THE FACTORS INFLUENCING HOMEBUYERS' PERSPECTIVES TOWARDS ECO-FRIENDLY HOUSING

BY

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DECLARATION

We hereby declare that:
(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
(3) The word count of this research report is 17093.

Name of Student:	**Student ID:**	**Signature:**
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Date: 14 December 2023

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Navaneethan Paranjothi
Universiti Tunku Abdul Rahman
14 December 2023.

DEDICATION.

I dedicate this research to my parents, Paranjothi and Vijayasri and sibling, Koheelah Jothi, whose unwavering support and encouragement have been my guiding light throughout this academic journey. Your belief in my abilities has been a constant source of inspiration. This achievement is as much yours as it is mine.

With love and gratitude,
Navaneethan Paranjothi.

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The factors influencing homebuyers' perspective towards eco-friendly housing.

Dear respondents, my name is Navaneethan Paranjothi. I am a final year undergraduate student in Universiti Tunku Abdul Rahman, Sungai Long, currently pursuing a Bachelors Degree in Building and Property Management (HONS). I am hereby conducting a survey for my final year project titled "Factors influencing homebuyers' perspectives towards eco-friendly housing" whereby its primary objective is to identify the underlying factors that positively shift homebuyers' outlook on eco-friendly housing and motivate them in their decision making process.

This survey consists of **3 SECTIONS** and will take approximately 5-10 minutes to answer all the questions. Any and all responses will be kept confidential. Your participation in this survey will be a significant contribution towards this research.

Please feel free to reach me at **navaa13@1utar.my** should you have any inquiries.

Thank you in advance for your time.

Section A: Demographic survey.

1. Your age
   - 25 – 35
   - 35 – 45
   - 45 – 55
   - More than 55

2. Your gender
   - Male
   - Female
3. Your ethnicity
   - Malay
   - Chinese
   - Indian

- Others:___

4. Education level
   - SPM
   - Diploma/STPM
   - Bachelor's Degree
   - Master's degree
   - Doctorate (PHD)
   - Others___

5. Household Income level
   - Less than RM 4999
   - RM 5000 – RM 9999
   - RM 10,000 – RM 20,000
   - More than RM 20,000

6. Occupation
   - Government sector
   - Private sector
   - Self employed
   - Others___

7. Location

   - Eco Sanctuary
   - Eco Ardence
   - Eco Majestic
   - Eco Forest
   - Others___

8. Ownership status
   - Tenant
   - Homeowner

9. Duration of stay/ownership
   - Less than 1 year
   - More than 1 year

*If more than 1 year, please state your duration*___

Section B: factors that influences the homebuyers' perspective in the decision-making process of purchasing eco-friendly homes.

No	Factors / Assessment Criteria	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
	#1 Greenhouse gas emission reduction					
1	I am confident that the conventional housing construction methods that do not consider environmental conservation	1	2	3	4	5
2	I believe Greenhouse Gas emissions are extremely detrimental to the environment	1	2	3	4	5
3	I believe the construction industry should implement eco-friendly methods and techniques to reduce harmful gas emissions	1	2	3	4	5
4	More homes should be built with solar energy and powering to reduce the amount of harmful gas emissions regardless of its cost	1	2	3	4	5
5	I prefer to live in a house that minimizes the amount of harmful gas output	1	2	3	4	5
	#2 Waste reduction					
1	I believe the use of recycled and sustainable materials has a lower environmental impact thus, reducing the need for new resource extraction and minimizing waste	1	2	3	4	5

2	The level of environmental pollution caused by waste production in the housing sector is a concerning issue.	1	2	3	4	5
3	The implementation of waste management, control and reduction should be a mandatory component in every housing township to promote the preservation of the environment.	1	2	3	4	5
	#3 Energy and Water Saving					
1	I believe the government is taking the necessary initiatives to stimulate eco-friendly housing development to reduce climate change	1	2	3	4	5
2	I am confident that energy efficient appliances, lighting, insulation, and water saving fixtures are examples of measures that seek to protect the environment.	1	2	3	4	5
3	I am confident that these are the features of a house that I prefer the most	1	2	3	4	5
4	The cost efficiency in regards to water and electric bills with these water and energy saving features on a monthly basis could increase the demand for environmentally friendly homes.	1	2	3	4	5
	#4 Improvement in overall quality of life					

1	I believe that a homebuyer feels rewarded knowing that they are actively participating in preserving the environment.	1	2	3	4	5
2	I believe that green spaces can lead to better liveability in a township as it increases the community's wellbeing.	1	2	3	4	5
4	I believe residing in an environmentally friendly home can increase a homebuyer's quality of life through the usage and accessibility to green spaces.	1	2	3	4	5
	#5 Enhancement in health and comfort					
1	The highest level of comfortability in terms of noise reduction, pollution control, air quality, access to green space and better security could lead to one's betterment in their overall comfort level and health.	1	2	3	4	5
2	Green spaces promotes a healthy lifestyle.	1	2	3	4	5
3	I believe homebuyers are actively participating in protecting the environment by reducing their carbon footprint.	1	2	3	4	5

Section C: Homebuyers' opinion on eco-friendly homes

1. In your opinion, do you have any other factors that could significantly and positively change your outlook on eco-friendly homes?
    - IF YES, STATE YOUR OPINION___*

**IF NONE, SAY NIL*

2. *"Applying the green features to achieve the GBI certification leads to higher construction costs for developers. Consequently, this causes higher prices for green buildings customers (M.S Wira et al.,)"*

Do you agree with the fact that eco-friendly homes that follow the GBI parameters being sold at such high price points?

- IF YES,PLS STATE WHY____
- IF NO, PLS STATE WHY____

LIST OF ABBREVIATIONS

GBI	Green Building Index
LEED	Leadership in Energy and Environmental Design
JPN	Jabatan Pendaftaran Negara (National Registration Department)
SPSS	Statistical Package for Social Science
USGBC	United States Green Building Counsil
GHG	Greenhouse Gas
TPB	Theory of Planned Behaviour
SSPM	Stormwater System Planning and Maintenance
VOC	Volatile Organic Compounds
F1Q1	Factor 1 Question 1
F1Q2	Factor 1 Question 2
F1Q3	Factor 1 Question 3
F1Q4	Factor 1 Question 4
F1Q5	Factor 1 Question 5
F2Q1	Factor 2 Question 1
F2Q2	Factor 2 Question 2
F2Q3	Factor 2 Question 3
F3Q1	Factor 3 Question 1
F3Q2	Factor 3 Question 2
F3Q3	Factor 3 Question 3
F3Q4	Factor 3 Question 4
F4Q1	Factor 4 Question 1
F4Q2	Factor 4 Question 2
F4Q3	Factor 4 Question 3
F5Q1	Factor 5 Question 1
F5Q2	Factor 5 Question 2
F5Q3	Factor 5 Question 3

PREFACE

In embarking upon this research journey, I sought to delve into the complexities surrounding The Factors Influencing Homebuyers' Perspectives Towards Eco-Friendly Housing. The exploration of this topic has been a compelling endeavour, driven by a desire to contribute meaningful insights to the existing body of knowledge.

The genesis of this research can be traced back to a realization of the gaps and unanswered questions within the field. Observing the evolving landscape of the real estate market, I felt compelled to investigate the intricacies and nuances that shape homebuyers' perspectives on eco-friendly housing. This study is not merely an academic pursuit but a genuine attempt to unravel layers of understanding in a domain that holds profound implications for the real estate community.

Throughout this research process, I have been fortunate to receive guidance from Dr Elia Syarafina Bt. Abdul Shakur, whose expertise and encouragement provided invaluable direction. Their insights steered the research towards a deeper level of inquiry, and their unwavering support has been a constant source of motivation.

However, like any research endeavor, this study is not without its challenges. These obstacles, while significant, served as learning opportunities and reinforced the need for thoughtful consideration in interpreting the findings.

I extend my gratitude to all those who, in various capacities, contributed to the realization of this research. Their time and efforts have been integral to the robustness of the study.

This work is presented with humility, recognizing the evolving nature of research and the perpetual quest for knowledge. It is my sincere hope that this research may serve as a catalyst for further exploration, dialogue, and progress within the field of building and property management.

With scholarly enthusiasm,

Navaneethan Paranjothi.

ABSTRACT.

As sustainability and environmental consciousness become more and more valued in society, it is critical to comprehend the factors influencing people's real estate decisions. Using quantitative methods, the research takes a comprehensive approach to investigate the various aspects that positively affects homebuyers' perspectives towards eco-friendly housing.

The study explores prospective homeowners' knowledge of eco-friendly features, and its impacts. It examines how perceived costs—both short, and long-term—affect how decisions are made. Moreover, the study investigates how homebuyers' trust and preferences are shaped by green certifications like GBI, ENERGY STAR and LEED and their methods in encouraging the conservation of the environment.

It is evident that the quality of the environment is deteriorating due to the heavy pollution and rapid urbanization (Mei et al., 2017). The majority of energy used in modern cities is used by buildings, which accounts for almost 30 to 40 percent of all energy consumption and 70 percent of all electricity consumption. As a result, the adoption of eco-friendly methods like energy-efficient practices in the building industry offers enormous potential for reducing energy usage. This has brought forth a dire need for the construction industry to step towards energy efficient housing. In Malaysia, the Green Building Index (GBI) is a first-generation assessment instrument for energy-efficient structures. This was an initiative to boost, promote and stimulate environmentally friendly building practices and safeguard the environment. However, the application of green features to obtain the GBI certification results in higher construction costs for developers, which in turn increases the cost for buyers of green buildings (Wira et al., 2013) This study offers detailed insight into what alters the homebuyers' perception on eco-friendly housing despite having such a high price point.

This thesis seeks to make a significant contribution to the fields of consumer behavior, sustainability, and real estate by thoroughly examining consumer's behavioral patterns. Policymakers, real estate developers, and other stakeholders should benefit from the findings as well as higher education students and scholars, which should make it easier to promote and adopt eco-friendly housing practices among all walks of life.

CHAPTER 1: RESEARCH OVERVIEW

1.0. INTRODUCTION.

There is no doubt that global warming is the well-known phenomenon of industrialization in the world. There are several research and reports that have proven the devastating concept of the current situation on our planet and its ongoing effects on humankind. These adverse effects are coming to the light in recent times, and it has caused a spike in the curiosity for sustainable housing as an ideal remedy. It is generally agreed that Green Building is the practice of creating and using more resource efficient models of planning design in construction, renovation, operation, maintenance, and demolition of buildings. The primary goal of eco-friendly construction is to preserve the environment from the adverse effects that is resulted from the construction process. The Eco-Friendly concept also brings forward a vast array of practices and techniques to contribute to the primary goal to minimize the negative impacts of buildings on resource consumption, the environment and ultimately, the human health. However, these efforts do not go without extracting its fair share of negative impacts on the economic side of the housing sector. As interests and awareness increase from the public it is safe to say that the general acceptance of green homes not being cost friendly is becoming more and prevalent in recent times. The aim of this research is to determine the key factors that may influence homebuyers' general perception and views towards their choice in settling in eco-friendly homes.

1.1. RESEARCH BACKGROUND

Construction industry is detrimental to the environment as it is the leading cause of high energy consumption, solid waste generation, global greenhouse gas emissions, external and internal pollution, environmental damage, and resource depletion. Malaysia with its rapid growth of urbanization is one of the leading nations with a high CO_2 production in the Southeast (Pandey. S, 2018) As it remains, the construction industry is alone is the primary contributor to 24% of the country's total carbon dioxide emission. Green Buildings, also widely known as Sustainable Buildings, are structures that are environmentally responsible and resource-efficient throughout their lifespan. An efficiently designed green building can

produce energy savings between 30% to 60% compared to that of a conventional building – one that does not comply to the framework or criteria of green building parameters in its core design.

When the green building concept was emerging in the 1970's, the construction industry began to design and construct homes in an attempt to incorporate sustainable developmental principles. These principles included, eco-friendly building materials and construction process, awareness towards the impact on safety and health of the surrounding environment caused by the building before and after its completion and etc. The industry has come a long way since this as regulatory bodies in supervision of these green buildings were established subsequently to help design and construct green buildings and to certify them. Such is the Green Building Index. It was established as the first-generation rating tool for energy-efficient buildings as Malaysia was becoming a more progressive country with its ambitious long-term aim of joining the ranks of the developed countries by the year 2020 (Pandey. S, 2018)

1.2. PROBLEM STATEMENT

The main idea that prompted this research paper is the fact that the implementation of eco-friendliness element ultimately causes the hike in housing prices. However, this research aims to delve deeper into the realms of consumer perception that indicates us of the other factors that could cause the shift in perspectives rather than pinning price points as the driving factor. Although applying green features to achieve the GBI certification leads to a significant spike in the construction cost for developers and inadvertently transferring to the consumers –a higher price point – to consider compared to traditional housing schemes, it is seemingly growing clear that price points are not a detrimental factor as it does not significantly shift or affect their outlook in preserving the environment. This could be due to different ratings of the Green Building Index exacting a different cost. (Portnov et al., 2018) However, the underlying factors that pushes the homebuyers to be willing to bear the extra costs for the environmentally conscious homes are not well known (Wira et al.,)

Despite the growing awareness of environmental sustainability and its implications, there exists a gap in understanding the intricate factors that significantly influence homebuyers' perspectives on eco-friendly housing options that pushes them beyond the cost constraint. This is because the biggest issue that Malaysian green home developers face is a lack of

demand for green homes (Alias et al., 2010). The bulk of Malaysian home purchasers will continue to reject the green home notion as a new way of living. Despite the fact that the government has been launching programs to raise public awareness about green housing since 2007, Alias finds that Malaysia has yet to achieve the acceptable degree of sustainable development. This study aims to address this gap by investigating the multifaceted elements that shape homebuyers' preferences for eco-friendly housing. This is achieved by considering factors such as emission reduction, waste reduction, energy and water saving, improvement in quality of life and enhancement in health and comfort. By unraveling these underlying determinants, this research seeks to provide valuable insights for real estate developers, policymakers, and other stakeholders as well as scholars to effectively promote and cater to the demand for eco-friendly housing in an increasingly environmentally conscious market.

First time home buyer is defined by age between 24 to 34 years old (Puteri et al., 2017). Housing preference is important to make decisions in buying a house especially for first-time homebuyers. Even though housing is a basic need, it involves lot of procedures and financial resource. Housing preference involves several factors like location, amenities, surrounding neighborhood etc. Generally, these factors will influence the buyers' decision when purchasing a house but the bottom line is that the decision-making process is different for everyone.

1.3.RESEARCH QUESTION

1. What are the key factors that significantly influence the homebuyers' perspectives in the decision-making process of purchasing eco-friendly housing.
2. What is the most significant key factor that influences the homebuyers' perspectives in the decision-making process of purchasing eco-friendly housing.

These research questions encompass the broad scope of this study and aims to explore the multifaceted dynamics that guides homebuyers' perspectives on eco-friendly housing.

1.4. RESEARCH OBJECTIVES

The objective of this research is to identify the core factors that influences homebuyer's purchase decisions on eco-friendly homes. The research materials for this topic is

questionably obscure. However, this research paper has outlined two important objectives to comply and to be referred to as the framework to base the paper on.

i. To identify the key factors that influences the homebuyers' perspective in the decision-making process of purchasing eco-friendly housing.
ii. To evaluate the most significant factors that influences the homebuyers' perspectives in the decision-making process of purchasing eco-friendly housing.

1.5. RESEARCH HYPOTHESIS

i. H_1 : emission reduction influences the homebuyers' decision-making process of purchasing eco-friendly homes.

   H_0 : emission reduction does not influence the homebuyers' decision-making process of purchasing eco-friendly homes.

ii. H_1 : waste reduction influences the homebuyers' decision-making process of purchasing eco-friendly homes.

   H_0 : waste reduction does not influence the homebuyers' decision-making process of purchasing eco-friendly homes.

iii. H_1 : energy and water saving influences the homebuyers' decision-making process of purchasing eco-friendly homes.

   H_0 : energy and water saving does not influence the homebuyers' decision-making process of purchasing eco-friendly homes.

iv. H_1 : improvement in quality of life influences the homebuyers' decision-making process of purchasing eco-friendly homes.

   H_0 : improvement in quality of life does not influence the homebuyers' decision-making process of purchasing eco-friendly homes.

v. H_1 : enhancement in health and comfort influences the homebuyers' decision making process of purchasing eco-friendly homes

   H_0 : enhancement in health and comfort does not influence the homebuyers in their decision making process of purchasing eco-friendly homes.

1.6. SIGNIFICANCE OF STUDY.

The importance of this study is to provide a framework for the homebuyers' purchase decisions and the considerations that goes into the purchasing process. It is also important as it could lay out the findings as the key factors that should be considered by the agencies that are involved in the development of green homes. This study is for the purpose to see how the eco-friendliness element in housing developments equally holds advantages as well as disadvantages for its users and the environment. Another benefit of this research is to assist the public and the parties involved in developing green townships in adjusting their views towards green buildings. The contribution that this study could give is the fact that potential homebuyers and agencies like developers, the housing ministry, JPN, and for academics may have different outlooks on the impact of eco-friendly housing. Their reasonings are variable which could in turn significantly be valuable to conduct feasibility research on future green building developments especially in terms of residential developments. Although green or smart homes may already represent the eco-friendly development agenda in the emerging economy, little has been done to investigate the demand in the marketplace. Therefore, it is vital to empirically investigate homebuyers' attitudes and acceptance towards green homes and how they influence their adaptation intentions. This research has far-reaching implications that span multiple domains, including environmental sustainability, real estate development, consumer behavior, and policy formulation.

1.6.1 Environmental Sustainability.

In an era marked by growing environmental concerns, this study can contribute to the broader goal of promoting sustainable living practices. By unraveling the factors that influence individuals' preferences for eco-friendly housing, this research can offer guidance on how to design and market environmentally conscious housing options that resonate with potential homebuyers. This, in turn, has the potential to reduce carbon footprints, energy consumption, and resource depletion in the housing sector.

1.6.2 Real Estate Industry Insights.

Real estate developers and industry stakeholders stand to gain profound insights from this research. Understanding which features of eco-friendly housing

matter most to potential buyers can inform design decisions, marketing strategies, and investment choices. This knowledge can facilitate the creation of housing options that align with consumer preferences, potentially leading to increased demand and market growth in the sustainable housing sector.

1.6.3 Informed Consumer Decision-Making

This research can empower prospective homebuyers with informed decision-making tools. By shedding light on the trade-offs, benefits, and considerations associated with eco-friendly housing features, individuals can make choices that align more closely with their values and needs. This knowledge can lead to more satisfying and sustainable housing choices.

1.6.4 Policy Formulation and Regulation

Governments and policymakers such as the KPKT, Government Developers, JPN etc., grappling with urban development and sustainability goals can benefit from this study's findings. Insights into what motivates or inhibits the adoption of eco-friendly housing features can guide the formulation of policies that incentivize sustainable practices. This could include offering tax incentives, promoting energy-efficient technologies, or implementing building codes that encourage environmentally friendly housing options.

1.6.5 Academic Contribution

This study aims to enrich the academic literature on consumer behavior, sustainable development, and housing preferences. By delving into the complex interplay of variables and constructs, this research adds depth to existing theories and models. The empirical findings can contribute to a broader understanding of how psychological, social, and economic factors interact in the context of eco-friendly housing.

1.6.6 Long-Term Social Impact

As this research contributes to the growth of eco-friendly housing, its impact extends beyond individual decisions. A shift towards sustainable housing options can ripple through communities, fostering a culture of environmental responsibility. By

shaping attitudes and preferences, this research can catalyze a movement towards more sustainable and resilient urban environments.

In conclusion, the significance of this study lies in its potential to drive positive change across multiple dimensions – from fostering sustainability to informing real estate practices, empowering consumers, guiding policy decisions, enriching academic knowledge, and contributing to the broader social fabric. By understanding and addressing the factors influencing homebuyers' perspectives on eco-friendly housing, this research paper can play a pivotal role in shaping a more sustainable and conscious future.

1.7. CHAPTER LAYOUT

This research paper has been divided into five chapters to ensure the reader's understanding of the general topic in the most sensible, relevant and linear manner possible. This is an effort to facilitate the research write-up with minimal distractions and maximum efficiency and effectiveness. The chapters are as follows.

i. Introduction

A brief introduction of the topic to be discussed in the research paper. This topic outlines the background and the problems that are commonly found in the purchase process of eco-friendly homes. This topic also ensures the reader has the sufficient base knowledge regarding the key factors influencing buyers' perspectives towards eco-friendly homes before the subsequent topics.

ii. Literature review

This is a topic where it contains the documentation of a comprehensive review of the published and unpublished information from secondary sources of data that are available on the key factors influencing homebuyers' perspective on eco-friendly homes. Hence, the literature review is a clear and logical presentation of the relevant research work conducted thus far in the research field of interest.

iii. Methodology

This topic discusses the manner of which the research methodology was carried out in regard to research design, data collection method, sampling design, operational definitions of constructs, measurement scales, and the methods of data analysis on the factors that alters buyer perspective on eco-friendly homes

iv. Data analysis

This chapter reviews the patterns of the result and the analyses of the results which are relevant to the factors that influencing homebuyers' perspectives on eco-friendly homes and its hypotheses.

v. Discussions, conclusions, and implications.

This chapter presents the main themes from the previous chapters and the outline of the aim and the organization of this topic.

1.8. CONCLUSION

In Chapter 1, we have explored several key themes that set the foundation for this research. We began by delving into the concept of green building and its significance in the context of modern construction practices. We discussed the environmental, economic, and social drivers behind the growing interest in green buildings, emphasizing the need for sustainable solutions in the face of environmental challenges.

Furthermore, we examined the factors that influence buyer perspectives on green buildings, highlighting the importance of environmental awareness, cost considerations, energy efficiency, and various other aspects that shape individuals' decisions in the real estate market.

As we transition to Chapter 2, we will build upon these fundamental concepts to delve deeper into the practical aspects of eco-friendly design and construction and develop the theoretical framework on the factors that influences homebuyers' perspectives on green building. Chapter 2 will focus on the principles of eco-friendly architecture and its usages in various countries and the strategies employed to create eco-friendly structures. We will also

explore the latest innovations and technologies in green building and their implications for both the environment and the real estate industry.

CHAPTER 2: LITERATURE REVIEW

2.0. INTRODUCTION

The concept of eco-friendly housing has gained significant traction in recent years due to the escalating concerns about environmental sustainability and the pressing need to mitigate the adverse impacts of urbanization on the planet. As global awareness of climate change and resource depletion intensifies, individuals, communities, and policymakers are showing a growing interest in adopting more sustainable housing options. (Wijayaningtyas, M., 2019) This has led to a surge in the demand for eco-friendly housing, characterized by features such as energy efficiency, use of renewable materials, reduced carbon footprint, and incorporation of environmentally conscious design principles.

Numerous studies have looked into various areas of eco-friendly housing, such as architectural design and construction processes, as well as energy-efficient technology and sustainable building materials. However, according to Wira et al., in 2013, there is a dearth of a complete understanding of the elements that influence homebuyers' viewpoints and preferences, particularly with regard to eco-friendly homes. To effectively promote and encourage the adoption of such housing options, it is critical to investigate the complex interplay of factors that govern people's decision-making processes when contemplating eco-friendly dwellings (Wira et al., 2013)

The real estate market is heavily influenced by supply and demand. As a result, the green houses market is influenced by both supply and demand. As stated by Wira et al., in 2013, to achieve sustainable development in green homes in Malaysia, we must pay equal attention to both the supply and demand sides. This means that the perspectives and awareness levels towards the benefits of eco-friendly houses must be equally analyzed to develop a framework that could be used as a basis of understanding by the developers and policymakers.

This literature review aims to synthesize and analyze existing research on the subject, highlighting key themes and gaps in the current understanding of homebuyers' perspectives on eco-friendly housing. By critically examining previous studies, this review seeks to identify common trends, divergent findings, and emerging concepts that shed light on the

complex web of influences that shape individuals' attitudes and choices in this context. Ultimately, this exploration will contribute to a more holistic comprehension of the factors that drive or hinder the demand for eco-friendly housing, enabling stakeholders to formulate informed strategies for promoting sustainable living practices in the housing sector.

2.0.1. Distinction between eco-friendly homes, green homes and sustainable homes

Despite having interchangeable terms and often considered inter-related green homes, eco-friendly homes and sustainable homes carries a slight distinction in terms of its general definition, focus, features, usage and materials. For the sake of establishing and maintaining continuity and consistency in this thesis, the distinctions are as explained below. The fact that Green Homes, Sustainable Homes, and Eco-Friendly Homes are often used interchangeably, but they have nuanced differences. The differences are as laid out below.

2.0.1.1. Green Homes

A green home is one that is both energy and space efficient and can provide its people with a comfortable and healthy living environment. Sustainable resources are used in the operation of Green Home. It is regarded as a sustainable resource in that it may maximize our resources by drawing on the environment's natural resources while having a minimal negative impact on the ecosystem. The idea of a green home may be implemented in everything from the insulation and lighting to the building materials (Alias et al., 2010). Green homes primarily focus on reducing the environmental impact of the building during its construction and use. One effort to lessen the damage that homeowners and builders bring to the environment is the Green Home Concept. Even though green housing has existed for generations, it is primarily used in western nations. Architects began to create houses with minimal electricity usage. They incorporate environmentally friendly features such as energy-efficient appliances, renewable energy sources like solar panels, and water-saving fixtures. This is mainly due to homeowners consuming a lot of energy and contributed significantly to global warming by emitting between 10 and 30 tons of carbon dioxide each year. Green development has the potential to save up to 1.8 billion tons of carbon dioxide (Alias et al., 2010). The trees and

bushes that surround a green home might serve as natural shades to cool the building. Green homes often use sustainable building materials and construction techniques. For instance, daylight lighting. Alias finds that it is possible to use less electricity by using daylight lighting. It is the natural light that enters the house through the windows and other openings. In addition to lighting up the inside of the house, it also serves to heat and cool it. The green home can get sunshine evenly thanks to day illumination.

2.0.1.2 Sustainable Homes

The Brundtland Commission of the United Nations defined "sustainable development" as "" in 1987. Since that time, Johnston et al. have uncovered more than 140 new alternative and updated definitions. Thus, this profusion of diverse "sustainability" meanings has led to a situation where this fundamental idea has grown to imply many different things. Sustainability simply means that a particular activity or action may be sustained, or continued indefinitely, according to the dictionary's definition. In terms of the concept's focus, sustainable homes are broader and it is not limited to environmental concerns but also encompassing social and economic aspects. The key features of sustainability include not only environmental considerations but also considerations for the social and economic impacts of the home. This could involve using recycled materials, supporting local communities, and ensuring long-term affordability and self-sustainability. In regard to its longevity, the emphasis is on long term sustainability, both in terms of environmental impact and the home's ability to meet the needs of future generations (Blumendorf. M, 2013). Since this concept has not been widely adopted by the Malaysian housing industry, we can look into the Canadian Archetype Sustainable House as stated by Blumendorf (2013), which strives to create a contemporary home design that is resource-efficient and uses natural and sustainable materials. Its construction consists of ash-based concrete, wood, cork, bamboo, and organic paint. A minimal energy consumption is the goal of new insulation techniques, solar/gas powered heating, and solar-powered low energy lighting. Rainwater is collected and utilized to flush the toilets while sewage is handled on-site. Compostable plates and cups were used for lunch, garbage was

sorted and recycled on-site or transported to facilities, and solar power trailers powered the whole building site.

2.0.1.3. Eco-Friendly Homes

A home that was constructed with various sustainable elements in mind to minimize carbon footprint is referred to as an eco-friendly home. An eco-friendly home is a structure created to use less energy and produce less trash, as well as to be as sustainable as possible and have as little of an impact on the environment as feasible. Eco-friendly homes primarily focus on environmental aspects and reducing their carbon footprint. The key features of eco-friendly homes are that they mainly prioritize features like energy efficiency, renewable energy, and reduced water consumption. The materials used for these homes carries minimal environmental impact, such as non-toxic paints, sustainable wood, and recycled materials. Eco-friendly homes may also encourage eco-friendly lifestyle choices, such as composting and reducing waste.

In summary, while these terms are related and often overlap, they differ in their scope and emphasis. Green homes primarily target environmental concerns, sustainable homes take a broader view including social and economic sustainability, and eco-friendly homes are primarily concerned with reducing environmental impact. Understanding these differences can help individuals and organizations make more informed choices when it comes to building or buying homes that align with their values and goals. In this research, the concept of eco-friendly homes will be mainly looked into and the other concepts will be used for references.

2.1 REVIEW OF THE LITERATURE

This realm of intricately woven threads constitutes the core of this research investigation. In this section, the constellation of variables that form the tapestry of factors influencing homebuyers' perspectives on eco-friendly housing will be unraveled.

2.1.1 Dependent Variable

Homebuyers' Perspectives on Eco-Friendly Housing: This could be measured through a composite index or a set of questions that assess homebuyers' attitudes, preferences, and perceptions related to various aspects of eco-friendly housing, such as waste reduction, energy efficiency, environmental impact, cost considerations, etc.

2.1.2 Independent Variables.

Independent variables are those factors or conditions that will be manipulated or examined in order to identify their effect on the dependent variables. The following independent variables could be investigated in the context of this study on the factors influencing homebuyers' perspective towards eco-friendly housing.

2.1.2.1 Greenhouse Gas (GHG) Emission Reduction

This refers to the decrease of greenhouse gas emissions and other hazardous pollutants related with the construction and operation of a structure or housing unit. Pollutants from fossil fuels, such as ozone depletion, air pollution, and acid rain, endanger human life (United States Green Building Council, 2003). Some green building solutions, such as solar energy and powering, help to reduce fossil fuel usage and greenhouse gas emissions (GHG). They also improve energy efficiency and reduce toxic emissions

(Wira et al., 2013). This study will look into how different construction materials, energy sources, and technologies affect the amount of emissions produced by a building.

2.1.2.2 Waste reduction

This is the process of limiting waste produced during the construction and maintenance of a structure. Recycling and decreasing building waste are examples of such initiatives. Construction generates massive waste products, amounting to 180 million tons per year globally (Wira et al.,) According to the National Association of Home Builders in 1988, the total quantity of demolition green building is substantially less than conventional structures in terms of waste output. Researchers could investigate the efficacy of waste-reduction tactics in building, such as the utilization of recycled materials and efficient trash disposal systems.

2.1.2.3 Energy and water saving

Energy and water-saving measures seek to reduce the usage of these resources within a structure. Energy-efficient appliances, lighting, insulation, and water-saving fixtures are examples of such measures. Green building special green design and technology reduce operation costs and recuperate any extra project expenditures as well as long-term savings (USGBC, 2003). Energy saving features may include features that encourages the usage of energy efficient lighting and sensors to optimize energy savings to external or common areas. The influence of various energy and water-saving systems and practices on the resource consumption and utility bills of a building can be investigated through this variable. Water recycling features include rainwater harvesting and waster water recycling where a reduction in the usage in potable water consumption may be possible. Increased water efficiency features include water efficient irrigation and landscaping and water efficient fittings where

it encourages a design of system that does not require the usage of potable water supply from the local water authority. This could lead to significant reduction in bills. (Green Building Index, Malaysia, 2013)

2.1.2.4 Improvement in overall quality of life

In the context of housing, improvement in quality of life refers to providing living places that improve comfort, safety, and overall well-being. Researchers may look into how design factors such as natural lighting, indoor air quality, noise reduction, and access to green spaces contribute to occupants' enhanced quality of life. (Wira et al.,).

2.1.2.5 Enhancement in health and comfort.

Enhancing health and comfort entails planning and constructing homes that encourage the factor of liveability, such as temperature management, ventilation, and less exposure to contaminants. The effects of characteristics like efficient HVAC systems, non-toxic building materials, and ergonomic design on occupant health and comfort will be tested. (Wira et al., nd). Components like physical exercise is encouraged by access to green places such as parks, gardens, and natural sceneries. Outdoor activities such as walking, jogging, or playing sports in green environments help to improve physical health. Regular exercise in green areas has been linked to decreased obesity rates, lower rates of chronic diseases, and improved cardiovascular health. Communities with walkable infrastructure, such as sidewalks, pedestrian routes, and access to green spaces, encourage physical exercise. Residents may simply walk or bike to neighboring amenities, decreasing the need for car travel and supporting a healthier lifestyle.

Certain characteristics connected to each of these independent variables in various housing or building scenarios would be typically modified. The purpose is to understand how changes or interventions in these areas may affect the dependent variables, which are the outcomes. Depending on the research aims, these outcomes could include energy consumption, cost savings, occupant satisfaction, or environmental impact.

This study would entail gathering data, analyzing relationships, and drawing conclusions about the effectiveness of sustainable building practices and technologies in reducing emissions, reducing waste, saving energy and water, improving quality of life, and improving health and comfort in housing.

2.2. REVIEW OF RELEVANT THEORETICAL MODELS

Entering the world of theoretical models, we set out on an academic investigation that serves as the foundation for our comprehension of the variables impacting homebuyers' perceptions of eco-friendly housing. These models function as compass points, shedding light on the connections between complex psychological and sociological factors and, in the end, forming the complex mosaic of preferences in the field of sustainable living environments.

2.2.1 Theory of Planned Behavior (TPB).

According to Ajzen's (1985, 1987) Theory of Planned Behavior, people's intentions to carry out a behavior are influenced by their attitudes, perceived behavioral control, and subjective norms. Homebuyers' perspectives and preferences can be influenced by social norms, perceived control over sustainable housing choices, and attitudes toward environmental sustainability in the context of eco-friendly housing.

2.2.2 Housing Preferences Framework.

This framework highlights how a variety of factors, such as personal preferences, financial concerns, environmental considerations, and social influences, affect housing decisions. It takes into account how these elements interact to influence people's opinions about various housing options, such as environmentally friendly homes (Puteri et al., 2017).

2.2.3 Cognitive Dissonance Theory.

According to the cognitive dissonance theory, people strive for consistency in their actions and beliefs (Festinger 1957). Cognitive dissonance can occur

when someone values environmental sustainability but selects a non-eco-friendly housing option, which could affect or change their viewpoints.

These theories and frameworks provide insightful information about various facets of behavior, choices, and preferences pertaining to green building and eco-friendly homes. In order to better understand and encourage sustainable behaviors, preferences, and choices within the housing context, this study will put these theoretical models to use.

2.3. PROPOSED THEORETICAL/CONCEPTUAL FRAMEWORK

A theoretical framework is a summary of foundational theories that acts as a roadmap for developing the arguments. To make sense of phenomena, identify connections, and forecast the future, researchers develop theories. This subsection will elucidate the prevailing theories that serve as the foundation for this study within a theoretical framework, thereby proving that the topic of this paper or dissertation is relevant and grounded in established concepts. The current study's theoretical framework, as illustrated in Figure 1, comprises five independent variables: reducing emissions, reducing waste, conserving energy and water, improving overall comfort and health, and improving overall quality of life.

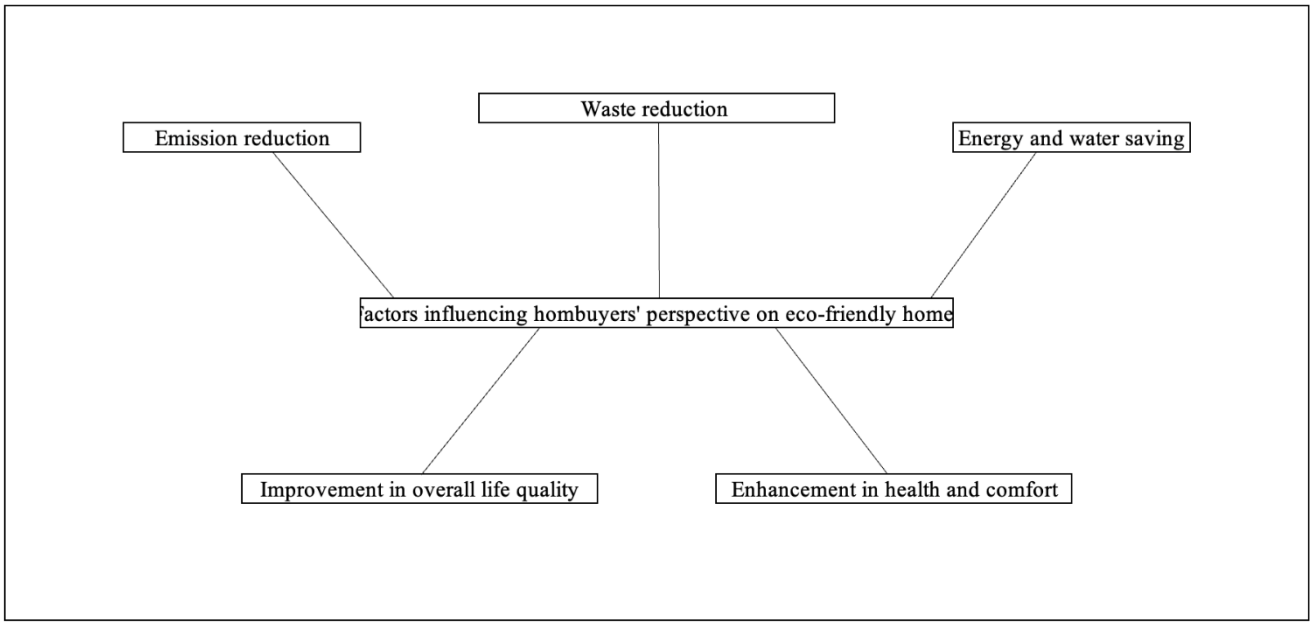

Figure 1: The theoretical framework for the present study.

2.3.1. Greenhouse Gas (GHG) Emission Reduction

Emission reduction is one of the significant factors that shifts homebuyers' perspectives on eco-friendly homes. According to (Wira, 2013), the environmental benefits of eco-friendly homes is a catalyst when it comes to homebuyer perspective. Construction consumes the most amount of energy and has negative effects on the environment. In eco-friendly homes, the techniques and the implementation of environmentally friendly technologies like solar energy and powering has a great potential to reduce harmful gas emissions. Homebuyers' today can be considered as environmentally conscious, and the likelihood for eco-friendly homes being preferred more over conventional homes becomes unsurprisingly evident in the wealthy and highly educated demography of homebuyers (Tan, T.H., 2012). It is safe to say that they recognize that residential buildings contribute to a substantial portion of the greenhouse gas emission (GHG) and the fact that eco-friendly homes, designed with features to reduce said emissions align with their values and environmental concerns. In a case study by Jalil M.A (2010), it was found that household waste emits nitric oxide and methane gas that contributes to 20% of the GHG. This could result in the emission of dangerous substances like methane which is a whopping 21 times more potent than carbon dioxide as found by Bhavani and Phon in 2009, it directly serves as a prime adversary to the environment. For the individuals who embrace an eco-conscious lifestyle, reduction of emission can be said to be a fundamental aspect that drives their intent in purchasing and owning eco-friendly homes.

Besides, emission reduction is also a compelling factor that goes beyond its meaning as one of the environmental benefits as it also helps in reducing financial savings, improved indoor air quality and provides the homebuyers with the satisfaction of living in a place that does not damage its surrounding environment.

2.3.2. Waste Reduction

As discussed earlier, eco-friendly homes are built with the factor of sustainability in mind as they incorporate various features, technologies and practices that can significantly minimize waste production. According to a study conducted by Foo L.C et al., (2013), the construction industry is very well known for contributing towards economic growth especially in developing countries which includes Malaysia. This does not overshadow the fact that this industry is also the biggest contributor of environmentally negative impact in the form of waste production. The amount of waste generated is directly proportionate to the heavy demands of projects like residential buildings, or housing projects and other property types.

In terms of managing and reducing the output of waste in the construction industry in other countries, Singapore can be seen as one of the frontliners to attain such achievement. Singapore is an Asian country which constitutes a city state with of the highest per capita incomes in the word. However, waste management still poses as an obstacle in attaining rapid development in the country (Ismam J.N, 2014). To prevent the increasing of waste related issues in the housing and construction sector, Singapore with its limited land faces, which is approximately only 682 square kilometers, aim to achieve the "zero landfill" which attempts to minimize the amount of waste output and recycling as much as is feasible. This can be perceived through the Singapore Green Plan (SGP) from 2012 execution which clearly lists out the target and aims of this initiative. The government of Malaysia has plans to manage household waste efficiently to ensure a clean, fresh and sustainable environment.

Eco-friendly homes are often designed with careful consideration of material efficiency, minimizing construction waste as much as possible. The usage of recycled and sustainable materials has lower environmental impact, and using them reduces the need for new resource extraction and minimizes waste. Other than these, there is an increasing need for the construction of new buildings regarding the speed of the construction process, economy and minimization of the negative effects on the environment and techniques like modular and prefabricated construction can meet these demands (Hořínková, D., 2021). This method is said to produce less waste during the construction process due to its components being

manufactured with precision, and any off cuts or waste can be minimized in a factory setting.

Eco-friendly homes are developed with a holistic approach to sustainability in mind. They seek to limit waste output during construction, cut energy and resource consumption during occupancy, and encourage residents to exercise responsible waste management practices. These initiatives add up to a significant reduction in waste throughout the home's life cycle.

2.3.3. Energy and water saving

Going green has grown popular in households, and many individuals are following suit by adopting an eco-friendly lifestyle. One would be tempted to wonder why emphasis is being focused on green housing. This is partly due to the importance of constructing environmentally friendly and green homes in efforts to prevent climate change (Tan T.H, 2014). This is growing more evident since the government's recent initiative to promote the adoption of energy saving measures for housing (Green Building Index, 2013). According to Feliciano and Prosperi (2011), a large portion of greenhouse gas emissions from the residential sector could be attributed to quick and cheap construction procedures that do not apply energy-efficient measures or renewable energies. In the built environment, there has been a growing emphasis on energy-efficient construction approaches. Traditionally, housing developers-built houses using conventional methods. These conventional approaches, on the other hand, are unsustainable in the long run. As a result, sustainable features in housing construction are a significant contributor to achieving a healthy and sustainable environment. Eco-friendly buildings have minimal carbon footprints in general, which is especially essential in the construction industry because it is a big consumer of raw materials (Tan T.H, 2014).

In a case study conducted in Australia, the unsustainable nature of urban water is becoming clear, with major river systems and aquifers failing and urban water storage reservoirs at historic lows. With these statistics, climate change is anticipated to increase Australia's water problems due to higher temperatures and changing precipitation (Lawrence et al., 2008). Water management is another

factor that could massively save on water bills in a household. Eco-friendly houses implement various water saving practices to promote low water usage that invertedly becomes cost effiecient. As development expands and impervious surfaces increase, so does the necessity for appropriate water management practices like stormwater management systems in eco-friendly houses. Stormwater management is the control and utilization of stormwater runoff, which includes stormwater system planning and maintenance (Abdul Khadir et al., 2023). Many studies have indicated that sustainable stormwater technologies like green roofs, rain gardens, bioretention systems, and pervious pavements are appropriate for residential areas to install. Roof areas in residential areas, particularly high-rise structures, can be used to implement stormwater management systems to address water-related issues, as roof areas can account for up to 50% of total area. Due to land scarcity, the green roof, a vegetated SSPM, has emerged as one of the options for converting impermeable regions into permeable areas, particularly for high-rise residential structures in densely populated urban areas. In terms of water quantity restrictions, SSPMs can reduce flow rate, peak flow, and total volume by holding a considerable amount of runoff. In terms of water quality regulations, SSPMs can treat pollutants and sediments to enhance water quality as measured by the Water Quality Index (WQI). As a result, the SSPMs being implemented in residential areas helps address any water-related difficulties, such as flooding and water pollution.

By incorporating these energy-efficient and water-saving features and practices, eco-friendly homes can significantly reduce both energy and water consumption, leading to lower utility bills and a reduced environmental footprint.

2.3.4. Enhancement in health and comfort.

Enhancements in health and comfort are compelling factors that can strongly influence homebuyers to choose eco-friendly housing. Implementing environmentally conscious aspects could be significant enough to shift homebuyer perspective and the likelihood of them owning eco-friendly housing as many literatures have stated. As discussed before, conventional homes do not possess the intricacies of sustainability and therefore do not contribute to the improvement

of the environment. This is due to demands that requires the construction process to be made quick.

One of the environmental benefits of eco-friendly concept in housing is the enhancement in health and comfort due to its construction techniques and implemented aspects. For instance, improved air quality can be an attractive feature of eco-friendly homes as low-VOC (Volatile Organic Compounds) paints and materials are frequently used, as are improved ventilation systems with air filtration. This results in cleaner indoor air, which reduces the risk of respiratory disorders and allergies while also increasing general health. As found in a literature by Teck-Hong Tan from 2014, housing, as a social service, consists of more than just buildings and mortar. In fact, housing is a component of a household community. Eco-friendly housing assists households in developing a feeling of community. Similarly, green homes have a high likelihood of achieving a desirable degree of liveability and support development that adheres to sustainability principles. To promote healthy living, work, and recreation, liveable communities often feature high standards of transportation, infrastructure, and security (Tan T.H, 2014).

The health and comfort benefits of eco-friendly housing extend beyond any associated benefits. They include physical and emotional well-being, comfort, and mental tranquillity. These elements can have a significant impact on homebuyers who seek a healthy and comfortable living environment for themselves and their families.

2.3.5. *Improvement in quality of life.*

Achieving sustainability entails more than just greening the environment in the area; it also includes efforts to create a pleasant living environment. Personal safety issues become one of the key objectives for homebuyers when looking for a new house because being free of crime is vital to improve the quality of life for homeowners. A house is no longer only a place to live. It is now referred to as a way of life or a space that reflects the owner's personality, self-image, and character (Tan T.H, 2013). Since living in gated and guarded communities is becoming increasingly popular, housing developers should strongly consider

gated and guarded eco-friendly homes in their housing development plans. Tan T.H, (2011) found that homeowners are willing to pay 18.1% extra to reside in a gated and guarded area. It's worth investigating whether homebuyers who want to live a decent life without worrying about their safety are more likely to choose eco-friendly homes marketed as gated and guarded communities.

2.4. Hypotheses Development.

This study has 5 hypotheses, which are as follows;

$H_{1:}$ Emission control or reduction factor has a significantly positive influence over homebuyers' perspective towards eco-friendly homes.

$H_{2:}$ Waste reduction factor has a significantly positive influence over homebuyers' perspective towards eco-friendly homes

$H_{3:}$ Energy and water saving factor has a significantly positive influence over homebuyers' perspective towards eco-friendly homes.

$H_{4:}$ Enhancement in health and comfort factor has a significantly positive influence over homebuyers' perspective towards eco-friendly homes.

$H_{5:}$ Improvement in overall quality of life has a significantly positive influence over homebuyers' perspective towards eco-friendly homes.

The above hypotheses can be substantiated through numerous previous studies including; Foo L.C et al., 2013; Tan, T.H, 2012; Foo L.C et al., 2013; Jalil M.A, 2010; Ismam J.N, 2014; Hořínková, D., 2021; Tan T.H, 2014, Feliciano, Prosperi et al., 2011; Lawrence et al., 2008; Abdul Khadir et al., 2023; Tan T.H, 2013 and Tan T.H, 2011.

2.5. Conclusion.

The second chapter documents a comprehensive evaluation of secondary sources of data on factors influencing homebuyers' perspective towards eco-friendly housing. As a result, the literature review is a clear and logical exposition of prior study works. There is the background research, a theoretical framework on the factors and the testable hypotheses that bridges the factors and the justifications from secondary data sources.

CHAPTER 3: METHODOLOGY

3.0. Introduction

In the pursuit of unraveling the intricate factors that shape homebuyers' perspectives on eco-friendly housing, this chapter serves as the compass that guides the research voyage. Here, we delve into the methodologies that underpin our exploration, providing a comprehensive overview of how this study is designed, executed, and analyzed.

3.1. Research Design

At the core of our methodological approach lies the research design, the blueprint that outlines the structure of our investigation. In this study, we employ a quantitative approach. This approach allows us to capture the depth and breadth of perspectives that contribute to the multifaceted realm of eco-friendly housing preferences. The method of identifying the factors that significantly influences homebuyers' perspective towards eco-friendly homes is conducted via survey which consists of the carefully designed choice alternatives for the respondents to rate. Then, the researcher can conduct effective analysis and evaluation to present how the different factors of the alternatives contribute to the overall evaluations

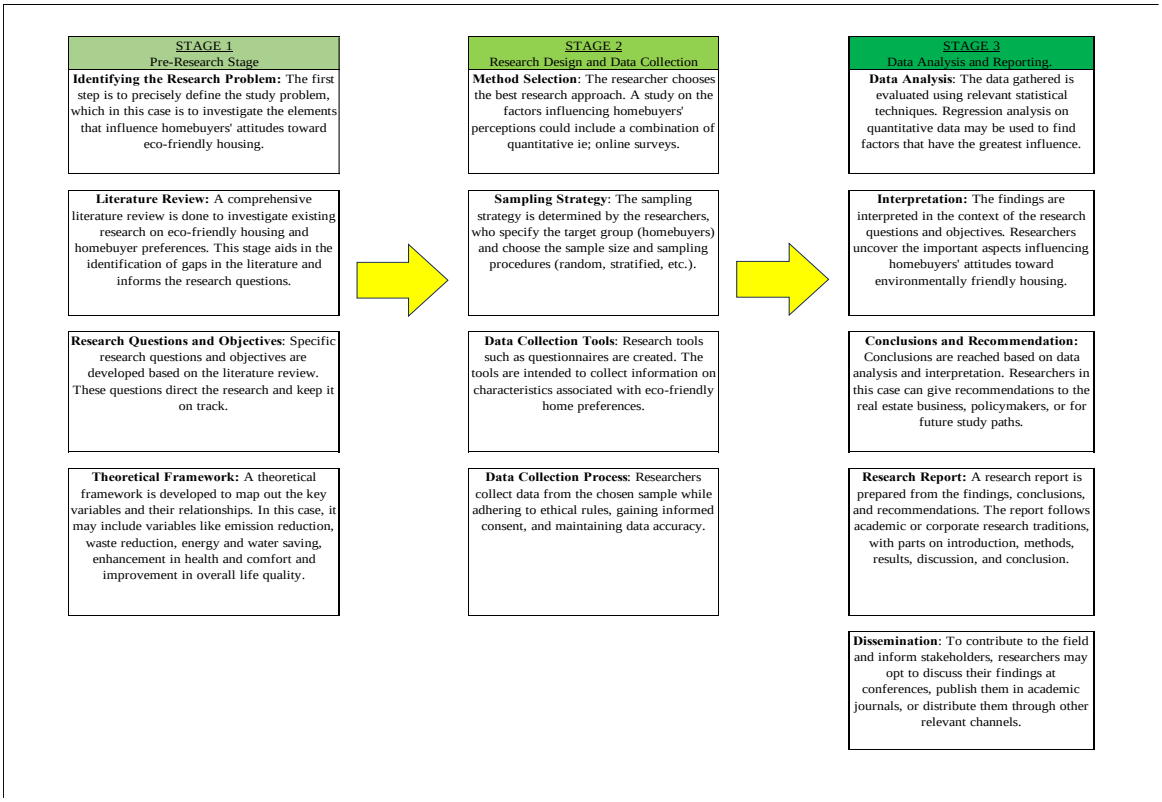

Table 2: The stages of research for the factors influencing homebuyers' perspectives on eco-friendly homes.

3.2. Data Collection Methods

The richness of our research findings is derived from a diverse array of data collection methods. For the purpose of this research the data collection method is categorized into 2 groups;

i. Primary data

ii. Secondary data

3.2.1. Primary Data

This research will be conducted through an online survey. Quantitative surveys will be administered to a sample of potential homebuyers. These surveys will utilize Likert-scale questions to measure the significant factors related to eco-friendly housing constructs.

3.2.2. Secondary Data

The secondary data collection is stemmed from the previous literature writings from various authors whose topics are in alignment with the topic being studied. Namely, Foo L.C et al., 2013; Tan, T.H, 2012; Foo L.C et al., 2013; Jalil M.A, 2010; Ismam J.N, 2014; Hořínková, D., 2021; Tan T.H, 2014, Feliciano, Prosperi et al., 2011; Lawrence et al., 2008; Abdul Khadir et al., 2023; Tan T.H, 2013 and Tan T.H, 2011.

3.3. Sampling Design

3.3.1. Target Population

The target population for this research is the residents of the four EcoWorld township in Klang Valley. This would include Eco Sanctuary, Eco Ardence, Eco Majestic and Eco Forest. This was done in order to narrow down the number of eco-friendly homebuyers. The developer EcoWorld was particularly chosen for this research because it is one of Malaysia top eco-friendly developers with multiple accolades from renown sustainable development bodies around the globe including GBI and LEED.

3.3.2. Sampling Frame and Sampling Location

In a research or survey sampling, a sampling frame is a list or an orderly representation of the elements in a population from which a sample is drawn. It is an important part of the sampling process because it establishes the pool of potential sampling units from which researchers can select to construct a representative sample.

The sampling frame of this research would focus on the factors that influences homebuyers' perspectives on eco-friendly homes and is therefore limited to eco-friendly homebuyers mainly situated in Klang Valley.

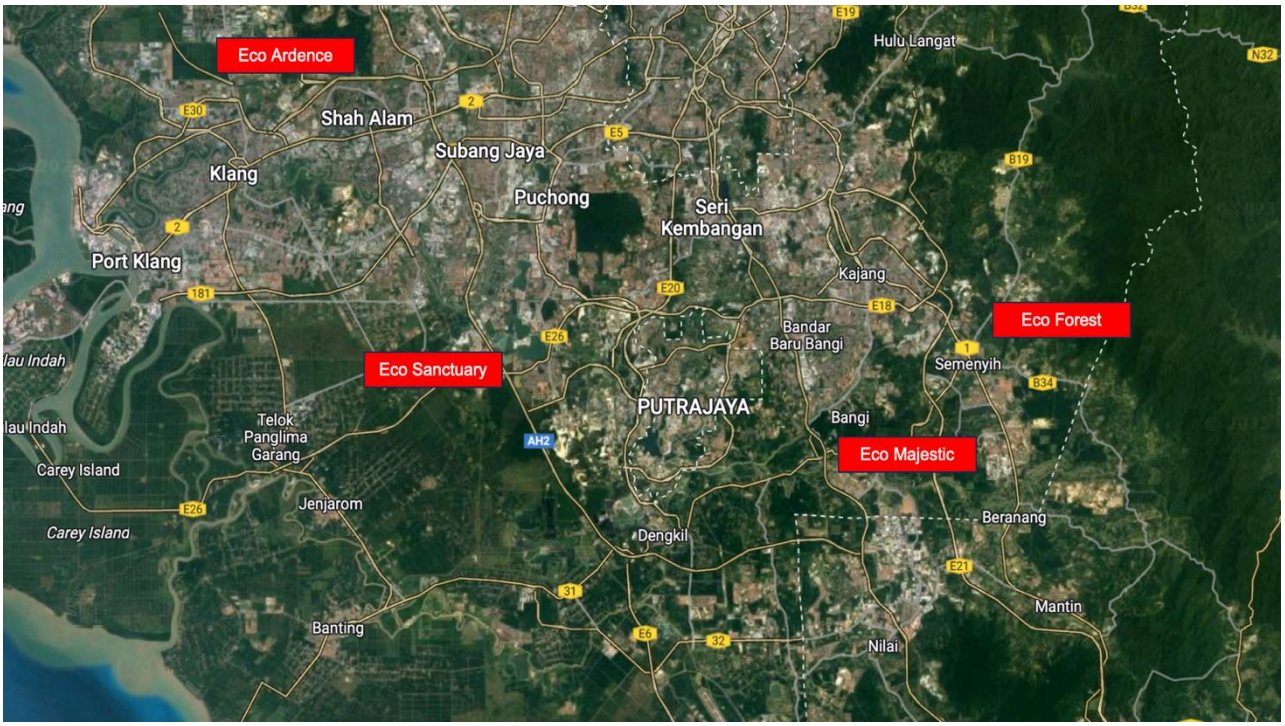

Figure 2: Location of EcoWorld Townships in Klang Valley

3.3.3. Sampling Elements

Individual units or elements selected from the population to create a sample in a research study or survey are referred to as sampling elements. These elements reflect the items of interest and serve as the basis for any sampling procedure. The specific sampling factors chosen are determined by the research aims, demographic characteristics, and sampling method used. Following are some instances of sampling elements in various contexts. When conducting housing or domestic behavior surveys, households are frequently utilized as sampling units.

For the purpose of this research, the particular elements chosen is households from the four EcoWorld townships in Klang Valley. The intended respondents for this research are the people who purchased the eco-friendly homes and are actively residing in them. This is to derive the perspectives from the eco-friendly homebuyers' themselves directly instead of deriving data from the general population of homebuyers for specificity's sake.

3.3.4. Sampling Techniques

In this research, convenience sampling method is being used. Convenience sampling is a type of non-probability sampling that is frequently employed in qualitative research. This technique frequently selects clinical cases or participants from a nearby place, medical records database, Internet site, or customer-membership list. The motivation of persons who participate in qualitative research influences convenience sampling. This incorporates an element of motive bias into the investigation. The motivation to engage may be motivated by a curiosity in the research issue, a desire to voice a disgruntled point of view, or a desire to support one's unique ideas. While convenience sampling is frequently considered less rigorous than probability sampling methods, it may be useful in the context of research on factors influencing homebuyers' attitudes on eco-friendly housing.

3.3.5. Sampling Size

The appropriate sample size for this research on factors influencing homebuyers' perspectives on eco-friendly housing involves several considerations, including the level of confidence, the margin of error that can be tolerated, population variability, and available resources. The population size distinction should be investigated because, in general, a larger example is required in circumstances of greater change. The population size must be taken into account because it restricts the size of the example. As a result, a sample size of at least 100 and no more than 150 people would be ideal for this study.

The total number of EcoWorld homebuyers in Klang Valley is 18,820. The data was derived from the official website where a figure was derived from each of the four EcoWorld townships' population. The figures are as shown in *table 2* below.

Township	Total population
Eco Ardence	7000
Eco Sanctuary	4000
Eco Majestic	2520
Eco Forest	5300
Total	18,820

Table 3: Total Population of the four EcoWorld townships in Klang Valley

It is difficult for researchers to access a large population size in quantitative research; therefore, researchers must reduce the population size into a correct, adequate, and appropriate sample size for collecting data from research fields by processing reference numbers analyzed from sample called Statisticsback to parameters called population (Chaokromthong, K., & Sintao, N., 2021). In this research, the Taro Yamane formula will be used to calculate the sampling size.

$$n=N/(1+(Ne^2))$$

According to a literature by Singh, A. S., & Masuku, M. B. (2014), the sample size required to detect statistical significance grows when the minimal expected difference is reduced. This parameter's setting is arbitrary and is determined by a clinician's clinical judgement or prior expertise with the issue under investigation. Suppose the researcher thinks that a 95% accuracy rate for the new procedure would be a clinically significant improvement. The researcher would so settle on a minimum expected difference level of 10% (0.10).

Using these parameters to calculate the sampling size for this research, the researcher would get a figure 99.47. The calculations are as shown below.

$$\boldsymbol{n=N/(1+(Ne^2))}$$

$$\boldsymbol{n=18{,}820/(1+(18{,}820 \times 0.10^2))}$$

$$\boldsymbol{n= 99.47}$$

Based on the calculation above, using the Taro Yamane formula would generate a result of 99.47. This figure is close to 100. Therefore, a number of 100 questionnaires will be distributed.

3.4. Research Instrument

Research instruments are simply the tools used to collect data for a research project and there are numerous possibilities from which to choose according to Birmingham and Wilkinson, 2003. This study was conducted using an online questionnaire. This method offers the advantage of obtaining the factors that influences homebuyers' perspective on eco-friendly housing.

3.5. Constructs Measurement

For the purpose of attaining research objective number 2, the Likert's "Survey of Opinion" method is approached. Ordinal scale measurement is illustrated using a Likert scale. It is used to assess respondents' attitudes, opinions, or perceptions about a group of objects or statements. Based on the degree of agreement or disagreement with each statement, the Likert scale assigns ordinal values (numbers that indicate order or ranking) to replies (Batterton et al., 2017).

Table 3.1 Construct measurement and the sources for the questionnaire

Statement	Items in questionnaire	References
Greenhouse Gas emmision		
I am confident that the conventional housing construction methods that do not consider environmental conservation	S(B) Q.1	Feliciano and Prosperi (2011)
I believe Greenhouse Gas emissions are extremely detrimental to the environment	S(B) Q.2	Jalil M.A (2010)
I believe the construction industry should implement eco-friendly methods and techniques to reduce harmful gas emissions	S(B) Q.3	Bhavani and Phon (2009)

More homes should be built with solar energy and powering to reduce the amount of harmful gas emissions regardless of its cost	S(B) Q.4	Jalil M.A (2010)
I prefer to live in a house that minimizes the amount of harmful gas output	S(B) Q.5	Tan T.H, (2012)
Waste Reduction		
I believe the use of recycled and sustainable materials has a lower environmental impact thus, reducing the need for new resource extraction and minimizing waste	S(B) Q.1	Foo L.C et al., (2013)
The level of environmental pollution caused by waste production in the housing sector is a concerning issue.	S(B) Q.2	Foo L.C et al., (2013)
The implementation of waste management, control and reduction should be a mandatory component in every housing township to promote the preservation of the environment.	S(B) Q.3	Hořínková, D., (2021)
Energy and Water Saving		
I believe the government is taking the necessary initiatives to stimulate eco-friendly housing development to reduce climate change	S(B) Q.1	Tan T.H, (2012)

I am confident that energy efficient appliances, lighting, insulation, and water saving fixtures are examples of measures that seek to protect the environment.	S(B) Q.2	Feliciano and Prosperi (2011)
I am confident that these are the features of a house that I prefer the most	S(B) Q.3	Jalil M.A (2010)
The cost efficiency in regards to water and electric bills with these water and energy saving features on a monthly basis could increase the demand for environmentally friendly homes.	S(B) Q.4	Alias et al, (2010)
Improvement in Quality of Life		
I believe that a homebuyer feels rewarded knowing that they are actively participating in preserving the environment.	S(B) Q.1	Tan T.H, (2011)
I believe that green spaces can lead to better liveability in a township as it increases the community's wellbeing.	S(B) Q.2	Tan T.H, (2013)
I believe residing in an environmentally friendly home can increase a homebuyer's quality of life through the usage and accessibility to green spaces.	S(B) Q.3	Wira et al., (2013)
Enhancement in Health and Comfort		
The highest level of comfortability in terms of noise reduction, pollution control, air quality, access to green space and better security could lead to one's betterment in their overall comfort level and health.	S(B) Q.1	Wira et al., (2013)

Green spaces promotes a healthy lifestyle.	S(B) Q.2	Tan T.H, (2014)
I believe homebuyers are actively participating in protecting the environment by reducing their carbon footprint.	S(B) Q.3	Feliciano and Prosperi (2011)
Other opinions towards eco-friendly homes		
In your opinion, do you have any other factors that could significantly and positively change your outlook on eco-friendly homes?	S(C) Q.1	-
Do you agree with the fact that eco-friendly homes that follow the GBI parameters being sold at such high price points?	S(C) Q.2	Wira et al., (2013)

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3.6. Data Processing

Data preparation is a crucial step in the research process, ensuring that the collected data is accurate, consistent, and ready for analysis. When data is processed, it is collected and converted into useable information. It is critical that data processing be done appropriately so that the end product, or data output, is not harmed.

Data processing begins with raw data and converts it into a more legible format (graphs, papers, etc.), providing it the shape and context required for computer interpretation and use by personnel throughout a company. The data processing in the context of this research can be described as follows.

3.6.1. Data Checking

An initial assessment of acquired data is performed to discover any errors, discrepancies, or missing information. This procedure ensures the overall quality of the data. Outliers, data input errors, and inconsistencies in replies are all common data checks.

3.6.2. Data Editing

The rectification of recognized flaws or inconsistencies in the dataset is referred to as data editing. This could entail cleansing and confirming the data.

If there are outliers in numerical responses, for example, the researcher can decide whether to eliminate them, recode them, or explore them further.

3.6.3. Data Coding

Coding is the process of giving numerical or category codes to data in order to analyse it. This could include coding open-ended responses from survey questions in the research. For instance, the researcher may categorize comments to the reasons for choosing eco-friendly housing as "environmental concern," "cost savings," "health benefits," and so on.

3.6.4. Data Transcribing

The process of translating recorded interviews or qualitative data into written or digital text is known as transcription. It guarantees that qualitative data is in an analysis-ready format. You might explain the transcription procedure, such as whether it was done manually or with transcription software**.** In the context of this research the transcribing would be derived from the quantitative data collected from the survey questionnaires.

The researcher may demonstrate the rigor and transparency of the research technique by providing a comprehensive description of these data preparation processes. This is necessary to ensure the validity and dependability of the research findings.

3.7. Data Analysis

The data for this study were examined using statistical software programs, notably the Statistical Package for the Social Sciences (SPSS), which is highly known for its capabilities in managing survey data and performing complex statistical

analyses. This software can analyze data using major techniques including descriptive analysis, scale measurements, and inferential analysis.

3.7.1. Descriptive Analysis.

Descriptive analysis, often known as descriptive statistics, is a subfield of statistics concerned with summarizing and presenting data in a meaningful and interpretable manner. It entails presenting a clear and succinct overview of a dataset using multiple statistical measurements and graphical representations. Descriptive analysis serves several purposes such as data summarization, data exploration and communication.

In the context of this research, the survey questionnaire was divided into 3 sections namely, Section A (Demographic Survey), Section B (The factors influencing homebuyers' perspective towards eco-friendly homes) and Section C (Other opinions related to eco-friendly homes), where Section A will be presented in a bar chart, Section B will be presented in a pie chart and Section C, in a table.

3.7.2. Scale Measurements

In the context of research and statistics, scale measurement refers to the process of assigning numbers or labels to objects, events, or observations based on specific rules or criteria. It is an essential component of data collecting and analysis since it lets researchers to measure and compare. To identify the most significant factors that influences a homebuyers' perspective towards eco-friendly homes, each response option is assigned a numerical value. The values assigned are as stated below;

Strongly agree:	5
Agree:	4
Neutral (neither agree nor disagree):	3
Disagree:	2

Strongly Disagree: 1

Figure 3.2: The likertz scale of measurements

3.7.2.1. Crohnbach's Alpha

Measurement error is synonymous with both consistency and precision, which are implied by reliability, while imprecision and inconsistency are implied by a lack of reliability. Measurement error in the context of testing could be described as any fluctuation in scores resulting from factors unrelated to the measured that are connected to the measurement method. Therefore, a test's reliability is its apparent consistency and lack of mensuration error, which make it valuable. An instrument's dependability can be estimated, and the meaning of Cronbach's Alpha—an objective reliability estimate that is widely used—can be defined.

Known by another name, Cronbach's alpha is a measure of internal consistency that is applied to multi-item measurement instruments and is currently more widely used than it was in its early development (Amirrudin et al., 2021)

In actuality, a test's dependability must be estimated using study data. Coefficient alpha is the estimation that is most commonly used in social science and behavioral research to assess reliability. Alpha is also known as internal consistency reliability and only needs one test to be administered. Kuder and Richardson suggested alpha as a method for estimating dichotomous items. The main form of Alpha's formula was created by Jackson and Hoyt, Guttman, and Jackson as a substitute for the split-half approach. Cronbach is credited with proposing the unique formula known as Cronbach's Alpha. Here, general reliability formulas are displayed in formula;

$$\alpha = \frac{N\overline{c}}{\overline{v} + (N-1)\overline{c}}$$

Here is N equal to the number of items, $\overline{c}$ is the average inter-item covariance among the items and $\overline{v}$ equals the average variance. One can see from this formula that if you increase the number of items, you increase Cronbach's alpha. Additionally, if the average inter-item correlation is low, alpha will be low. As the average inter-item correlation increases, Cronbach's alpha increases as well (holding the number of items constant).

In other words, Cronbach alpha is a measure of the proportion of variance in a set of test scores that is systematic or consistent; it can range from 00.0 (if no variance is consistent) to 1.00 (if all variance is consistent), with all values between 00.0 and 1.00 also being possible. A Cronbach alpha estimate, often represented by the lower-case Greek letter alpha, should be interpreted similarly to other internal consistency estimates. For instance, it can be concluded that a test is 10% unreliable (100% - 90% = 10%) if the Cronbach alpha for a given set of scores is .90. This indicates that the test is 90% reliable (Brown et al., 2002).

3.7.3. Inferential Analysis.

Inferential analysis is a statistical approach used in research to draw conclusions and make inferences about a population based on a sample of data. It involves using statistical techniques to generalize the findings from a sample to a larger population, test hypotheses, and make predictions. Inferential analysis is a fundamental part of quantitative research and is often used to make decisions or draw meaningful insights from data.

3.7.3.1. Regression Analysis

One statistical method for examining relationships between variables is regression analysis. Typically, the researcher aims to determine the causal relationship between two variables: the impact of an increase in price on

demand or the influence of alterations in the money supply on inflation rates, for instance. In order to investigate such questions, the researcher gathers information on the relevant underlying factors and uses regression to calculate the quantitative impact of the causal variables on the variable they affect. The degree of confidence that the genuine relationship is close to the estimated relationship, or the "statistical significance" of the estimated relationships, is another common assessment made by the investigator.

The degree of confidence that the true relationship is close to the estimated relationship, or the "statistical significance" of the estimated relationships, is another common assessment made by the investigator. The discipline of economic statistics, or "econometrics," has historically relied heavily on regression techniques. They are becoming more and more significant to attorneys and those who make legal policy (Sykes et al., 1993)

3.8. Conclusion.

This methodology chapter has provided a comprehensive summary of the research methods, approaches and techniques used in this study on the factors influencing homebuyers' attitudes on eco-friendly homes. In this chapter he methodology has involved several elements including the research design, the data collection methods, sampling design, research instrument, construct measurements data processing as well as data analysis. In essence, this precisely developed research technique serves as the cornerstone for this study's empirical investigations and analyses. This research could help providing a complete knowledge of the factors that influence homebuyers' perspectives on eco-friendly housing by using the quantitative technique. The study's findings are expected to make major contributions to the disciplines of sustainable housing and consumer behavior, ultimately providing valuable insights for policymakers, real estate developers, and environmental advocates.

In the following chapters, the data presentation and analysis, followed by a discussion of the findings and their implications will be discussed. Through these processes, the researchers hope to provide light on the complex factors that underpin homebuyers' choices and perceptions of eco-friendly housing.

CHAPTER 4: DATA ANALYSIS

4.0. Introduction

This chapter is aimed to discuss the results of the survey questionnaire. The descriptive analysis is divided into respondent demographic profile, central tendencies measurement of constructs. This chapter will also discuss the scale of measurement and inferential analysis.

4.1. Descriptive Analysis

4.1.1 Demographic Analysis

This research involved 100 respondents from the 4 different EcoWorld Townships across Klang Valley. According to statistics, there are a total of 53 males and 47 females who participated in the research survey, 26.5% and 23.5% respectively. Among these 100 respondents, there are 46 Indians, 37 Malays and the balance 17 people are Chinese. In terms of age, most of the respondents are within the age range of 25 - 35 with 68 respondents, the second most is the age group of 35 – 45 with 20 respondents. The oldest age groups, 44 – 55 and more than 55-year-olds are the least number of respondents, with 7 and 5 respectively.

In terms of location, 47 respondents are located in Eco Ardence, 22 are from Eco Majestic, 20 are located in Eco Sanctuary, and 11 from Eco Forest. Out of 100 respondents who participated in the survey, 71 of them are homeowners and the rest, 29 are tenants/renters. 66 respondents are Bachelor's Degree holders. Followed by 14 respondents with Master's Degree. This indicates that most of the respondents are knowledgeable and therefore fit to answer. In terms of household income, 51 of the respondents are from the income group of less than RM5250. 36 respondents are from

the income group of RM5251 – RM11,819. Over 63% of the respondents are working in private sector, 27% in government sector and 10% are self-employed. Over 28% of the respondents have been staying in EcoWorld Townships for 1-3 years. 28% for around 4 – 6 years, 16% are around 7 – 9 years, 14%, are less than 1 year, and 14% are more than 9 years.

4.1.2. Central Tendencies Measurement of Construct

The second part of the survey (Section B) consists of five parts according to the variables. Each of the variables consists of three to five questions. The final part of the survey (Section C) consists of questions that require the respondents to share their opinions. In Section B, the questions required the respondents to answer according to their level of agreement to each of the questions. This is to analyze the factors that which has the most influence on homebuyers' perspective towards eco-friendly homes. The scale is known as the Likertz scale and the range chosen for this survey is 1 – 5 with 1 being strongly disagree and 5 being strongly agree.

F1Q1

	N	%
strongly disagree	2	1.0%
disagree	15	7.5%
neutral	20	10.0%
agree	32	16.0%
strongly agree	31	15.5%
Missing System	100	50.0%

Table 4: frequency table for factor 1 question 1

Factor 1 question 1 is "I am confident that the conventional construction methods do not consider environmental conservation". For this question, 32 respondents agreed, whereas 31 respondents strongly agreed. 20 respondents are on the neutral position and 8% of the respondents strongly agree with the statement.

F1Q2

	N	%
disagree	1	0.5%
neutral	9	4.5%
agree	19	9.5%
strongly agree	71	35.5%
Missing System	100	50.0%

Table 4.1: Table of frequencies for Factor 1 Question 2

The second question of the questionnaire is "I believe Greenhouse Gas emissions are extremely detrimental to the environment". For this question, 19 respondents agree whereas 70 of them strongly agree. The degree of agreement towards this statement is made evident with the fact that only 1 respondent had disagreed.

F1Q3

	N	%
disagree	3	1.5%
neutral	9	4.5%
agree	21	10.5%
strongly agree	67	33.5%
Missing System	100	50.0%

Table 4.2: Table of frequencies for Factor 1 question 3

The next question on the survey was "I believe the eco-friendly methods and techniques can reduce harmful gas emissions". For this question 3 respondents had disagreed due to unknown reasons, however with 21 of them strongly agreeing while the majority of the respondents strongly agree with this statement (67). This indicates that the respondents' lived experiences in EcoWorld townships are vastly aligned with the objectives of this research.

F1Q4

	N	%
disagree	4	2.0%
neutral	8	4.0%
agree	25	12.5%
strongly agree	63	31.5%
Missing System	100	50.0%

Table 4.3: Table of frequencies for Factor question 4

This next question was still on the factor of Greenhouse Gas Emission Reduction, where the respondents were asked "I believe solar energy and powering can reduce the amount of harmful gas emission". 63 respondents answered positively towards this statement by choosing strongly agree. This means that the respondents are aware of the positive outcomes of solar panel usage in homes and its contribution towards the reduction of Greenhouse Gas Emission Reduction.

F1Q5

	N	%
disagree	1	0.5%
neutral	8	4.0%
agree	14	7.0%
strongly agree	77	38.5%
Missing System	100	50.0%

Table 4.4: Table of frequencies for Factor 1 question 5

The final question for this factor was "I prefer to live in a house that minimizes the amount of harmful gas output". This was regarded as one of the ways to determine if this factor is more significant than the rest. Majority of the respondents are neutral and leaning towards a positive response.

This signifies that majority of the respondents are aware of the adverse effects of harmful gas emission towards the environment and are actively participating in preserving it.

F2Q1

	N	%
strongly disagree	2	1.0%
disagree	1	0.5%
neutral	13	6.5%
agree	24	12.0%
strongly agree	60	30.0%
Missing System	100	50.0%

Table 4.5: Table of frequencies for factor 2 question 1

Factor 2 is regarding waste reduction and the first question was "I believe the use of recycled materials has lower environmental impact". While 2 respondents answered strongly disagree and 1 disagree, we can see that this statement derives a vastly positive result since 60 respondents strongly agree.

F2Q2

	N	%
disagree	2	1.0%
neutral	12	6.0%
agree	35	17.5%
strongly agree	51	25.5%
Missing System	100	50.0%

Table 4.6: Table of frequencies for Factor 2 question 2

This question was "The level of environmental pollution in the construction industry is a concerning issue". Majority of the respondents lean towards agreeing with this statement. This can be due to the level of awareness among the respondents towards the initiative taken to lessen the environmental impact in the construction industry by developers and policymakers alike.

F2Q3

	N	%
disagree	4	2.0%
neutral	12	6.0%
agree	29	14.5%
strongly agree	55	27.5%
Missing System	100	50.0%

Table 4.7: Table of frequencies for Factor 2 question 3

The third question for this factor was "The implementation of waste management, should be a mandatory component in every township" for which, again, majority of the respondents agreed upon. This can be due to the one of the consequential factors; increasing price point. This statement and the overall responses however indicate that waste management systems are appreciated by the number of people who lean from neutral to strongly agree.

F3Q1

	N	%
strongly disagree	2	1.0%
disagree	8	4.0%
neutral	25	12.5%
agree	30	15.0%
strongly agree	35	17.5%
Missing System	100	50.0%

Table 4.8: Table of frequencies for Factor 3 question 1

In terms of factor 3, which was energy and water saving the first question the respondents were asked was "I believe the government is taking the necessary

initiatives to stimulate eco-friendliness to reduce climate change". This question can be regarded as somewhat sensitive since it involves the government and its initiatives towards the preservation of the environment. However, majority of the respondents can be seen leaning towards agreeing with the statement from a neutral position, with 25, 30 and 35 respondents respectively.

F3Q2

	N	%
disagree	2	1.0%
neutral	7	3.5%
agree	14	7.0%
strongly agree	77	38.5%
Missing System	100	50.0%

Table 4.9: Table of frequencies for Factor 3 question 2

This question was "I am confident that energy efficient appliance, and water saving fixtures are examples of measures environmental protection." For this question, 77 respondents strongly agreed followed by 14 respondents agreeing.

F3Q3

	N	%
disagree	1	0.5%
neutral	8	4.0%
agree	15	7.5%
strongly agree	76	38.0%
Missing System	100	50.0%

Table 4.10: Table of frequencies for Factor 3 question 3

The following question entailed "I am confident that these are the features in a house that I prefer the most." This is another example of question that tests one of the hypotheses of the research. For this question, 76 respondents strongly agreed. This could indicate that energy saving appliances in homes

has a positive impact towards homebuyers' perspective upon eco-friendly housing.

F3Q4

	N	%
strongly disagree	1	0.5%
disagree	1	0.5%
neutral	11	5.5%
agree	14	7.0%
strongly agree	73	36.5%
Missing System	100	50.0%

Table 4.11: Table of frequencies for Factor 3 question 4

The fourth and final question in this factor was "I believe the cost reduction in bills with water and energy saving features is crucial to increase the demand for environmentally friendly homes." The respondents have given positive answers with the majority (73 respondents) strongly agreeing with the statement. This indicates that the energy saving appliances in eco-friendly homes does indeed have a positive impact on the general perception and demand on eco-friendly houses.

F4Q1

	N	%
disagree	4	2.0%
neutral	7	3.5%
agree	12	6.0%
strongly agree	77	38.5%
Missing System	100	50.0%

Table 4.12: Table of frequencies for Factor 4 question 1

Factor 4 tests the variable of improvement towards the overall quality of life where the first question was "I believe that homebuyers feel rewarded knowing that they are preserving the environment." For this question over 70

respondents have strongly agreed, 12 respondents agreed, 7 of them in neutral position and 4 disagreeing. This could indicate that the vast majority of eco-friendly homeowners and tenants do indeed feel rewarded knowing that they are actively participating in preserving the environment.

F4Q2

	N	%
disagree	3	1.5%
neutral	7	3.5%
agree	8	4.0%
strongly agree	82	41.0%
Missing System	100	50.0%

Table 4.13: Table of frequencies for Factor 4 question 2

The second question in the fourth factor was “Personal safety is the aspect that homebuyers lean on the most when they purchase a home.” For which a staggering 82 respondents have strongly agreed. This could very well indicate that the factor of personal safety is something that Is heavily considered during the decision-making process of purchasing an eco-friendly home. It is safe to say that this aspect plays a huge part in influencing the homebuyers perspectives.

F4Q3

	N	%
disagree	1	0.5%
neutral	7	3.5%
agree	16	8.0%
strongly agree	76	38.0%
Missing System	100	50.0%

Table 4.14: Table of frequencies for Factor 4 question 3

The third and final question in this variable was “I believe environmentally friendly homes can increase a homebuyer’s quality of life through green spaces.” Yet again in this question, 76 respondents or the majority of respondents have strongly agreed in contrary to 1 respondent disagreeing. This

could indicate that the usage of green spaces in eco-friendly homes is something that is appreciated by the vast majority of eco-friendly homeowners and tenants.

F5Q1

	N	%
disagree	1	0.5%
neutral	13	6.5%
agree	17	8.5%
strongly agree	69	34.5%
Missing System	100	50.0%

Table 4.15: Table of frequencies for Factor 5 question 1

The fifth variable that was tested in this survey questionnaire was enhancement in health and comfort. The first question was "indoor air quality is the most significant factor that affects homebuyers' perspectives towards eco-friendly homes." 69 people responded strongly agree to this statement whereas 17 have agreed. This is another indication that the factor of indoor air quality affects the general perception of homebuyers towards eco-friendly housing.

F5Q2

	N	%
disagree	3	1.5%
neutral	4	2.0%
agree	16	8.0%
strongly agree	77	38.5%
Missing System	100	50.0%

Table 4.16: Table of frequencies for Factor 5 question 2

The following question was "The highest level of comfortability and better security could lead to one's betterment in their overall comfort level and health." In this question, 77 respondents have strongly agreed to this statement

which may indicate that security and comfort is a significant outlier that affects the decision-making process for homebuyers.

F5Q3

	N	%
disagree	3	1.5%
neutral	6	3.0%
agree	14	7.0%
strongly agree	77	38.5%
Missing System	100	50.0%

Table 4.17: Table of frequencies for Factor 5 question 3

The third and final question for the fifth factor was "Green spaces are a crucial component in an eco-friendly township because it preserves the environment and promotes healthy lifestyle." Once again for this question 77 respondents have answered strongly agree while 14 answered agree. This heavily indicates that the respondents are aware on the positive impacts of the usage of green spaces in housing townships and how it subsequently leads to better health.

OP1

	N	%
yes	40	20.0%
nil	60	30.0%
Missing System	100	50.0%

OP2

	N	%
agree	81	40.5%
disagree	19	9.5%
Missing System	100	50.0%

Tables 4.18 and 4.19: Table of frequencies for Section C

For the questions in Section C, the respondents were required to state their opinion on given issues. In question one of Section C, the respondents were asked whether they have any other factor that they deem more significant than the ones that were tested in this research. In the meantime, the second question asked the respondents' whether they agree on eco-friendly homes being sold at high price points primarily due to being compliant to the GBI parameters.

Although 60.6% of the respondents did not wish to share their thought for the first question (as shown in the pie chart below), there are a number of interesting new opinions that can be considered as external perspectives that the respondents themselves have suggested.

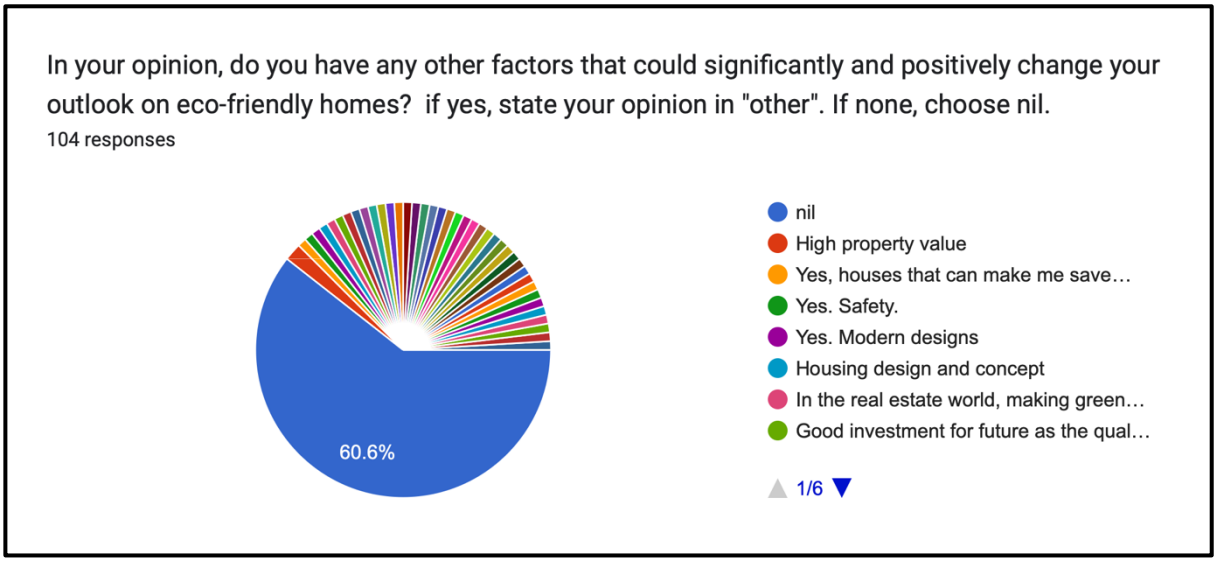


Figure 4: The opinion answers

Out of the 100 respondents, 35 opinions were received and some were repeated, some were in different manners but in similar context. Table 23 below shows the top 3 homebuyers' perspectives that has the highest frequency.

Frequency	Perspective
8	Modern designs
6	Cleanliness

5	increase in property value
4	Cost Saving
4	Health Benefits

Table 4.20: Table of frequencies for Section C Question 1.

These new findings show that the initially proposed conceptual framework is subject to amendment as the new perspectives indicates that homebuyers are of the opinion that such external factors may as well play a significant role in influencing homebuyer's perspective towards Eco-friendly housing.

In the meantime, the second question has also extracted a number of opinions from the respondents as they were asked if they think it is fair for Eco-Friendly homes being sold at a higher price point than conventional homes. For the purposes of this study, a summary of the answers is formulated, it is as shown in table 24 below.

OP2

		N	%
agree		81	40.5%
disagree		19	9.5%
Missing	System	100	50.0%

Table 4.21: Table of frequencies for Section C Question 2.

The number of people who agreed on the statement – *"Applying the green features to achieve the GBI certification leads to higher construction costs for developers. Consequently, this causes higher prices for green buildings customers (M.S Wira et al.,)"* – has far outnumbered those who disagreed, with 81 and 19 respectively. This indicates that majority of the respondents believe that the high price point is a necessary element when it comes to eco-friendly housing.

Table 24 shows the opinion analysis of both of the opinion question that were asked to respondents.

Opinion Analysis			
%	Yes	No	Total
Question 1	60.6	39.4	100
Question 2	85	15	100

Table 4.22: Table of opinion analysis for OP1 and OP2

4.2. Scale Measurement.

The reliability analysis was conducted using IBM SPSS Statistics version 25 software. The analysis was done with a pilot test to calculate the Crohnbach's Alpha value in which the Alpha value has a benchmark of 0.7. The value has to be greater than the benchmark value so that the research receives an indication that the data received from the survey questionnaire is reliable and acceptable for further analysis.

In this research, the pilot test was conducted using 20 items from the data and all the variables used were the data that is sorted as scale measurement. This means that only questions that used the Likertz scale (F1Q1 – F5Q3) were used. Upon running the test, an Alpha value of .938 was achieved with 18 items. Table 25 below shows the Reliability Statistics of the data and table 26 shows the Reliability Analysis of the survey – Item-Total Statistics.

Reliability Statistics	
Cronbach's Alpha	N of Items
.938	18

Table 4.23: Reliability Analysis of the survey – Crohnbach's Alpha.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
F1Q1	76.96	89.029	.456	.941
F1Q2	76.11	89.917	.715	.933
F1Q3	76.19	87.347	.810	.931
F1Q4	76.24	87.901	.743	.932
F1Q5	76.04	90.544	.697	.934
F2Q1	76.32	90.422	.505	.938
F2Q2	76.36	93.041	.418	.939
F2Q3	76.36	87.788	.716	.933
F3Q1	76.83	91.415	.366	.942
F3Q2	76.05	88.715	.808	.932
F3Q3	76.05	90.129	.728	.933
F3Q4	76.14	88.970	.671	.934
F4Q1	76.09	86.608	.859	.930
F4Q2	76.02	88.464	.785	.932
F4Q3	76.04	89.453	.808	.932
F5Q1	76.17	88.991	.719	.933
F5Q2	76.04	90.221	.690	.934
F5Q3	76.06	89.976	.674	.934

Table 4.24: Reliability Analysis of the Survey – Item-Total Statistics

4.3 Inferential Analysis

For the inferential analysis, multiple regression method was used to analyze the relationship between the independent and dependent variable. In this case, the dependent variables were Age, Gender, Ethnicity, Education level, Household Income, Occupational Sector, Location, Ownership Status and also the Duration of Stay/Ownership. The independent variables are the five factors as proposed. This method was taken due to having more than one set of variables to analyze the relationship between the variables and to find the significant independent variable that affects homebuyers' perspectives towards Eco-Friendly housing. The analyses are as shown below;

4.3.1 Independent Variable #1 – Age.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.305[a]	.093	.045	.816	.093	1.924	5	94	.098

a. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

b. Dependent Variable: AGE

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.405	5	1.281	1.924	.098[b]
	Residual	62.585	94	.666		
	Total	68.990	99			

a. Dependent Variable: AGE

b. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_in_Quality_of_Life

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.671	.683		2.445	.016
	Greenhouse_gas_emission	.053	.045	.205	1.179	.242
	Waste_Reduction	.083	.064	.190	1.306	.195
	Energy_Water_Saving	-.054	.051	-.163	-1.063	.291
	Improvement_Quality_Life	-.185	.085	-.453	-2.182	.032
	Enhancement_Health_Comfort	.080	.075	.184	1.069	.288

a. Dependent Variable: AGE

A multiple regression was run to predict age from all of the 5 factors. These variables are not statistically significant predicted Age, $F\ (5, 94) = 1.924$, $p < .0005$, $R^2 = .093$. Only Factor 4, **Improvement in Quality of Life** added statistically significant to the prediction, $p < .05$. All other four variables added were not statistically significant to the prediction $p < .05$.

It can be concluded that the factor of Improvement in Quality of Life is significant enough in the age element. This is a clear indicator that the majority age group received from the data, 25 – 35 which is about 69.2% are mostly concerned with the fact that they have to provide a better living condition for themselves, and their kin.

4.3.2 Independent Variable #2 – Education Level.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.293[a]	.086	.037	.682	.086	1.769	5	94	.127

a. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

b. Dependent Variable: EDU_LEVEL

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.110	5	.822	1.769	.127[b]
	Residual	43.680	94	.465		
	Total	47.790	99			

a. Dependent Variable: EDU_LEVEL

b. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	3.577	.571		6.267	<.001
	Greenhouse_gas_emission	.013	.038	.061	.349	.728
	Waste_Reduction	.053	.053	.147	1.006	.317
	Energy_Water_Saving	.015	.043	.055	.355	.724
	Improvement_Qualitt_Life	-.145	.071	-.428	-2.052	.043
	Enhancement_Health_Comfort	.006	.062	.017	.101	.920

a. Dependent Variable: EDUCATION_LEVEL

A multiple regression test was run to predict Education Level from all of the 5 factors. These variables are not statistically significant predicted Education Level, $F(5, 94) = 1.769$, $p < .0005$, $R^2 = .086$. Only Factor 4, **Improvement in Quality of Life** added statistically significant to the prediction, $p < .05$. All other four variables added were not statistically significant to the prediction $p < .05$.

This statistic is a clear indicator that majority education level among the respondents which is Bachelor's Degree, or 67.3%, they are more concerned with the improvement in quality of life. This indicates that people with higher education are more environmentally conscious therefore the need for them opt for eco-friendly townships to improve their quality of life.

4.3.3 Independent Variable #3 – Income Level

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.266[a]	.071	.021	.700	.071	1.433	5	94	.220

a. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

b. Dependent Variable: INC_LEVEL

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.510	5	.702	1.433	.220[b]
	Residual	46.050	94	.490		
	Total	49.560	99			

a. Dependent Variable: INC_LEVEL

b. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.605	.586		2.739	.007
	Greenhouse_gas_emission	.075	.039	.342	1.944	.055
	Waste_Reduction	.037	.055	.100	.684	.496
	Energy_Water_Saving	-.056	.044	-.199	-1.285	.202
	Improvement_Qualitt_Life	-.041	.073	-.117	-.557	.579
	Enhancement_Health_Comfort	-.041	.064	-.111	-.639	.525

a. Dependent Variable: INC_LEVEL

A multiple regression test was run to predict Income Level from all of the 5 factors. These variables are not statistically significant predicted Education Level, *F (5, 94) = 1.433, p* < .0005, R^2 = *.071.* Only Factor 1, **Greenhouse Gas Emission Reduction** added statistically significant to the prediction, *p < .05.* All other four variables added were not statistically significant to the prediction *p < .05.*

This is an indication that Relating income levels to factors that influence homebuyer perspectives toward greenhouse gas emission reduction in eco-friendly housing involves understanding how income impacts priorities, preferences, and decision-making. Income directly affects affordability therefore the majority of respondents in this research in terms of income group which is less than RM5250 (52.9%), and the income group of RM5251 – RM11,819 (34.6%) are able to use their affordability to opt for eco-friendly townships due to their main concern of living in a place where there is a reduction of harmful gas emission.

4.3.4 Independent Variable #4 – Occupational Sector

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.292[a]	.085	.037	.576	.085	1.756	5	94	.130

a. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

b. Dependent Variable: OCC_SEC

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.914	5	.583	1.756	.130[b]
	Residual	31.196	94	.332		
	Total	34.110	99			

a. Dependent Variable: OCC_SEC

b. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.561	.482		3.235	.002
	Greenhouse_gas_emission	.065	.032	.356	2.042	.044
	Waste_Reduction	-.045	.045	-.147	-1.011	.315
	Energy_Water_Saving	-.019	.036	-.080	-.517	.606
	Improvement_Qualitt_Life	.053	.060	.184	.881	.381
	Enhancement_Health_Comfort	-.046	.053	-.151	-.871	.386

a. Dependent Variable: OCC_SEC

A multiple regression test was run to predict Occupational Sector from all of the 5 factors. These variables are not statistically significant predicted Occupational Sector, $F\ (5, 94) = 1.756$, $p < .0005$, $R^2 = .0.85$. Only Factor 1, **Greenhouse Gas Emission Reduction** added statistically significant to the prediction, $p < .05$. All other four variables added were not statistically significant to the prediction $p < .05$.

Similar to education level, occupational sector also has its significance towards Factor 1. This may be due to the level of income from the occupational sector. It is safe to say that private sector employees may use their savings incentive to opt for eco-friendly townships. The majority occupational sector in this research is private sector with 64.4%. this can be an indicator that education and awareness plays a huge toll in determining the significance. For example, finance professionals might respond well to data-driven analyses showcasing the long-term financial benefits of eco-friendly homes.

4.3.5 Independent Variable #5 – Ownership Status

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.254[a]	.064	.015	.453	.064	1.292	5	94	.274

a. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

b. Dependent Variable: OWNERSHIP_STAT

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.324	5	.265	1.292	.274[b]
	Residual	19.266	94	.205		
	Total	20.590	99			

a. Dependent Variable: OWNERSHIP_STAT

b. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.130	.379		2.980	.004
	Greenhouse_gas_emission	.046	.025	.325	1.842	.069
	Waste_Reduction	-.023	.035	-.097	-.660	.511
	Energy_Water_Saving	.025	.028	.139	.891	.375
	Improvement_Qualitt_Life	-.074	.047	-.334	-1.582	.117
	Enhancement_Health_Comfort	.033	.041	.140	.800	.426

a. Dependent Variable: OWNERSHIP_STAT

A multiple regression test was run to predict Occupational Sector from all of the 5 factors. These variables are not statistically significant predicted Occupational Sector, $F\ (5,\ 94) = 1.292$, $p < .0005$, $R^2 = .0.85$. Only Factor 1, **Greenhouse Gas Emission Reduction** added statistically significant to the prediction, $p < .05$. All other four variables added were not statistically significant to the prediction $p < .05$.

The perspective of homebuyers toward greenhouse gas emission reduction in eco-friendly housing can be influenced by their ownership status (whether they are renters or homeowners). For homeowners this could be a long-term investment. Eco-friendly housing can be an asset that holds a high value that contributes to increasing property value over time which proves to be a wise investment. Homeowners tends to opt for eco-friendly living conditions as it vastly helps in reducing the cost through monthly bills. This study shows that townships that focuses on reducing harmful gas output may tailor their living spaces to their preferences.

For renters, houses that focuses on reducing harmful gas output leads to immediate cost saving. This could be beneficial for them in the short run. The level of flexibility that an eco-friendly township offers also can affect renters as eco-friendly houses does not require major modifications or major commitments.

4.3.6 Independent Variable #6 – Duration of stay

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.364[a]	.132	.086	1.195	.132	2.864	5	94	.019

a. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

b. Dependent Variable: DURATION

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.432	5	4.086	2.864	.019[b]
	Residual	134.128	94	1.427		
	Total	154.560	99			

a. Dependent Variable: DURATION

b. Predictors: (Constant), Enhancement_Health_Comfort, Waste_Reduction, Energy_Water_Saving, Greenhouse_gas_emission, Improvement_Qualitt_Life

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.254	1.000		-.254	.800
	Greenhouse_gas_emission	.113	.066	.289	1.704	.092
	Waste_Reduction	-.066	.093	-.101	-.710	.480
	Energy_Water_Saving	.039	.075	.078	.520	.604
	Improvement_Qualitt_Life	-.171	.124	-.280	-1.378	.171
	Enhancement_Health_Comfort	.232	.109	.357	2.122	.036

a. Dependent Variable: DURATION

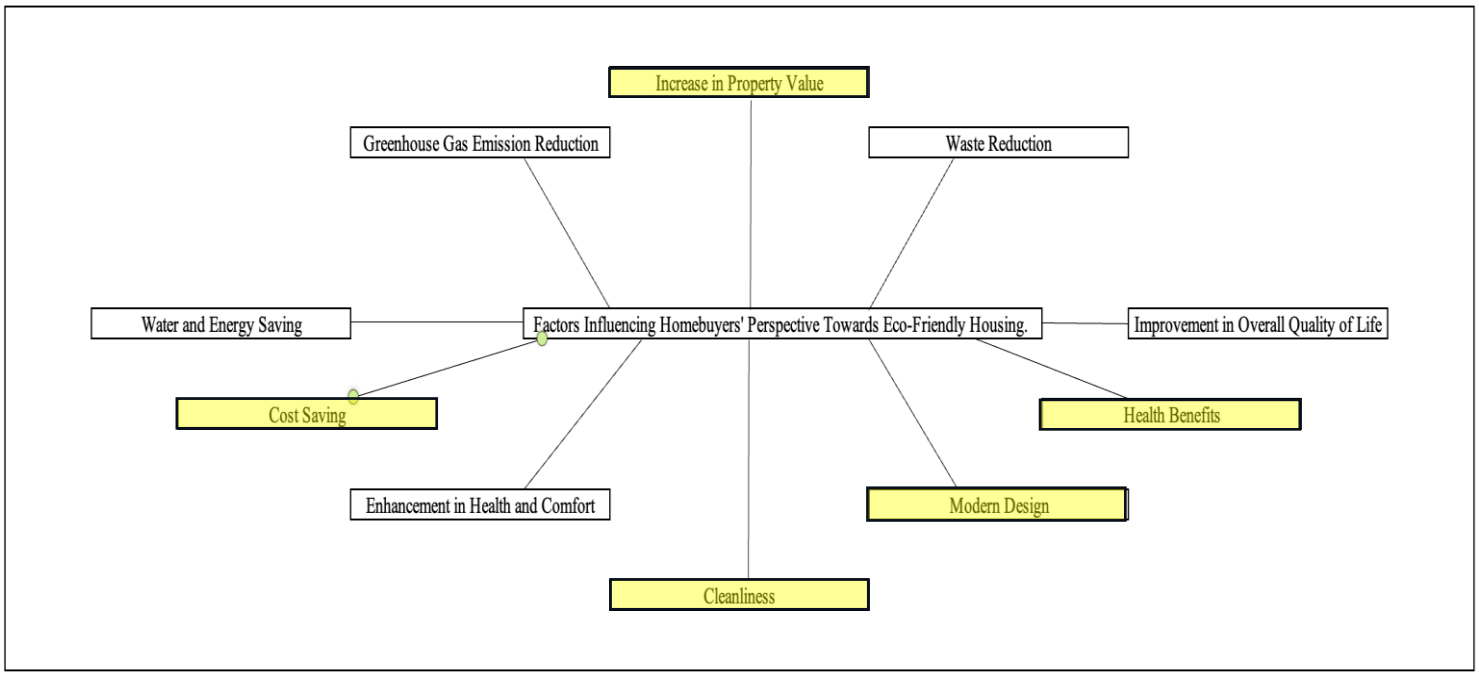
A multiple regression test was run to predict Duration of Stay from all of the 5 factors. These variables are not statistically significant predicted Duration of Stay, $F(5, 94) = 2.864$, $p < .0005$, $R^2 = .0.132$. Only Factor 5, **Enhancement in Health and Comfort** added statistically significant to the prediction, $p < .05$. All other four variables added were not statistically significant to the prediction $p < .05$.

In this case, the respondents who tend to live longer in eco-friendly townships tend to lean more towards their preferences in setting a living condition around enhanced health and comfort factors. This could mean that flexibility of this factor to cater to both long term and short term influences the homebuyers' perspective towards eco-friendly housing.

4.3.7. The new proposed conceptual framework.

Based on the survey results, it can be concluded that the core factors discussed from chapter 1 are not the only factors that influences homebuyers' perspectives towards eco-friendly housing. On the contrary, this research proves that there are external factors that can be considered as the outliers for the research as they also provide a new angle of perception in this research. The diagram below shows the amended conceptual framework with added new external factors in the highlighted areas.

Figure 5: The new conceptual framework



4.4 Conclusion.

In short, this chapter discussed and presented the results from the primary data that was obtained from a total of 100 respondents. These respondents rate the significance level based on the survey questionnaire that was distributed. The upcoming chapter will discuss the research findings, implications recommendations and conclusions. Through this data analysis, it can be concluded that for each of the demographic aspect there is only one significant factor that changes their outlook on eco-friendly housing.

With this in mind, the most significant factor for most of the demographic aspect is factor number one, which is Greenhouse Gas Emission Reduction. This is followed by factor number 4, Improvement in Overall Quality of Life as the second most favored factor and coming in number three is the Enhancement in Health and Comfort which is the fifth factor as the third most significant factor. The other factors were not included in this list due to the P value being too high to be considered as positively significant and therefore the top three.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS.

5.0 Introduction.

The conclusion and findings from the research that were reported in the previous chapter are covered in this chapter. Thus, the purpose of this chapter is to analyze the characteristics that have the most impact on homebuyers' perceptions of eco-friendly homes in order to draw conclusions, offer advice, and wrap up this research.

5.1 Summary of Statistical Analysis

This research had involved 100 respondents of different demography across the four Eco World townships in Kling Valley. Based on the analysis, the most of the factors are not statistically aligned with each other however there are some demographic aspects that are more relevant than the others to run the test. This meant that only a select few dependent variables were chosen to run the multiple regression analysis to avoid redundancy.

5.2 Discussion on Major Findings.

This research raised two important questions; what are the factors that contribute towards influencing homebuyers' perspective? And which one is the most significant outlier? To test this question a total of five factors were derived from various excerpts and journals from related fields of study. This proved that this research may very well serve as a guideline when determining the most significant factor as there are very few related research topics.

Aside from that, the research survey proved that the respondents are well aware of the adverse effects of global warming and many are starting to take necessary actions against it. This can be seen in their positive reaction towards the questions asked from Factor one to Factor five. As a result, we can highlight the factors with the most amount of agreement as the significant factor that influences the homebuyers' perspective towards eco-friendly housing. With Factor 1, Greenhouse Gas Emission Reduction being the top in the list with the most repeat value, Factor 4, Improvement in Overall Quality of Life comes in at second, followed by Enhancement in Health and Comfort.

Apart from these five factors that were tested, the questionnaire also asked the respondents for their opinion on their own words. The second part of Section C asked the respondents whether or not they agree with townships that comply with GBI parameters being sold at such high price points. This had received mixed answers as respondents had their own say towards the issue at hand. We were able to see how other factors can also affect the homebuyer's perspective when purchasing an eco-friendly home. The table of frequencies for these factors show that these external factors can also be used while testing this theory. Therefore, the research had included

these external factors as part of what truly and significantly alters a homebuyer's opinion towards eco-friendly housing. Factors like "Cleanliness" were repeated more than twice whereas "Good investment option" were repeated 6 times in similar context.

5.3 Implication of the Study.

The primary aim of this research is to serve as a guideline to determine the most significant factor that influences homebuyers' perspective towards eco-friendly housing. This could serve as an outline for policymakers when determining the significant factors in their goal to fight global warming and preserve the environment. The conclusions made were based on the answers that were derived from the survey questions answered by the respondents as backup to the research that was conducted using excerpts from related fields of study. This study can also prove to be a very good analysis on homebuyers' behavior as we can see from the data that was derived from the questionnaire.

5.4 Limitation of the Study.

When conducting this research, there were various limitations that were faced. One of them was the fact that some of the respondents did not wish to answer the survey questionnaire due to reasons unknown. Some of them did not come off as friendly enough to fill out the survey. The next limitation was the target population that were too far from each other. The 4 EcoWorld townships were not easy to reach due to distances and because of this, an alternative way had to be reached in order to distribute the research questionnaire. Apart from this, there were no concrete research done on this particular topic previously so the chances of finding similar research to use a baseline for this research was particularly hard.

5.5 Recommendation for Future Research

Studying how buyers view environmentally friendly homes is essential to comprehending how trends, tastes, and obstacles in eco-friendly real estate markets are changing. Which could be crucial for developers in order to deliver according to the market demand.

To monitor shifts in the attitudes and choices of homebuyers towards environmentally friendly housing over time, we can conduct longitudinal studies. This would provide light on how the needs for sustainable housing are changing. Apart from that, to determine how cultural, economic, and geographical aspects affect homebuyers' perceptions towards eco-friendly housing, conduct comparative research across various locations and civilizations. This can support the creation of regionally tailored plans. Another one is that we can analyze how homebuyers' decisions are affected by green building certification programs (GBI, LEED, ENERGY STAR, etc.). Examine the effects these certifications have on market competitiveness and perceived value.

5.6 Conclusion

To conclude this research, the study of homebuyers' attitudes towards eco-friendly housing is a dynamic area that needs to be further investigated in order to satisfy the changing needs of consumers who care about the environment. Important insights have been discovered by looking at the different aspects that influence these perspectives, such as ownership status, income levels, and length of residence.

The study demonstrated the need for specific methods catered to various market segments by illuminating the complex interactions among lifestyle preferences, financial considerations, and environmental consciousness. Comprehending the subtleties inherent in particular demographic groups, like income brackets or homeowners versus renters, facilitates more efficient dissemination of information and advocacy for environmentally sustainable housing.

Additionally, the study highlights how crucial it is to take into account how long a buyer intends to stay as a crucial factor in determining their perspectives. Residents may have different expectations and priorities in the short- and long-term,

which calls for flexible approaches to community planning, infrastructure development, and sustainability initiatives.

In summary, this study emphasizes how complex the process of selecting environmentally friendly housing is when making decisions. It involves a complex interplay of values, societal influences, and the desire for a comfortable and sustainable lifestyle in addition to being purely an economic decision. These findings lay the groundwork for future developments in eco-friendly housing development and promotion, which will ultimately promote a more resilient and sustainable built environment as the housing industry continues to change.

ENDNOTES

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As the pages of this project come to a close, I invite readers to consider the implications of the findings and to join the ongoing discourse of consumer behavior towards eco-friendly housing. The pursuit of knowledge is a collective endeavor, and I hope this work sparks further exploration, dialogue, and advancements in the ever-evolving landscape of building and property management. In the spirit of intellectual curiosity and shared learning, I look forward to the continued journey of discovery that lies ahead.

This journey has been a tapestry woven with curiosity, challenges, and the unwavering support of those who believed in the significance of the quest for knowledge. As I conclude this research, I am reminded of the quote that encapsulates the spirit of this endeavor;

"Everybody wants to know what I would do if I don't win, I guess we'll never know".

With sincere gratitude and anticipation,
Navaneethan Paranjothi

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