So, data collection and process options about the research process must be included. The most important approach in this chapter is that the researcher uses a questionnaire to gather all the important data to meet the objectives of the study. Researchers have used quantitative data presentation in this study.

## CHAPTER 4

### DATA ANALYSIS & FINDINGS

#### 4.1 Introduction

This chapter discusses the findings from the data collected by using selected statistical test that runs by the latest Statistical Package for the Social Sciences (SPSS) software. Specifically, the reliability test on the 30 respondents from the pilot study was done to verify the consistency and reliability of the research instrument before the actual survey. Next, the normality test, followed by the descriptive analysis for demographic profile and information of waste management. Lastly, Spearman Correlation was used to measure hypotheses of the research.

#### 4.2 Reliability Test

A pilot study has been conducted on 30 respondents to determine the consistency and reliability of the research instrument before the actual survey. There were four variables that need to be tested for reliability where each of the variable consists of five items (see Table 4.1).

**Table 4.1: Reliability Cronbach's Alpha of Pilot Test**

Variables	Number of items	Cronbach' Alpha	Strength of Association
Attitude towards recycles	5	0.903	Excellent
Subjective norm towards recycles	5	0.884	Very Good
Perceived behavioral control towards recycles	5	0.911	Excellent
Intention towards recycles	5	0.862	Very Good

It can be summarized that attitude ( $\alpha = 0.903$ ), and perceived behavioral control ( $\alpha = 0.911$ ) has an excellent consistency whilst subjective norm ( $\alpha = 0.884$ ) and intention ( $\alpha = 0.862$ ) has very good consistency of items measured. Overall, this questionnaire is acceptable to proceed to the next actual survey.

### 4.3 Normality Test

**Table 4.2: Test of Normality**

Tests of Normality						
	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Intention to recycle	0.189	341	0	0.83	341	0
Attitude	0.205	341	0	0.875	341	0
Subjective Norm	0.192	341	0	0.813	341	0
Perceived behavioral control	0.206	341	0	0.799	341	0

According to Gupta A. et al., (2019), the Kolmogorov-Smirnov test was used to test the normality of the data distributed. The indication of the data needs to be normally distributed is when the significance level is more than 0.05. While the data is not typical if the significant value is less than 0.05. From table 4.2 above, the normality test indicates that it significant value for all the variables, which are intention to recycle, attitude, subjective norm, perceived behavioral control, ae less than < 0.001, which means it is less than 0.05 and consider as not normal data.

### 4.4 Descriptive Analysis

The results of descriptive analysis performed on the items for each variable are presented in the form of mean and standard deviation in this section. All the items were measured using a five-point Likert scale; Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4) and Strongly Agree (5).



**Table 4.3: Descriptive Analysis for Variables**

	Attitude	Subjective Norm	Perceived behavioral control	Intention toward recycle
N	341	341	341	341
Mean	3.8217	3.8651	3.8598	3.9771
Std. Deviation	0.9322	0.973	1.0159	0.9097
Minimum	1	1	1	1
Maximum	5	5	5	5

Based on the descriptive analysis shows that the respondents think that they felt happy when they recycle on their premises and felt that this is part of their responsibility. (mean = 3.82) Also, the respondents think that business neighbours influenced them to recycle on their premises. (mean = 3.87). Then, the respondents think that time constraints them to recycling (mean = 3.86). Mostly the respondents have a neutral intention to recycle waste at their premises (mean = 3.98)

**Table 4.4 Demographic Background**

<b>Demographic profile</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>	<b>341</b>	<b>100</b>
- Male	157	46
- Female	184	54
<b>Age</b>	<b>341</b>	<b>100</b>
- 20-30 years	60	17.6
- 31-40 years	150	44
- 41-50 years	98	28.7
- 50 years and above	33	9.7
<b>Ethnicity</b>	<b>341</b>	<b>100</b>
- Malay	256	75.1
- Chinese	57	16.7
- Indian	25	7.3
- Pakistan	3	0.9
<b>Monthly profit business</b>	<b>341</b>	<b>100</b>
- Below RM2000	55	16.1
- RM2000- RM3999	95	27.9
- RM4000- RM5999	139	40.8
- RM6000- RM7999	50	14.7
- Above RM8000	2	0.5
<b>Period of business operation</b>	<b>341</b>	<b>100</b>
- Less than one years	10	2.9
- 1-3 years	108	31.7
- 3-5 years	151	44.3
- More than 5 years	72	21.1
<b>Type of business ownership</b>	<b>341</b>	<b>100</b>
- Sole proprietors	230	67.4
- Partnership	98	28.7
- Cooperative	13	3.9
<b>Type of goods sold</b>	<b>341</b>	<b>100</b>
- Food and confectionery	88	22.2
- Wet goods	96	24.2
- Clothing and Apparel	84	21.3
- Daily Product	65	16.4
- Home and Kitchen Items	55	13.9
- Toys	8	2

Based on Table 4.4, most of the respondents were female (54.0%) aged between 41 – 50 years old (28.7%) and most ethnicity which is Malay (75.1%). Among the incomes that have the highest percentage of respondents is RM4000 to RM5999 (40.8%). Most of the respondents' period of

business operation is between 3 to 5 years (44.3%). Also, most respondents were sole proprietors (67.4%). The majority of types of goods sold were food and confectionery (22.2%).

#### 4.5 Information of Waste Management

**Table 4.5 Information of Waste Management**

<b>Information of Waste Management</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Do you know what is recycle?</b>	<b>341</b>	<b>100</b>
- Yes		
- No		
<b>Experience of recycle</b>	<b>341</b>	<b>100</b>
- Yes	60	17.6
- No	150	44
<b>How often do you recycle</b>	<b>341</b>	<b>100</b>
- Everyday	76	21.9
- 1-2 times in a week	137	40.4
- 3-5 times in a week	128	37.7

The data above describes that the sample has knowledge about recycling (98.5%) and they had experience in practicing it (95%). This reflects that the sample has a high level of past engagement in recycling activities. In addition, most of them recycle between 3 to 5 times a week.

**Table 4.6 Ways to practice recycling.**

<b>Ways to practice recycling</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Recycle Properly</b>		<b>66.3</b>
By separating the broken glass from the recycling bin.	117	15.9
By compressing bottles before throwing them in the recycling bin.	119	16.2
By flattening boxes before recycling them.	186	25.3
By separating food waste from the waste bin	65	8.9
<b>Didn't Recycle Properly</b>		<b>33.7</b>
By throwing the broken glass into the bin.	109	14.9
By throwing the bottles into the bin.	67	9.1
By throwing the boxes to bin.	71	9.7

However, amongst those who were performing recycling, 66.3% of them were properly recycling in a proper manner; separate food waste (8.9%), separating the broken glass from the recycling bin (15.9%), compressing bottles (16.2%), and flattening boxes before recycling them (25.3%). Whilst 33.7% simply throw broken glass, bottles, and boxes into regular bins.

#### **4.6 Correlation and Hypothesis Testing**

According to Gupta et al., (2019), Spearman correlation evaluates the direction and strength of the correlation between two ranking determinants. It provides a measure of the monotonicity of the relationship between two determinants. The Spearman correlation coefficient ranges between +1 and -1. A Spearman's correlation score of +1 indicates a perfect connection between the rankings. According to the normality test results, it is determined that the data is non-normal data. Thus, Spearman correlation has been employed in order to identify correlation between all variables based on the hypothesis statements.

**Table 4.7: The Spearman Correlation Coefficient**

		Intention to recycle	Attitude	Subjective Norm	Perceived behavioral control
Intention to recycle	Correlation Coefficient	1	.519**	.535**	.472**
	Sig. (2-tailed)	0	0	0	0
	N	341	341	341	341
Attitude	Correlation Coefficient	.519**	1	.750**	.499**
	Sig. (2-tailed)	0		0	0
	N	341	341	341	341
Subjective Norm	Correlation Coefficient	.535**	.750**	1	.533**
	Sig. (2-tailed)	0	0		0
	N	341	341	341	341
Perceived behavioral control	Correlation Coefficient	.472**	.499**	.533**	1
	Sig. (2-tailed)	0	0	0	
	N	341	341	341	341

**H1:** There is a relationship between attitude and intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan.

The correlation coefficient  $r=0.519$  was observed between attitude and intention to recycle waste among the micro-entrepreneurs, which is statistically significant ( $p<0.01$ ). This indicates that attitude has a moderate positive relationship towards the intention to recycle. Thus, H1 is accepted.

**H2:** There is a relationship between subjective norm and intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan.

The correlation coefficient  $r=0.535$  was observed between subjective norm and intention to recycle waste among the micro-entrepreneurs, which is statistically significant ( $p<0.01$ ). This indicates that attitude has a moderate positive relationship towards the intention to recycle. Thus, H2 is accepted.

**H3:** There is a relationship between perceived behavioral control and intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan.

The correlation coefficient  $r=0.472$  was observed between perceived behavioral control and intention to recycle waste among the micro-entrepreneurs, which is statistically significant ( $p<0.01$ ). This indicates that attitude has allowed low positive relationship towards intention to recycle. Thus, H3 is accepted.

In conclusion, attitude, subjective norm, and perceived behavioral control are all statistically significant factors in influencing recycling intentions. Notably, among these variables, subjective norm demonstrates the strongest relationship, with a correlation coefficient of 0.535. Specifically, a majority of respondents express the belief that their business neighbours play a substantial role in shaping their intentions regarding recycling behaviours.

#### 4.8 Summary

This chapter concludes by discussing the interaction attitudes towards waste recycling, subjective norms to waste recycling, and perceived behavioral control towards waste recycling. The overarching inferences drawn were gained from the pilot study, conducted to validate the questionnaire, affirm its reliability for the subsequent survey phase. Next, the data on normality indicates that all variables conform to a normal distribution. Lastly, the Spearman Correlation Coefficient underscores the significance of all variables, demonstrating a meaningful and reciprocal relationship between the independent variables and the dependent variable based on the hypotheses stated.

## CHAPTER 5

### DISCUSSION AND CONCLUSION

#### 5.1 Introduction

The researcher outlined the main findings from the study regarding waste recycling with intention among micro-entrepreneurs in Kota Bharu Kelantan based on the hypothesis statements. This chapter also includes a study of implications, limitations such as problems or weaknesses that can be caused by the collection of variables, and recommendations for further research based on the findings of the study.

A total of 341 micro-entrepreneurs in Kota Bharu Kelantan who have been selected as respondents have given feedback to this study by answering the survey questions that were distributed to them. To ensure that the respondents are micro-entrepreneurs, four main market areas in Kota Bharu have been selected, namely Pasar Siti Khadijah, Wakaf Che Yeh, Berek 12 and Pasar Tok Guru. This is to ensure that the data used in this study is valid and reliable. Most of the small traders in the selected area have a business certificate certified by the Kota Bharu Municipal Council (KBMC). This proves that the micro-entrepreneurs were been recognized by the authorities.

#### 5.2 Key Findings

Based on the findings in Chapter 4, it can be concluded that attitude, subjective norm, and perceived behavioural control have a positive relationship towards the intention to waste recycling among micro-entrepreneurs in Kota Bharu, Kelantan. Table 5.1 shows the summary of hypothesis testing result based on spearman's correlation coefficient analysis.



**Table 5.1: Summary of Hypothesis Testing**

Hypothesis	Result	Hypothesis Testing
There is a relationship between attitude and intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan.	r = 0.519 p = 0.000 Moderate	Hypothesis 1 is accepted
There is a relationship between subjective norms and intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan.	r = 0.535 p = 0.000 Moderate	Hypothesis is accepted
There is a relationship between perceived behavioral control and intention to recycle waste among micro-entrepreneurs in Kota Bharu, Kelantan.	r = 0.472 p = 0.000 Low positive	Hypothesis 3 is accepted

Attitudes toward waste recycling intention refers to micro-entrepreneurs' feelings, beliefs, and evaluations regarding the intention to recycle waste materials. An attitude can significantly influence the intention to engage in recycling behaviors (Karatekin et al., 2023). Table 5.1 shows that attitude has a positive moderate relationship towards waste recycling among micro-entrepreneurs where the coefficient value is 0.519. It implies that as attitudes toward waste recycling increase, there is a moderate increase in the intention to recycle waste. As for this study, the sample felt happy, responsible, and important to recycle in order to save the environment. As supported by Al Mamun et al. (2019), desire for recycling is positively and statistically substantially influenced by attitude. By having a positive attitude through embracing recycling and sustainable practices, entrepreneurs can contribute not only to the safe internal operations of their business, but also their external reputation and market positioning to a more environmentally conscious and responsible business ecosystem (Nyankone, 2022).

SN reflects the perceived social expectations and approval, or disapproval associated with intention to engage in waste recycling (Karatekin et al., 2023). Based on table 5.1, the result shows that subjective norm has positive moderate relationship towards intention to recycle waste among

micropreneurs where the coefficient value is 0.535. It indicates that the perceived influence from their social environment moderately contributes to shaping their intention to waste recycling practices in their businesses. Which means, the more they see their friends, family, other market traders, and mass media promoting recycling activities, the more desires the market traders will have to perform the recycling in the future (Munir et al, 2023). This study is supported by Simamora et al. (2021), which highlighted that that recycling intention is encouraged by the social norms that are important for them. Moreover, Fauk et al. (2022) stated that family, friends, neighbors, or anybody else who holds personal significance might exert pressure on micro-entrepreneur. In addition, the findings show that entrepreneurs perceive subjective norms related to legal and regulatory expectations. Additionally, respondents agreed that existing laws influence them to recycle waste on their premises. If waste recycling is mandated or encouraged by government regulations, micro-entrepreneurs may view compliance with these norms as a necessary aspect of responsible business conduct (Ang et al., 2021). Therefore, the study concluded that there is positive moderate subjective norm towards waste recycling intention.

PBC in waste recycling intention is closely tied to individuals' knowledge about recycling processes, access to facilities, and the convenience of disposal options, influencing their perceived ability to engage in environmentally friendly behaviors. The result on table 5.2 shows that Perceived behavioral control has a low positive relationship towards waste recycling among micro-entrepreneurs where the coefficient value is 0.472. Micro-entrepreneurs feel that they only have limited control over the implementation of waste recycling practices in their business, yet there is still a positive correlation with their intention to recycle. The micro traders did mention that time overtakes them to do recycling on their premises, however they still do recycling occasionally. There are several studies that confirms the positive relationship between perceived behavioral

control and intention to recycle waste (Al Mamun, 2018; Mohamad et al., 2022; Munir et al, 2023). Specifically, it is found that convenience, experience and accessibility to recycling facilities (Munir, et al., 2023), time and location (Mohamad et al., 2022) as well as having knowledge on recycling (Muniandy et al., 2021) has significantly influenced individual motivation to recycle electrical waste. In addition, this study also conclude that perceived behavioral control is also influenced by an individual's knowledge and skills related to recycling. If people feel adequately informed about recycling practices and possess the necessary skills and knowledge to engage in recycling, they are more likely to have a positive perception of their control over the behavior (Muniandy et al., 2021), Therefore, the study concluded that there is positive moderate perceived behavioral control towards waste recycling intention.

### 5.3 Implications

There are several important implications for the overall findings of this research that need to be considered. Therefore, the implications of this study have affected the micro-entrepreneurs around Kota Bharu Kelantan on their intention to recycle waste.

The findings in this research are the first to provide useful information to micro-entrepreneurs about the importance, benefits and positive effects of waste recycling. This is because micro-entrepreneurs are less exposed to waste recycling knowledge. By conducting this research, they were indirectly exposed to the benefits of waste recycling. After this research is carried out, they can do waste recycling activities with more discipline because they have learned the importance of waste recycling.

The next research finding is that the results of this study can guide the government as well as non-governmental organizations in forming and enacting policies and programs that revolve around waste recycling among micro-equilibrium in Kota Bharu Kelantan. This is because it can meet the needs of the community regarding waste recycling. Public and private entities are expected to work together to make micro-entrepreneurs aware of the importance of waste recycling. This can be done with proper recycling campaigns and seminars.

#### 5.4 Limitations & Recommendations

In the context of research, there are some limitations that need to be overcome to improve the quality of research, one of which is the sample size. A small sample size may not reflect the true variation in the population. This can be done by expanding the group of respondents or taking a larger sample. Therefore, future researchers need to expand the sample size to emphasize customer loyalty. Instead of focusing only on Kota Bharu, Kelantan, future researchers can expand their study sample by conducting future studies in all Kelantan cities. Here are some of the main markets in the cities of Kelantan, one of which is Pasar Besar Kuala Krai, which is a hub for locals to buy fresh produce, meat, and other daily necessities. Pasir Mas Market is just like any other market, it offers a variety of local goods and products. Kubang Kerian Market is famous for its diverse range of products, including fresh produce, clothing, and home goods. Wakaf Bharu Market provides a combination of daily necessities and local products.

Next, additional variables. Not including some relevant variables may reduce the complexity and relevance of the study. Therefore, adding variables such as awareness, knowledge, or practice can improve the understanding of the relationship between these factors and enrich the study. In addition, awareness, or knowledge. Studies that do not measure levels of awareness or knowledge may be missing important dimensions. So, by adding variables that measure the level of awareness or knowledge can provide additional insight and provide information about the factors that influence the results of the study.

## 5.6 Conclusions

Overall, the study of waste recycling intentions among micro-estates in Kota Bharu, Kelantan shows that most micro-estates have a low level of waste recycling intention. This is due to several factors, including lack of knowledge about the benefits of recycling, lack of access to recycling facilities, and lack of incentives to recycle. However, the results of this study also show that there are several factors that can increase the intention to recycle waste among micro-equivalents. This includes increasing knowledge about the benefits of recycling, increasing access to recycling facilities, and providing incentives to recycle. Therefore, the government and other related parties need to make various efforts to increase the intention of recycling waste among micro-equivalents. This can be done by providing information about the benefits of recycling, increasing access to recycling facilities, and providing incentives to recycle.

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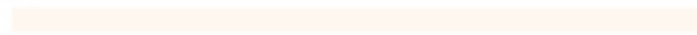
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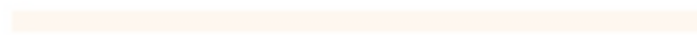
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APPENDIX A  
QUESTIONNAIRE



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**TAJUK : KAJIAN TERHADAP NIAT KE ARAH KITAR SEMULA SISA DALAM  
KALANGAN USAHAWAN MIKRO DI KOTA BHARU, KELANTAN**

Selamat Sejahtera,  
Tuan/ Puan yang dihormati

Kami sedang menjalankan penyelidikan akademik yang bertajuk kajian terhadap niat ke arah kitar semula sisa dalam kalangan usahawan mikro di Kota Bharu, Kelantan

Penyelidikan ini dijalankan adalah bertujuan untuk memenuhi keperluan akademik pengajian kami. Untuk pengetahuan Tuan/ Puan, tinjauan ini adalah untuk mengkaji niat ke arah kitar semula sisa dalam kalangan usahawan mikro di Kota Bharu, Kelantan. Diharap Tuan/ Puan dapat melengkapkan soal selidik ini dengan ikhlas dan dengan penuh komitmen. Maklum balas tinjauan dari Tuan/ Puan adalah sulit dan hanya akan digunakan untuk tujuan akademik sahaja. Kerjasama dari Tuan/ Puan dalam penyelidikan ini amat kami hargai.

*Good day,  
Dear Sir / Madam,*

*The purpose of this research is to fulfil our academic requirement. For your information, this survey is about intention towards waste recycling among micro-entrepreneurs in Kota Bharu Kelantan. It is hoped that Sir/ Madam can complete this questionnaire sincerely and with full commitment. Your responses for this survey are confidential and will be used for academic purposes only. Your cooperation in this research is greatly appreciated.*

Soal selidik ini mengandungi enam bahagian. Bahagian A adalah mengenai latar belakang responden, Bahagian B adalah mengenai maklumat tentang kitar semula sisa, manakala Bahagian C, D, E dan F terdiri daripada pemboleh ubah yang digunakan untuk kajian ini; sikap tentang kitar semula, norma subjektif mengenai kitar semula dan kawalan tingkah laku yang dirasakan ke atas kitar semula dan niat untuk mengitar semula.

*This questionnaire contains six sections. **Section A** is about the respondent's background, **Section B** is about information on waste recycling, whilst **Section C, D, E and F** consist of the variable that are used for this study; attitude on recycle, subjective norm on recycle and perceived behaviour control on recycle and intention to recycle.*

**Disediakan oleh / Prepared by:**

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## **A. LATAR BELAKANG RESPONDEN**

### **RESPONDENT'S BACKGROUND**

**ARAHAN:** Sila nyatakan jawapan anda dengan menandakan (√) pada ruang yang disediakan.  
**INSTRUCTION:** Please specify your answer by placing a tick (√) on the space provided.

#### **A1. Jantina pemilik perniagaan/ Business owner's gender**

- Lelaki/ Male
- Perempuan/ Female

#### **A2. Umur pemilik perniagaan/ Business owner's age**

- Bawah 20 tahun/ Below 20 years old
- 20 - 30 tahun/ years old
- 31 - 40 tahun/ years old
- 41 - 50 tahun/ years old
- Lebih 51 tahun/ Above 51 years old

#### **A3. Etnik pemilik perniagaan/ Business owner's ethnicity**

- Melayu/ Malay
- Cina/ Chinese
- India/ India
- Lain- lain/ Others (Sila nyatakan/ Please specify) \_\_\_\_\_

#### **A4. Keuntungan bulanan perniagaan/ Monthly profit business**

- Kurang RM 2000/ Below RM 2000
- RM 2000 – RM 3999
- RM 4000 – RM 5999
- RM 6000 – RM 7999
- Lebih RM 8000/ Above RM 8000

#### **A5. Tempoh operasi perniagaan/ Period of business operation**

- Kurang dari satu tahun/ Less than one year
- 1-3 tahun/ years
- 3-5 tahun/ years
- Lebih dari lima tahun/ More than 5 years

#### **A6. Jenis pemilikan perniagaan/ Type of business ownership**

- Pemilikan Tunggal/ Sole Proprietorship
- Perkongsian/ Partnership
- Koperasi/ Cooperative
- Lain-lain/ Other (please specify): \_\_\_\_\_

#### **A7. Jenis barangan yang dijual/ Types of goods sold**

- Makanan and kuih muih/ Food and confectionery
- Barangan basah/ Wet goods
- Pakaian dan Fesyen/ Clothing and Apparel

- Barangan Harian/ *Daily Product*
- Barangan Rumah dan Dapur/ *Home and Kitchen Items*
- Lain-lain Sila nyatakan/ *Other, please specify* \_\_\_\_\_

## **B. MAKLUMAT PENGURUSAN SISA PEPEJAL INFORMATION ON SOLID WASTE MANAGEMENT**

**ARAHAN:** Sila tanda (√) pada jawapan yang berkenaan.

**INSTRUCTION:** Please tick (√) on the appropriate answer.

**B1. Adakah anda tahu apa itu kitar semula?/ Do you know what is recycling?**

- Ya/ *Yes*
- Tidak/ *No*

**B2. Pernahkah anda kitar semula sisa?/ Have you recycled waste before?**

- Ya/ *Yes*
- Tidak/ *No*

Jika **Ya**, Sila ke **B3 dan B4/ If Yes, please proceed to B3 and B4**

Jika **Tidak**, Sila ke Soalan **B5/ If No, please proceed to B5**

**B3. Berapa kerap anda melakukan aktiviti kitar semula di premis anda?/ How often do you do recycling activities at your premises?**

- Setiap hari/ *everyday*
- 1-2 kali dalam seminggu/ *1-2 times in a week*
- 3-5 kali dalam seminggu/ *3-5 times in a week*
- Lain-lain (sila nyatakan)/ *Other (please specify)* \_\_\_\_\_

**B4. Bagaimana anda kitar semula?/ How do you recycle?**

- Dengan mengasingkan kaca pecah daripada tong sisa kitar semula/ *By separating the broken glass from the recycling bin.*
- Dengan memampatkan botol dan meletakkan penutup semula sebelum saya membuang ke dalam tong sisa kitar semula di premis saya/ *By compressing bottles and put the lid back on before I throw in the recycling bin at my premises.*
- Dengan meratakan kotak sebelum mengitar semula/ *By flattening boxes before recycling them.*
- Dengan membuang kaca pecah ke tong sisa/ *By throwing the broken glass to bin.*
- Dengan membuang botol ke tong sisa/ *By throwing the bottles to bin.*
- Dengan membuang kotak ke tong sisa/ *By throwing the boxes to bin.*
- Lain-lain (sila nyatakan)/ *Other (please specify)* \_\_\_\_\_

**B5. Jika anda tidak mengitar semula, mengapa? / If you don't recycle, why?**

- Tiada kemudahan kitar semula yang berdekatan/ *No nearby recycling facilities*
- Tidak tahu cara mengitar semula/ *Don't know how to recycle.*
- Tiada masa untuk mengitar semula/ *No time to recycle.*
- Tiada kepentingan/ *Not important*
- Lain-lain (Sila nyatakan)/ *Others (Please specify)* \_\_\_\_\_

**C. SIKAP TERHADAP NIAT UNTUK KITAR SEMULA BUANGAN  
ATTITUDE TOWARDS INTENTION TO WASTE RECYCLE**

**ARAHAN:** Sila nyatakan sama ada anda bersetuju atau tidak bersetuju dengan kenyataan-kenyataan berikut:

**INSTRUCTION:** Please indicate whether you agree or disagree with the following statements:

1	2	3	4	5
Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

No	Soalan / Questions	1	2	3	4	5
C1.	Saya berasa gembira apabila saya melakukan kitar semula sisa di premis saya/ <i>I feel happy when I recycle waste at my premises</i>					
C2.	Saya merasakan bahawa saya menyumbang kepada masyarakat apabila saya melakukan kitar semula di premis saya./ <i>I feel that I am contributing to the society when I recycle at my premises.</i>					
C3.	Saya rasa adalah menjadi tanggungjawab saya untuk menjaga alam sekitar melalui aktiviti kitar semula sisa di premis saya/ <i>I think it is my responsibility to take care of the environment through recycling activities at my premises</i>					
C4.	Saya rasa dengan mengitar semula sisa di premis saya dapat memberi manfaat kepada masyarakat di sekeliling saya/ <i>I think that by recycling waste at my premises can benefit the community around me</i>					
C5.	Saya rasa penting untuk saya mengitar semula sisa di premis saya/ <i>I think it is important for me to recycle garbage at my premises</i>					



**D. NORMA SUBJEKTIF TERHADAP NIAT KITAR SEMULA SISA**  
**SUBJECTIVE NORMS TOWARDS INTENTION TO WASTE RECYCLE**

**ARAHAN:** Sila nyatakan sama ada anda bersetuju atau tidak bersetuju dengan kenyataan-kenyataan berikut.

**INSTRUCTION:** Please indicate whether you agree or disagree with the following statements.

1	2	3	4	5
Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

No	Soalan / Questions	1	2	3	4	5
D1.	Rakan perniagaan saya mempengaruhi saya untuk mengitar semula sisa di premis saya/ <i>My business neighbours influenced me to recycle waste on my premises</i>					
D2.	Keluarga saya mempengaruhi saya untuk mengitar semula sisa di premis saya/ <i>My family influenced me to recycle waste on my premises</i>					
D3.	Media massa mempengaruhi saya untuk mengitar semula sisa di premis saya/ <i>The mass media influenced me to recycle waste on my premises</i>					
D4.	Kempen dari pihak berkuasa tempatan mempengaruhi saya untuk mengitar semula sisa di premis saya/ <i>A campaign from the local authority influenced me to recycle waste on my premises</i>					
D5.	Undang-undang yang sedia ada mempengaruhi saya untuk mengitar semula sisa di premis saya/ <i>Existing regulations influenced me to recycle waste at my premises.</i>					

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**E. KAWALAN TINGKAH LAKU YANG DIRASAKAN TERHADAP NIAT UNTUK KITAR SEMULA  
PERCEIVED BEHAVIORAL CONTROL TOWARDS INTENTION TO WASTE RECYCLING**

**ARAHAN:** Sila nyatakan sama ada anda bersetuju atau tidak bersetuju dengan kenyataan-kenyataan berikut.

**INSTRUCTION:** Please indicate whether you agree or disagree with the following statements.

1	2	3	4	5
Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

No.	Soalan / Questions	1	2	3	4	5
E1.	Saya rasa pengalaman kitar semula sisa tidak menghalang saya untuk kitar semula pada masa akan datang/ <i>I think the experience of recycling does not prevent me from recycling in the future</i>					
E2.	Saya rasa jarak pusat kitar semula dengan premis tidak menghalang saya untuk kitar semula sisa di premis saya/ <i>I think the distance of the recycling center from the premises does not prevent me from recycling waste at my premises</i>					
E3.	Saya rasa masa tidak menghalang saya untuk kitar semula sisa di premis saya/ <i>I think time does not stop me from recycling waste on my premises</i>					
E4.	Saya rasa kos yang berkaitan dengan mengitar semula tidak menghalang saya untuk kitar semula sisa di premis saya/ <i>I feel that the costs associated with recycling does not prevent me to recycle waste at my premises.</i>					
E5.	Saya rasa pengetahuan tentang kitar semula sisa tidak menghalang saya untuk kitar semula di premis saya/ <i>I feel that knowledge on waste recycling does not prevent me to recycle at my premises.</i>					

**F. NIAT KE ARAH KITAR SEMULA**  
**INTENTION TOWARDS WASTE RECYCLE**

**ARAHAN:** Sila nyatakan sama ada anda bersetuju atau tidak bersetuju dengan kenyataan-kenyataan berikut.

**INSTRUCTION:** Please indicate whether you agree or disagree with the following statements.

1	2	3	4	5
Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>

No.	Soalan / Questions	1	2	3	4	5
F1.	Saya akan menyediakan tong sisa kitar semula di premis saya/ <i>I will set up recycling bins at my premises</i>					
F2.	Saya akan memampatkan botol dan meletakkan penutup semula sebelum saya membuang ke dalam tong sisa kitar semula di premis saya/ <i>I will compress bottles and put the lid back on before I throw in the recycling bin at my premises</i>					
F3.	Saya akan meratakan kotak sebelum mengitar semula/ <i>I will flatten boxes before recycling them.</i>					
F4.	Saya akan mengeluarkan semua sisa makanan dari tong sisa sebelum mengitar semula/ <i>I will remove all food wastes from the bin before recycling them.</i>					
F5.	Saya akan mengasingkan kaca pecah daripada tong sisa kitar semula kerana ia akan membahayakan pekerja kitar semula/ <i>I will separate the broken glass from the recycling bin as it will harm the recycling workers.</i>					

**APPENDIX B**  
**GANTT CHART**

ACTIVITY	WEEK													
	1	2	3	4	5	6	7	8	9	11	12	13	14	
Create a group whatsapp and discuss with supervisor for the first meeting through online (Google Meet)														
Project title selection														
Determination of title and submit into online														
Make a discussion with groupmates														
Project research and finding journal														
Meeting with supervisor for the first meeting through physical														
Preparation of chapter 1, 2 and 3														
Submit to supervisor														
Do correction														
Final submission of chapter 1,2 and 3														
Preparing for proposal presentation Of PPTA 1														
Final correction and amendments														
Start Collecting data														

Data analysis and discussion															
Conclusion and summary															
Preparation for final presentation															
Submit draft to supervisor of PPTA 2															

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