Addis Ababa University College of Business and Economics

School of Commerce

Department of Marketing Management

Factors Affecting Consumer Buying Behaviour toward Green Packaged Products: The Case of Addis Ababa, Ethiopia

A Thesis Submitted to the School of Graduate Studies of Addis Ababa University School of Commerce in Partial Fulfillment of the Requirements for the Master of Arts in Marketing Management

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Addis Ababa, Ethiopia

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June 2024

STATEMENT OF DECLARATION

I, Ahlam Bogale, declare that this thesis entitled: "Factors Affecting Consumer Buying Behavior Toward Green Packaged Products in Addis Ababa, Ethiopia" and submitted in partial fulfillment of the requirements for the degree of Master of Arts in Marketing Management is the outcome of my own effort and study. All sources of materials used for the study have been duly acknowledged. I have produced it independently with only the guidance and suggestions of the thesis advisor. The study complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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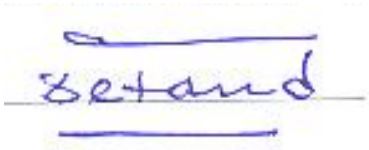
This is to certify that the thesis prepared by Ahlam Bogale, entitled "Factors Affecting Consumer Buying Behavior Toward Green Packaged Products in Addis Ababa, Ethiopia" and submitted in partial fulfillment of the requirements for the degree of Master of Arts in Marketing Management complies with the regulations of the University and meets the accepted standards with respect to originality and quality.



Advisor: Getie Andualem (Ph.D.)

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DECLARATION

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DEPARTMENT OF MARKETING MANAGEMENT

Factors Affecting Consumer Buying Behavior toward Green Packaged Products in Addis Ababa, Ethiopia

By: Ahlam Bogale

Board of Examiners Approval

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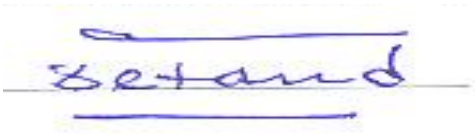
ENDORSEMENT

This thesis has been submitted to Addis Ababa University School of Commerce, School of Graduate Studies for examination with my approval as a university advisor.

Advisor Signature



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Abstract

This study investigates the factors influencing consumer buying behavior toward green packaged products in Addis Ababa, Ethiopia, focusing on three key variables: environmental awareness, willingness to pay, and altruism. Given the rising environmental concerns and the need for sustainable consumption practices, understanding these factors is crucial for promoting green packaged products in the market. Data were collected through a structured questionnaire distributed to 384 consumers, yielding a high response rate of 95.6% with 367 valid responses returned. The methodology involved a comprehensive multiple regression analysis to examine the relationships between the independent and the dependent variable. The findings revealed that environmental awareness, willingness to pay, and altruism all significantly and positively impact consumer buying behavior toward green packaged products. Among these, altruism showed the highest influence, indicating that individuals who prioritize the welfare of others and the environment are more inclined to purchase green-packaged products. Environmental awareness also had a strong impact, suggesting that consumers with higher awareness levels show a stronger preference for green-packaged products. Willingness to pay emerged as a significant factor, with many consumers willing to pay a premium for green-packaged products, driven by their perceived environmental benefits. Based on these findings, several recommendations are proposed. First, increasing environmental awareness efforts across various media platforms to educate consumers about the advantages of green packaged products. Second, strategies to make green packaged products more affordable, such as subsidies or incentives, could alleviate economic barriers. Third, promoting altruistic behavior through community programs and marketing strategies highlighting the societal benefits of green packaged products to further encourage green buying behavior. Future research should explore additional factors that might influence green buying behavior, and expand the geographical scope beyond Addis Ababa. This research offers useful insights for marketers, and environmental advocates aiming to promote sustainable consumption practices in urban settings, contributing to the broader goal of environmental sustainability.

Key Words: Green packaged products, Environmentally Friendly Products, Consumer Green Buying Behavior, Sustainable Consumption, Altruism

CHAPTER ONE

1. Introduction

Green packaging solutions highlight the use of non-toxic, eco-friendly materials, reducing exposure to hazardous substances. (Abatan, 2024) Green packaging encompasses packaging materials and practices designed to minimize environmental impact across their lifecycle. (Verghese, et al., 2015) It involves the strategic selection of materials, manufacturing processes, and end-of-life disposal methods to reduce resource consumption, energy usage, and waste generation while maximizing recyclability, reusability, and biodegradability (Marsh, 2007). Green packaging aims to align with principles of environmental sustainability and circular economy, addressing concerns related to climate change, pollution, and resource depletion (Geissdoerfer, 2017). By incorporating eco-friendly materials such as bioplastics, recycled paper, and compostable alternatives, green packaging seeks to mitigate ecological harm and promote sustainable consumption patterns. (Siracusa, et al., 2008) Ultimately, the adoption of green packaging strategies is crucial for minimizing the environmental footprint of packaging practices and fostering a more sustainable future. (Wandosell, 2021)

The combination of a rapidly growing global population and the increasing pace of consumerism has raised concerns about the environmental impact of consumption patterns. Packaging in the consumer goods industry has emerged as a significant contributor to environmental degradation. (Geyer, 2019) Conventional packing options result in detrimental environmental implications. The majority of plastics are used for packaging, resulting in an ecological footprint. (Wandosell, 2021) As the demand for products increases, packaging plays a crucial role, and its effects on the environment become more pronounced. (Marsh, et al., 2007) The marketing industry, as a primary driver of consumer choices, bears responsibility for shaping consumption habits, especially concerning packaging practices. (Armstrong, 2012) The ecological impact of packaging materials requires a critical examination of industry practices to reduce environmental damage. (Lewis & Fitzpatrick, 2010)

Understanding consumer perceptions of the environmental aspects of their consumption choices is essential in this discussion, as it uncovers the intricacies of their awareness of sustainability.

(Camilleri, 2023) The present-day global consumer landscape is going through a significant transformation, which is predominantly driven by an increasing awareness of environmental issues and the collective commitment to sustainable living. Climate change is one of the biggest issues of our day, and its negative consequences threaten all countries' ability to achieve sustainable development. (Nations, 2015)

As nations strive to meet climate goals and reduce their ecological footprint, understanding consumer attitudes and behaviors toward green packaging becomes imperative. This research delved into the factors that influence consumer buying behavior specifically concerning green packaged products, offering an exploration of this evolving phenomenon by providing a comprehensive understanding focusing on the factors that affect consumers' buying behavior toward green packaged products in Addis Ababa, Ethiopia.

1.1 Background of the study

The concept of green packaging has grown significantly over the past few decades, spurred by growing awareness of environmental issues and the need for sustainable solutions. (Wandosell, 2021) highlighted the environmental impacts of traditional packaging materials, such as plastic, paper, and metals, and the urgent need to transition towards eco-friendly alternatives. (Malik, 2019) explored various aspects of green packaging, including material selection, design innovations, and consumer perceptions, underscoring its importance in reducing carbon emissions, resource depletion, and waste generation.

In developing countries, the adoption of green packaging practices has been influenced by socio-economic factors, technological advancements, and policy interventions. Research in these regions has examined the challenges and opportunities associated with implementing sustainable packaging solutions amidst limited resources and infrastructure (Guiao, 2022). Studies have highlighted the role of informal economies, innovative packaging techniques, and community-based initiatives in promoting sustainable packaging practices and enhancing environmental resilience (Banerjee, 2021).

In Ethiopia, the concept of green packaging is gaining traction amidst rapid urbanization, industrialization, and rising consumer awareness. Research conducted in Ethiopia has underscored the environmental implications of conventional packaging materials, particularly in urban centers such as Addis Ababa (Imiru, 2023). Studies have explored the feasibility of eco-

friendly packaging alternatives, consumer preferences towards green products, and the role of government policies in promoting sustainable packaging practices. According to (Admassie, 2021), Ethiopia has the fastest growing major economy in Africa, with a 7.6 percent growth rate in 2022. The country has the second-highest population after Nigeria, resulting in considerable environmental pollution, degradation, and health difficulties. Despite challenges such as limited infrastructure and market access, there is growing momentum towards embracing green packaging solutions as a means to mitigate environmental degradation and foster sustainable development in Ethiopia (Tadesse, 2020). More than 80,000 tons of plastic waste is generated in Addis Ababa city annually, according to the Environmental Protection Authority of Addis Ababa City Administration. (Magazine, 2024)

Consumers around the globe are growing more mindful of the sustainability and eco-friendliness of the products that they buy. Nowhere is this more apparent than in the case of packaging, which has come under particular dislike for its adverse effects on our planet. Governments everywhere are wising to environmental imperatives and the need for sustainable consumption.

As Ethiopia is a country with a rich cultural heritage and a rapidly evolving economy it can be said that the country stands at the crossroads of development and sustainability. As the Ethiopian population becomes increasingly interconnected with the global community, there appears to be a noticeable shift in consumer behavior towards products that align with environmentally conscious values. The intersection of traditional values and modern aspirations presents a unique opportunity to explore how Ethiopian consumers navigate the landscape of green packaged products.

Addis Ababa is Ethiopia's capital. It is also the country's largest city in terms of population, with 3,384,569 people according to the 2007 census. However, it is suspected that the number was entered incorrectly and underestimated the city's population. Addis Ababa's population in 2024 is now predicted to be 5,703,628. In 1950, the population of Addis Ababa was 392,000. (Review, 2024) These numbers show that there is a lot of population growth which in turn can indicate an increased number of consumers. As the number of consumers grows the concern about ecological footprint will rise with it as well.

This study aims to examine the factors that influence consumers' buying behavior towards green packaged products, with a particular focus on Addis Ababa, Ethiopia. By comprehending the

dynamics in the country, the study will provide valuable insights that can assist businesses, policymakers, and marketers. Addis Ababa, as the capital city, is a hub for international communities and tourists, which exposes its residents to a wider range of global perspectives and practices. This heightened exposure contributes to greater awareness and understanding of environmental issues compared to other regions. Through this research, it can be demonstrated that the interplay of elements influencing consumer behavior toward green packaging promotes a better knowledge of the emerging dynamics, notably in the capital city.

1.2 Statement of the problem

Numerous studies conducted around the world have consistently highlighted consumers' increasing concern for environmental issues and their willingness to engage in sustainable practices. However, despite this growing awareness, research indicates that consumers often face barriers when it comes to choosing environmentally friendly products, including green packaging. Economic factors, such as perceived high costs and limited availability of green options, have been identified as significant deterrents in many regions. (Dangelico, 2010) Additionally, an understanding of environmental impact of packaging materials and the benefits of eco-friendly alternatives has also been identified as a major factor. These findings suggest that consumers worldwide may face similar challenges when it comes to adopting green packaging options. Although limited research has been conducted on consumer behavior towards green packaging in Ethiopia, existing studies provide valuable insights into how economic factors and knowledge gaps may influence consumer preferences in unique ways.

The global escalation of consumerism coupled with rapid population growth has significantly increased the demand for consumer goods, consequently exacerbating environmental concerns associated with packaging materials and practices. (Krausmann, et al., 2015). The production of packaging materials often involves high energy consumption, the depletion of natural resources, and the release of greenhouse gasses. Moreover, the improper disposal or inefficient recycling of packaging waste contributes to pollution, littering, and ecosystem degradation. (Meyers, 2015) The production of plastic is one of the most energy-intensive manufacturing processes in the world. The material is made from fossil fuels such as crude oil, which are transformed via heat and other additives into a polymer. (Africa Renewal, 2023) The use of environmentally unfriendly products poses a significant threat, which could lead to severe consequences for future generations. The demand for goods packaged in materials with dangerous ecological footprints is

compounding the environmental crisis. Despite greater awareness of these issues, consumer behavior remains a significant contributor to the problem.

Previous studies have extensively explored consumer behavior towards green packaging, primarily focusing on developed countries. However, limited research exists specifically examining this phenomenon in developing countries like Ethiopia. This gap in the literature calls for a dedicated investigation into the factors influencing consumer buying behavior regarding green packaging in Ethiopia. We should not also forget to mention the fact that Ethiopia, like many other developing nations, faces environmental challenges exacerbated by the widespread use of non-biodegradable packaging materials. Statistics indicate a significant increase in plastic waste generation, leading to environmental degradation and health hazards. (Magazine, 2024) As Ethiopia strives to achieve sustainable development goals, understanding consumer preferences and behaviors towards green packaging becomes crucial for mitigating environmental impacts. The Ethiopian government has demonstrated a commitment to environmental conservation through various policy initiatives and regulations. (Gazeta, 2014) However, challenges persist in effectively implementing and enforcing these policies, particularly in the context of sustainable packaging practices (Entrepreneurs, 2022). It is said that 13 percent of the waste generated in the city is plastic, and the country's plastic consumption has increased from 43,000 in 2007 to 224,000 in 2022. It has been pointed out that this is having a negative impact on people's health, environmental beauty and water resources. (Magazine, 2024)

Plastic garbage is a global challenge that harms the ocean, land, and people. Developing countries such as Ethiopia, face the problem as it is exacerbated by an increasing urban population, recycling habits that are poor, insufficient waste management infrastructure, and legislation. (Seyoum, 2023) In Ethiopia's capital, Addis Ababa, each resident generates approximately 51 kilograms of waste annually. Organic waste accounts for around half of that total, with food being the most common type. Plastic accounts for approximately 7.92 kg (15.5% for all garbage created). People with higher incomes use and dispose of more plastic than those with lower incomes. Additionally, they utilize a wider range of plastics. (Nateres, 2021). These reports and similar findings serve as a compelling call to action. Since consumers are the primary drivers of this ecosystem, understanding the factors that influence their green buying behavior will provide valuable insights for all stakeholders involved.

Research focusing on consumer green buying behavior can provide valuable insights for marketers to design targeted interventions and support the transition toward greener packaging solutions. The ultimate goal is to encourage a shift in consumer choices that can help to mitigate the environmental impact of consumption practices and preserve the planet for future generations. Through a thorough exploration of some valuable factors such as environmental awareness, willingness to pay, and Altruism, this research aims to contribute to informing targeted interventions, and marketing strategies that can inspire and facilitate positive changes in consumer behavior, leading to a more sustainable and environmentally conscious society.

1.3 Research Questions

1.3.1 Main Research Question

What are the key factors influencing consumer buying behavior towards green packaged products?

1.3.2 Sub-Research Questions

1) To what extent are consumers aware of the environmental impact of packaging materials?
2) How does environmental awareness influence consumer green buying behavior?
3) How willing are consumers to pay more for green-packaged products?
4) How does willingness to pay more for green packaged products influence consumer green buying behavior?
5) How does altruism influence consumer green buying behavior?

1.4 Objectives of the study

1.4.1 General Objective of the Study

To comprehensively investigate and analyze the factors affecting consumer buying behavior towards green packaged products, aiming to give insights that inform marketing strategies, sustainability initiatives, and product development within the consumer goods industry.

1.4.2 Specific Objectives of the Study

1) To examine to what extent consumers are aware of the environmental impact of packaging materials, and how their awareness influences their green buying behavior.
2) To examine how environmental awareness influences consumer green buying behavior.
3) To look into how willing consumers are to pay more for green-packaged products.

4) To identify how willingness to pay more for green packaged products influences consumer green buying behavior.
5) To examine how altruism influences consumer green buying behavior.

1.5 Definition of Terms

1.5.1 Operational Definition

Green packaging: Assessed based on criteria that incorporate renewable or recycled materials, recyclability, biodegradability, energy efficiency, and adherence to environmental standards. (Ottoman, 2017)

Green packaged products: Are identified based on criteria such as using eco-friendly packaging materials, recyclability of packaging, presence of eco-labels or certifications, and adherence to sustainable packaging standards. (Peattie, 2001)

Eco-conscious customers: Identified based on behaviors such as purchasing environmentally friendly products, participating in recycling programs, reducing energy consumption, and advocating for environmental causes. (Batson, 1991)

Ecological footprint can be quantified by assessing factors such as carbon emissions, energy consumption, water usage, land use, and waste production associated with human activities. Various methods, such as ecological footprint calculators, life cycle assessments, and environmental impact assessments, can be used to estimate and analyze ecological footprints at different scales. (Anon., 2021)

Altruism: can be observed and measured through behaviors such as donating time or resources to charitable causes, volunteering for community service, helping those in need, and displaying empathy and compassion towards others. (Batson, 1991)

Consumer green buying behavior: can be identified through actions such as actively seeking out products with eco-friendly certifications, preferring goods made from recycled or organic materials, avoiding products with excessive packaging or harmful chemicals, and supporting companies with strong environmental commitments and practices. (Peattie, 2010)

Sustainability: evaluating practices and policies aimed at balancing environmental, economic, and social goals. (Development., 1987)

Sustainable Development Goals (SDGs): A global call to action aimed at achieving several critical objectives such as ending poverty, safeguarding the environment, and ensuring peace and prosperity for all people across the globe by the year 2030. (Nations, 2015)

Sustainable Consumption: The use of products and services with minimal impact on the environment. (Lawrence, 2008)

1.6 Significance of the Study

In today's world where environmental sustainability is a pressing need, this study holds immense importance. By exploring the factors that impact consumer buying behavior towards green packaged products, this research can offer valuable insights that can have a far-reaching impact with multidimensional implications.

Consumer Education and Awareness:

This research contributes to the ongoing discourse on consumer education and environmental awareness. By unraveling the dynamics of how consumers perceive green packaging, the study aims to provide a basis for educational initiatives that can empower individuals to make informed and sustainable choices in their consumption patterns.

Guiding Sustainable Business Practices:

Provide essential guidance to industries on adopting and optimizing green packaging practices. Understanding consumer preferences can enable businesses to align their strategies with sustainability goals, fostering eco-friendly practices.

Informed Marketing Strategies & Industry Competitiveness and Innovation:

For marketers, the study can offer a roadmap to craft more effective and targeted campaigns. Insights into environmental awareness, willingness to pay, and altruism can empower marketers to communicate the eco-friendly attributes of their products in ways that resonate with diverse consumer segments.

For industries, the study's significance lies in its potential to enhance competitiveness and foster innovation. By adopting the findings of the study, industries can position themselves as leaders in environmentally responsible practices, attracting a segment of eco-conscious consumers. This

can help them gain a competitive edge in the marketplace by differentiating themselves from their counterparts and tapping into the lucrative and expanding eco-friendly consumer market.

Environmental Impact Mitigation:

The study's recommendations have the potential to significantly reduce the environmental impact caused by climate change. Encouraging consumers to adopt green packaging can lead to a substantial decrease in carbon footprints, resource depletion, and overall environmental damage associated with traditional packaging. The study's significance extends to the long-term well-being of societies. By promoting green packaging, the research aims to contribute to a more sustainable and resilient future, ensuring that the choices made today positively impact generations to come.

1.7 Scope of the Study

The scope of this research is designed to comprehensively explore the factors influencing consumer buying behavior towards green packaged products. The study focused on several key dimensions to provide a holistic understanding of the phenomenon.

Geographical Scope:

The primary geographical focus of this study is Addis Ababa, Ethiopia ensuring a contextualized examination of consumer behavior towards green packaged products within the city.

Theoretical Scope:

The theoretical scope of this study includes concepts and theories related to green consumer behavior. The study is based on well-established theories of consumer behavior and sustainability, and it investigates how these variables influence purchase decisions. This theoretical framework aids in understanding the reasons that drive green purchasing behavior, as well as the interactions of numerous contributing factors.

Methodological Scope:

This study's methodological scope encompasses the design, data collection, and analysis approaches used to fulfill its aims. A structured questionnaire was utilized to collect information from respondents in Addis Ababa. Multiple regression analysis was used to examine the data and evaluate the influence of the independent factors on the dependent variable. The study guaranteed that the data was valid and reliable by pre-testing and improving the questionnaire. Various demographic parameters, such as age, and gender, were analyzed to capture customer diversity and highlight complex patterns and variances in consumer preferences.

1.8 Organization of the Paper

The research is divided into separate but interrelated parts to methodically investigate the elements that affect the purchasing habits of customers toward green packaged products. The framework is constructed in such a way as to offer a coherent and comprehensive evaluation of the phenomenon. The introduction explains the study's background, justification, and significance. Introducing the primary research topic, and objectives laid the groundwork for the succeeding chapters. The second section deals with conducting a critical evaluation of the existing literature on consumer behavior toward green packaging, focusing on major ideas, empirical research, and gaps in knowledge. It created a theoretical framework that guides the study's conceptual foundations. The research methodology section provides a clear account of the study's methodology, including the research design, sampling techniques, and data collection methods. In the fourth section the collected data is examined using relevant statistical and quantitative techniques. This part describes the findings, interprets the conclusions, and connects the observed patterns to the research objectives. The discussion section analyzes customer behavior towards green packaging based on existing literature. It investigates consequences, similarities, and differences, laying the groundwork for the development of recommendations. Based on the study's findings, the fifth section gives practical recommendations to industries, legislators, and marketers. Outlining ways to improve green packaging practices and increase consumer participation with sustainable options. By summarizing the study's important findings areas for future research are offered to improve on the understanding of consumer behavior in the context of green-packaged products.

CHAPTER TWO

2 Literature Review

2.1 Introduction

The literature review section delves into an extensive investigation of existing literature concerning the behavior of consumers toward green-packaged products. This evaluation not only consolidates the considerable amount of information available in the field but also establishes the basis for the theoretical structure that guides the analysis.

2.2 Theoretical Framework

The Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour is a psychological theory developed by social psychologist Icek Ajzen in the late 1980s. It builds upon the earlier Theory of Reasoned Action (TRA), which Ajzen co-developed with Martin Fishbein. According to the TPB, three main factors influence individual behavior: perceived behavioral control, attitudes, and subjective norms. (Ajzen, 1991)

Attitudes (A) are an individual's favorable or negative assessments of completing an activity. Subjective norms (SN) capture the social influences that shape an individual's intentions. It considers the perceived social expectations and opinions of significant others. Perceived behavioral control (PBC) relates to the perception of an individual and their ability to perform the behavior.

The TPB suggests that these three components collectively influence an individual's behavioral intentions. Behavioral intentions, in turn, are considered strong predictors of actual behavior. The more positive the attitude, subjective norms, and perceived behavioral control are towards a behavior, the stronger the individual's intention to perform that behavior.

The TPB is a widely used model, but it has its weaknesses. Some believe that it oversimplifies the complexities of human decision-making and that other factors, such as emotions and contextual influences, may also have significant roles in shaping behavior. Since its inception, TPB has found widespread application in various fields, including health psychology, environmental psychology, and consumer behavior. Its adaptability makes it a valuable tool for

understanding and predicting behavior in diverse contexts, including consumers' choices regarding green-packaged products.

Diffusion of Innovations Theory:

Everett M. Rogers presents a comprehensive theory that explores how new ideas, products, and practices spread within societies over time. Drawing upon various disciplines such as sociology, psychology, anthropology, and communication studies, Rogers delineates the diffusion process as a social phenomenon characterized by the adoption, spread, and eventual assimilation of innovations by individuals and groups. The theory posits that the diffusion of innovations follows a predictable pattern, influenced by the interplay of innovation attributes, communication channels, social networks, and adopter characteristics. Through extensive empirical research and case studies across diverse contexts, Rogers elucidates the factors that facilitate or inhibit the adoption of innovations, shedding light on the dynamics of social change and technological advancement. (Rogers, 2003).

Based on these components, it goes into detail on the adopters as follows:

Innovators are the first to adopt an innovation. They are adventurous, risk-takers, and frequently have a higher social rank. Early Adopters are opinion leaders who accept new ideas early. They are well-connected through social networks. The Early Majority embraces innovations before the ordinary member of a society or community. They deliberate and observe before making a conclusion. The Late Majority accepts innovations after the ordinary member of society. They are cautious and suspicious of change. Laggards when it comes to adopting advancements, they will be the last ones. They are traditionalists who may oppose change. Based on the theory, the diffusion process typically follows a bell curve, starting with a small number of innovators, gaining momentum with early adopters and the early majority, reaching a peak, and then tapering off as the late majority and laggards eventually adopt the innovation.

The Diffusion of Innovations Theory has wide spread application in a variety of fields, including technology adoption, healthcare practices, and environmental sustainability. In the context of green packaged products, the theory can help understand how and why consumers adopt eco-friendly packaging innovations.

While the theory provides valuable insights into the diffusion process, it has been critiqued for its linear model, which may oversimplify the complexities of innovation adoption. Additionally, it may not fully account for cultural and contextual variations in the diffusion process. Overall, the Diffusion of Innovations Theory offers a structured framework for understanding how new ideas, including innovations in green packaging, spread through societies and influence consumer behavior over time.

The Diffusion of Innovation hypothesis is concerned with how new ideas and innovations spread over time within a social system. While it considers individual adoption decisions, its primary focus is on the overall adoption process and the characteristics of adopters as a group. In contrast, the theory of planned behavior focuses on the individual's decision-making process, examining how attitudes, subjective norms, and perceived behavioral control shape intentions and behaviors.

The Theory of Planned Behavior has been selected as the theoretical framework for this study, as it provides a comprehensive approach to investigating how attitudes, social norms, and perceived control influence consumers' intentions to buy green packaged products, as well as their actual purchasing behavior.

2.3 Empirical Review:

This section synthesizes existing research related to the key variables of this study: environmental awareness, willingness to pay, altruism, and consumer green buying behavior. By examining previous studies, this review aims to provide a comprehensive understanding of how these variables have been explored in various contexts and their established relationships. The studies included in this review utilize a range of methodologies and sample populations, offering diverse insights into the factors influencing consumer behavior toward green packaged products.

Numerous studies have explored a variety of factors that influence consumer behavior towards green products. Scholars have identified several key variables, including:

Perceived Consumer Effectiveness (PCE): This refers to the belief that individual efforts can contribute to environmental protection. Research shows that consumers who believe their actions make a difference are more likely to engage in green purchasing behaviors (Roberts, 1996)

Social Norms: The influence of social norms—what others think and do—can significantly affect green purchasing decisions. When consumers perceive that green behavior is socially accepted or expected, they are more likely to adopt it (Cialdini, 1990)

Environmental Knowledge: Consumers with a deeper understanding of environmental issues tend to make more environmentally friendly purchasing decisions. This knowledge can stem from education, media exposure, or personal experiences (Kollmuss, 2007)

Perceived Quality and Effectiveness of Green Products: Concerns about the quality and effectiveness of green products can influence consumer decisions. If consumers believe that green products are inferior or less effective, they may be less likely to purchase them, regardless of their environmental awareness (Chen, 2013)

Despite the numerous factors that influence green buying behavior, this study focuses on environmental awareness, willingness to pay, and altruism for reasons such as:

Relevance to the Ethiopian Context: The selected variables are particularly relevant in the Ethiopian context, where awareness of environmental issues is growing, but economic constraints also play a significant role in consumer decisions.

Strong Theoretical Foundation: These variables are well-grounded in the Theory of Planned Behavior (TPB), which provides a solid framework for understanding how attitudes (environmental awareness), subjective norms (altruism), and perceived behavioral control (willingness to pay) influence behavior.

Empirical Support: Numerous studies, have demonstrated that environmental awareness, willingness to pay, and altruism are significant predictors of green buying behavior. By focusing on these variables, this study builds on a strong empirical foundation while addressing gaps in the literature specific to Addis Ababa, Ethiopia.

Practical Implications: Focusing on these three variables offers actionable insights for businesses and marketers. Understanding how environmental awareness drives behavior can inform educational campaigns, willingness to pay can guide pricing strategies, and altruism can be leveraged in marketing messages to encourage green consumption.

2.3.1 Environmental Awareness

A study by D'Souza examining consumer environmental awareness and its impact on green purchasing behavior found environmental awareness significantly associated with increased green buying behavior on a survey of 200 consumers. (D'Souza, 2007) Another study conducted by Barber that had the objective of analyzing how the purchase of green products is affected by environmental awareness with a survey of 320 wine customers, found that higher environmental awareness leads to a greater likelihood of purchasing green products. (Barber, 2012). While investigating the impact of environmental awareness on green purchase decisions on a survey of 400 consumers, it was found that environmental awareness was a significant predictor of green purchasing behavior. (Gleim, 2013) A study conducted to explore the association between environmental awareness and green buying behavior in developing countries using a structured questionnaire for 450 consumers in India found that environmental awareness significantly affects green buying behavior. (J, et al., 2016) A study conducted by Nguyen et al. to examine the role of environmental awareness in influencing green buying behavior among millennials with a survey of 500 millennials in urban areas found that higher degrees of environmental awareness significantly increase the likelihood of purchasing green products. (Nguyen, et al., 2020)

H1: Environmental awareness has a significant and positive effect on green buying behavior.

2.3.2 Willingness to Pay

A study conducted by Laroche et al. (2001) to investigate the willingness to pay for green products among different consumer segments with a survey of 450 consumers showed that consumers with a higher willingness to pay are more likely to engage in green buying behavior. (M, et al., 2001) To explore the willingness to pay for green products among different income groups with an experimental study with 300 participants, using a conjoint analysis approach showed that for green products related willing to pay is higher among higher income groups, but even lower income groups show a significant willingness when aware of the environmental benefits. (Wang, et al., 2019) A study by Testa et al. (2015) showed that consumers show high willingness to eco-friendly packaging, with notable variations across different countries and demographic groups. (Testa, et al., 2015) while investigating the impact of willingness to pay on

green purchasing decisions show that willingness to pay as a significant predictor of green purchasing behavior. (Gleim, 2013)

H2: Willingness to pay has a significant and positive effect on consumer green buying behavior.

2.3.3 Altruism

Altruism (Aruga, 2020) is a factor that shapes individuals' pro-environmental acts and attitudes. Pro-environmental activity is more likely when an individual is aware of the negative repercussions for others and accepts responsibility for altering the offending environmental state. (Kaufmann, et al., 2012) valuable insights about the effect of altruism on consumer behavior towards green packaged products can be seen, both globally and within specific regional contexts such as Ethiopia. Researchers can acquire a thorough grasp of the elements influencing consumer buying behavior toward green packaging solutions by combining findings from several studies. A study by Minton & Rose (1997) to explore the role of altruism in influencing green consumer behavior showed that altruistic values are positively correlated with green buying behavior. (Minton & Rose, 1997) A study by Roberts (1996) understanding the role of altruism in predicting consumer behavior found that altruistic behavior significantly predicts green buying behavior. (Roberts, 1996) In another study (Hassan, 2018) found that altruism positively influences the intention to purchase green products with a stronger effect observed in female consumers. (Bordon & Francis, 1978) hypothesize that: People are less likely to act ecologically when they have a solid selfish and competitive orientation and more likely to prioritize environmental concerns due to increased resources.

H3: Altruism has a positive and significant effect on consumer green buying behavior.

2.4 Conceptual Framework

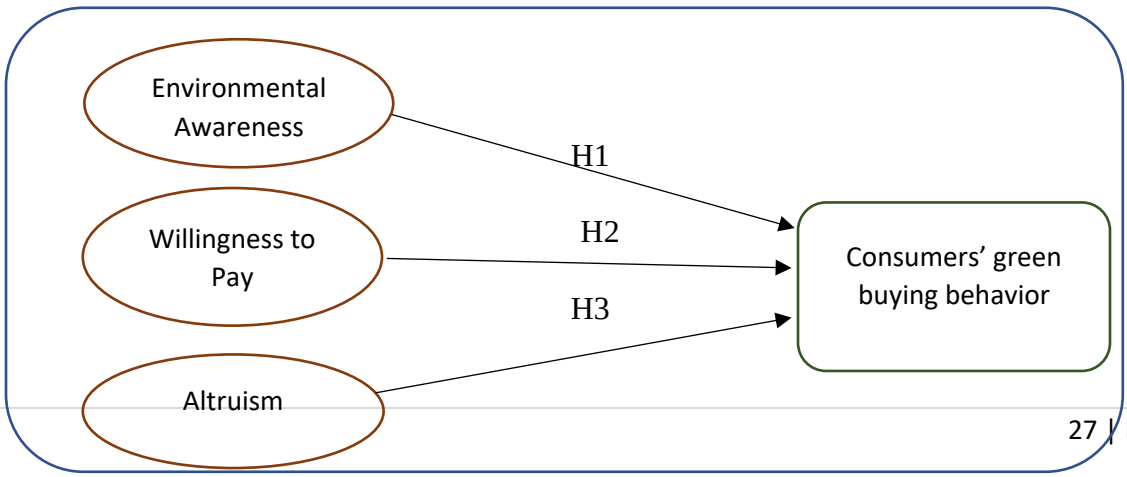

Figure 1. Conceptual framework adopted from Gupta, Raj. (2021)

Hypothesis of the Study

H1: Environmental awareness has a significant and positive effect on green buying behavior.

H2: Willingness to pay has a significant and positive effect on consumer green buying behavior.

H3: Altruism has a positive and significant effect on consumer green buying behavior.

CHAPTER THREE

3. Research design and Methodology

3.1 Introduction

This section outlines the research design and methodology for investigating the factors influencing consumer buying behavior towards green packaged products. The research approach integrates quantitative methods to capture the factors affecting consumer green buying behavior.

3.2 Research Design

An explanatory and descriptive research design is employed, where quantitative data are collected and analyzed. This design facilitates the integration of diverse perspectives and multiple data sources to generate a holistic understanding of consumer buying behavior toward green packaged products.

3.3 Research Approach

The proposed study adopted a quantitative research approach, to provide a comprehensive understanding of consumer buying behavior towards green packaged products. This approach allows of findings from different data sources, enhancing the validity and reliability of the stu.

3.4 Sampling Design

The study utilized a stratified random sampling technique to select a diverse sample of consumers in Ethiopia. Stratification by demographic variables such as age, gender, education level, and income ensure representation across different segments of the population, allowing for comprehensive insights into consumer behavior.

3.4.1 Target Population

The target population for this study comprises adult consumers aged 18 years and above residing in Addis Ababa, Ethiopia. Specifically, the target population includes individuals who are actively engaged in purchasing consumer goods, including green packaged products, within the city. The sample stratified based on key demographic variables such as age, gender, and location in residential and commercial areas within Addis Ababa.

3.4.2 Sampling Frame

The sampling frame will consist of a comprehensive list of residential areas, neighborhoods, and commercial districts within Addis Ababa, Ethiopia. This includes both urban and peri-urban areas where consumers reside and have access to various retail outlets selling consumer goods, as well as commercial areas such as markets, shopping malls, and retail centers where consumers frequently shop for goods.

3.4.3 Sampling Technique

A stratified random sampling technique was employed to ensure representation across different demographic segments within Addis Ababa. The city was stratified based on key demographic variables such as age, gender and location. Subsequently, random samples were drawn from each stratum to ensure proportional representation of diverse demographic groups in the final sample.

3.4.4 Sample Size

As Addis Ababa is the capital city of Ethiopia where a lot of consumers reside and the population was estimated to be around 3.4 million people. From those, one can assume as half of it being consumers. Since the population of the study is considered as infinite the sample size for this study is determined by using the estimation formula developed by Cochran (1963)

$$n = \frac{z^2(pq)}{e^2}$$, where n-Sample size

Z –Value at specified confidence interval, e.g. z=1.96 at 95% CI

p–Probability of inclusion positive response (0.5)

q = Probability of negative response =1-p= (0.5)

e –Desired level of precision (±5%)

$$= \frac{1.96^2(0.5*0.5)}{0.05^2} = 384.16 \approx 384$$

3.4.5 Sampling Procedure

To provide a representative sample of the Addis Ababa, Ethiopian population, a stratified random sampling strategy was used in this study. The city's population was separated into several strata based on major demographic criteria such as age, gender, and location. Each stratum was treated as a separate subgroup, allowing for a proportional representation of diverse demographic groups within the sample. Within each stratum, individuals were randomly selected to participate in the study, ensuring that every member of the population has the same probability of being included. This approach aimed to reduce sampling bias and enhance the generalizability of the study findings by ensuring that the sample reflects the demographic diversity of Addis Ababa. Additionally, by stratifying the population, the study explored variations in consumer behavior towards green packaged products across different demographic groups, providing valuable insights for effective marketing strategies and environmental initiatives.

3.5 Sources of Data

3.5.1 Primary Data Sources:

Questionnaires:

Structured questionnaires administered to consumers in Addis Ababa can provide primary data on their attitudes, perceptions, preferences, and behaviors towards green packaged products. Participants can fill out questionnaires online, and in person at retail locations.

3.6 Data Collection Methodology

Survey Questionnaire:

A structured questionnaire was adopted from previous related studies. (Nguyen, et al., 2023) The questionnaire included both closed-ended and Likert-scale questions to facilitate quantitative analysis. (Hoa, 2020) The questionnaire was pre-tested with a small sample of participants to assess clarity, comprehensibility, and validity. Feedback from the pre-test was used to refine the questionnaire before full-scale data collection.

3.7 Data Collection Instrument

1. Survey Questionnaires:

Variables: Environmental Awareness, Willingness to Pay, Altruism

Environmental Awareness: Likert scale-based questions assessing participants' awareness of environmental issues, attitudes towards sustainability, and knowledge of green packaging.

Willingness to Pay: Likert scale-based questions exploring participants' economic status, purchasing powers, and willingness to pay premium prices for green products.

Altruism: Likert scale-based questions to explore respondents' level of altruism, and its implication on their green buying behavior.

The survey questionnaire was designed to capture quantitative data on these variables and their influence on consumer behavior toward green-packaged products.

3.8 Data Analysis Methods

Descriptive Statistics:

Descriptive statistics was used to summarize and describe the characteristics of the collected data. Measures of central tendency (e.g., mean, median, mode) and measures of variability (e.g., standard deviation, range) are calculated to provide an overview of the distribution of responses for each variable. Descriptive statistics offers insights into the typical consumer preferences, attitudes, and behaviors regarding green packaging.

Correlation Analysis:

Correlation analysis conducted to explore the strength and direction of relationships between variables of interest. Specifically, Pearson correlation coefficients will be calculated to assess the

linear association between pairs of continuous variables, such as environmental awareness, willingness to pay, altruism and green buying behavior. Correlation analysis helps identify significant associations and potential predictors of consumer behavior towards green packaged products.

Multiple Regression:

Multiple regression analysis employed to examine the predictive power of independent variables on the dependent variable of consumer green buying behavior. This technique allowed for the simultaneous assessment of the effects of multiple predictor variables on the outcome variable. The model included independent variables such as environmental awareness, willingness to pay, and Altruism to predict variations in consumer behavior towards green packaging. The regression coefficients can indicate the strength and direction of the relationships, while the overall model fit be used to determine its predictive accuracy.

3.9 Validity and Reliability

3.9.1 Validity

Validity refers to the extent to which a measurement instrument accurately measures the concept it intends to measure. (Cohen, 2018) In this study, pilot testing criteria was used to ensure that the measurement instruments accurately capture the intended constructs and demonstrate convergent validity. The questionnaire was pre-tested with a small sample of participants to assess clarity, comprehensibility, and validity. Feedback from the pre-test was used to refine the questionnaire before full-scale data collection.

3.9.2 Reliability

Reliability refers to the consistency and stability of measurement instruments over repeated administrations. To evaluate the reliability of the measurement instruments in this study Cronbach's Alpha was considered. Cronbach's alpha coefficients was calculated to assess the internal consistency of items within each latent variable. A value greater than 0.7 indicates good internal consistency (Nunnally, 1994) To assess the reliability of the data collected, Cronbach's Alpha was calculated for each set of items related to the different factors that could influence consumer green buying behavior. The results are as follows:

Table 1: Data reliability Cronbach Alpha test result

Variables	Cronbach alpha	Number of items
Environmental Awareness	0.815	7
Willingness to pay	0.933	3
Altruism	0.953	4
Consumer buying behavior	0.951	5
Overall reliability	0.913	19

Source: Authors computation from SPSS v26 (2024)

The Cronbach's alpha was calculated to assess the reliability of each field of the instrument as well as the entire questionnaire. The results indicated that Cronbach's alpha values for the individual fields range from 0.815 to 0.913, demonstrating good internal consistency for each field. Moreover, the overall Cronbach's alpha for the entire instrument is 0.913, which indicates excellent reliability. Based on these results, the values for the items were considered reliable and acceptable for further analysis.

3.10 Research Ethics

Everyone has the right to choose whether or not to engage in the marketing research project. By fully informing participants about the nature of the study and giving the option to participate voluntarily, with no coercion or pressure. (Kumar R. & Kandasamy, 2012). Participants have the right to safety from physical or psychological harm. Measures will be taken to ensure that participants are not exposed to any harm or distress during the research process. Interviewers will be trained to handle sensitive topics with care and empathy to minimize potential stress or discomfort. (Kumar R. & Kandasamy, 2012).

Research subjects have the right to be fully informed about all aspects of the research project. This involves providing explicit information about the study's objective, length of participation, and utilization of collected data. All participants will provide informed consent prior to their participation in the study. (Kumar R. & Kandasamy, 2012). Participants have the right to privacy, encompassing control over unwanted intrusions into their personal space and control of their personal information. Measures will be implemented to safeguard participant privacy, including securing personal data and ensuring confidentiality in data handling and reporting. (Kumar R. & Kandasamy, 2012). Confidentiality concerns will be rigorously observed throughout the research process. Participant identities will be anonymized using number codes,

and any linkage between respondent names and questionnaire data will be stored separately and securely. Individual respondents will not be identified in reporting survey findings, and only anonymous summaries will be provided to maintain confidentiality and protect participant privacy. (Kumar R. & Kandasamy, 2012)

CHAPTER FOUR

4. DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter analyzes, interprets, and presents the data collected from the questionnaire. The analysis seeks to answer the research questions and test the hypotheses proposed in the study. A systematic questionnaire was utilized to collect information from a broad sample of consumers in Addis Ababa. The data was then thoroughly statistically analyzed using the Statistical Package for the Social Sciences (SPSS) software. Various statistical techniques, including descriptive statistics, correlation analysis, and multiple regression analysis, were employed to examine the relationships between the independent variables (environmental awareness, willingness to pay, and altruism) and the dependent variable consumer buying behavior. The results of these analyses are presented in the following subsections.

4.2 Response Rate

In this study, a total of 384 questionnaires were distributed among the participants. Out of these, 367 were correctly filled and returned, resulting in a response rate (returned valid questionnaires) of approximately 95.57%. This high response rate is considered acceptable and suggests that the data collected is representative of the sample population. According to (Fincham, 2008), a response rate above 70% is generally deemed adequate for survey research, ensuring the reliability and validity of the results.

4.3 Data Presentation

4.3.1 Data Validity

To ensure data validity of the data collected in this study was ensured through several steps such as the questionnaire items were adopted from a previous study where the validity of the instrument had already been established. Additionally, before the main data collection, a pilot test was conducted with a small sample of respondents. The feedback from this pilot test was used to refine the questionnaire, ensuring that the items were clear and easy to understand to ensure that the questionnaire accurately measured the intended constructs and provided reliable data for the study.

Demographic Characteristics

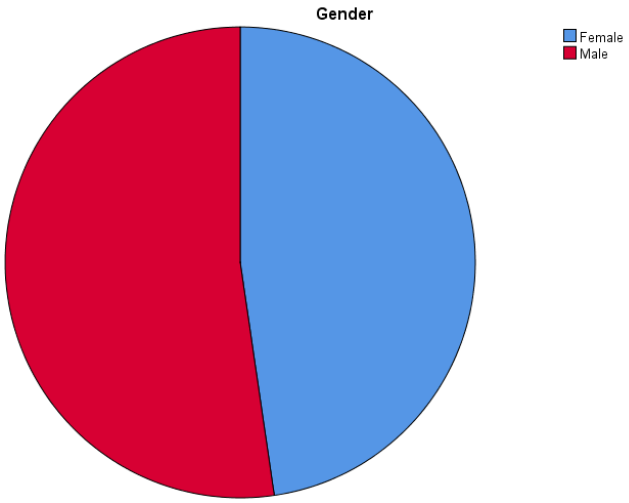

Figure 2 Profile of respondents

Out of the 367 correctly filled and returned questionnaires, 175 respondents were female (47.7%) and 192 were male (52.3%). This balanced gender representation helps ensure that the findings accurately reflect the perspectives of both male and female consumers.

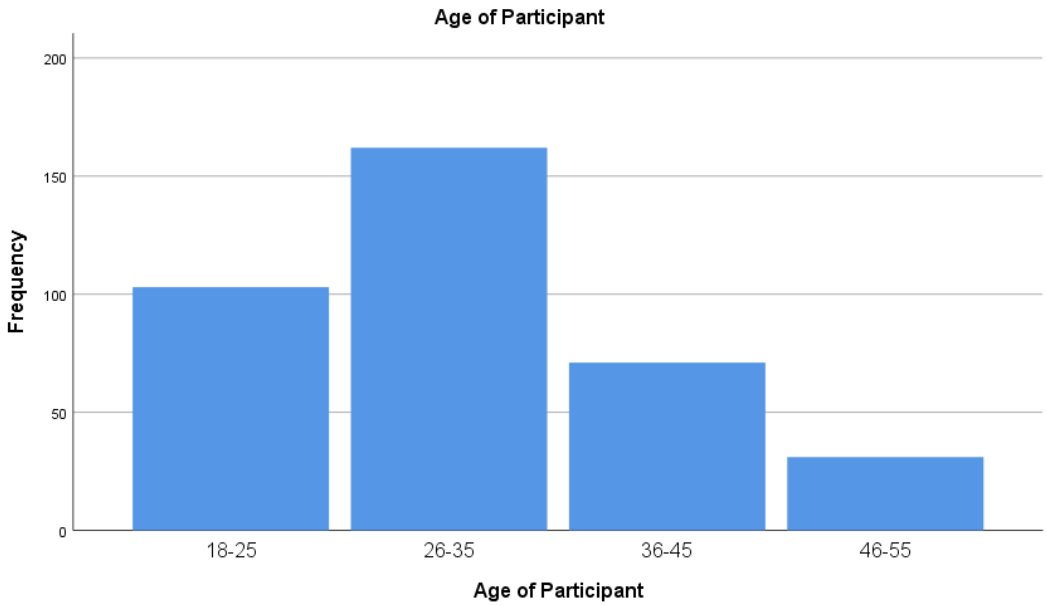

Figure 3 Age of participants

Source: Author's computation using SPSS v26(2024)

An array of age groups is represented by the age distribution of the study's participants. The largest group of respondents, 162 participants (44.1%), were between 26-35 years old, reflecting a significant portion of the sample. The second largest group was those aged 18-25 years, comprising 103 participants (28.1%). This was followed by 71 participants (19.3%) aged between 36-45 years. Lastly, there were 31 participants (8.4%) aged between 46-55 years. This varied age representation ensures that the study captures the perspectives and behaviors of a broad spectrum of consumers.

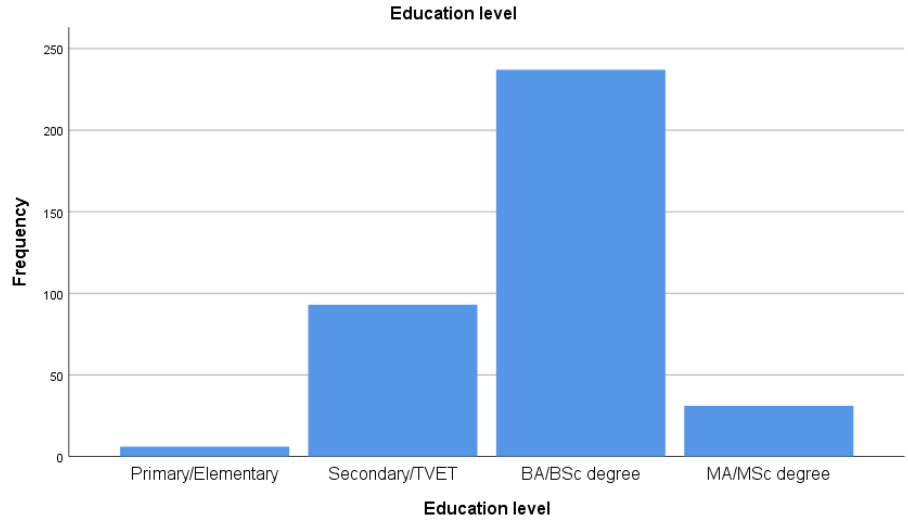

Figure 4 Education level of participants

Source: Author's computation using SPSS v26(2024)

The educational level of participants varied across different categories. A small portion of the respondents, 6 participants (1.6%), had completed primary or elementary education. A larger group, consisting of 93 participants (25.3%), had attained secondary school or TVET level education. The majority of respondents, 237 participants (64.6%), held a BA/BSc degree, indicating a high level of higher education within the sample. Additionally, 31 participants (8.4%) had achieved an MA/MSc degree, further highlighting the educational diversity of the study's participants.

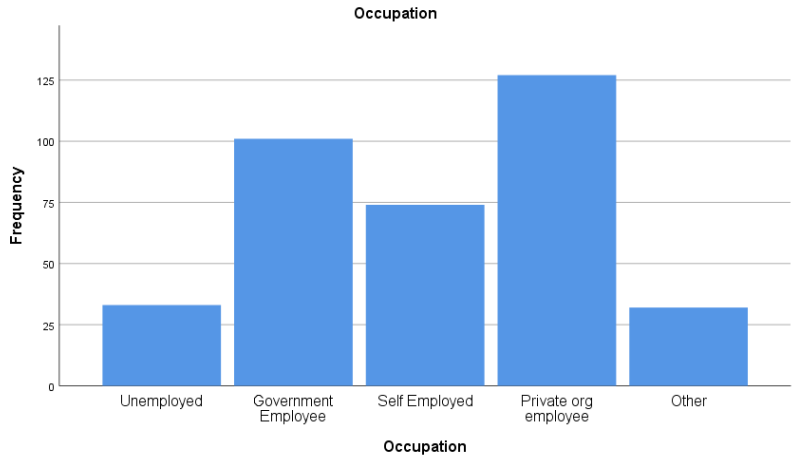

Figure 5 Occupation of participants

Source: Author's computation using SPSS v26(2024)

Among the respondents, 33 individuals were unemployed, representing 9% of the total sample. Government employees comprised 27.5%, with 101 respondents. Additionally, 74 participants, or 20.2%, identified as self-employed. The largest segment of the respondents, 127 individuals, were employed in private organizations, accounting for 34.6% of the total. Lastly, 32 respondents, or 8.7%, fell into the "other" category.

Address of Participants

The study included participants from various sub-cities within Addis Ababa, with diverse representation from different areas. 39 participants were from Arada, constituting 10.6% of the total sample. 55 participants from Yeka, making up 15.0% of the respondents. 46 participants from Bole, comprising 12.5% of the sample. Additionally, 32 participants were from Gulele, 8.7% of the total. 20 participants from Addis Ketema, accounting for 5.4% of the respondents. 40 participants Nifassilk Lafto, made up 10.9% of the sample. 28 from Lemi Kura and 26 participants from Akaki Kality, respectively, contributing 7.6% and 7.1% to the total. 43 participants from Kirkos, accounting for 11.7% of the sample. 14 participants from Lideta, making up 3.8% of the total, while 24 participants from Kolfe Keranyo, representing 6.5% of the sample.

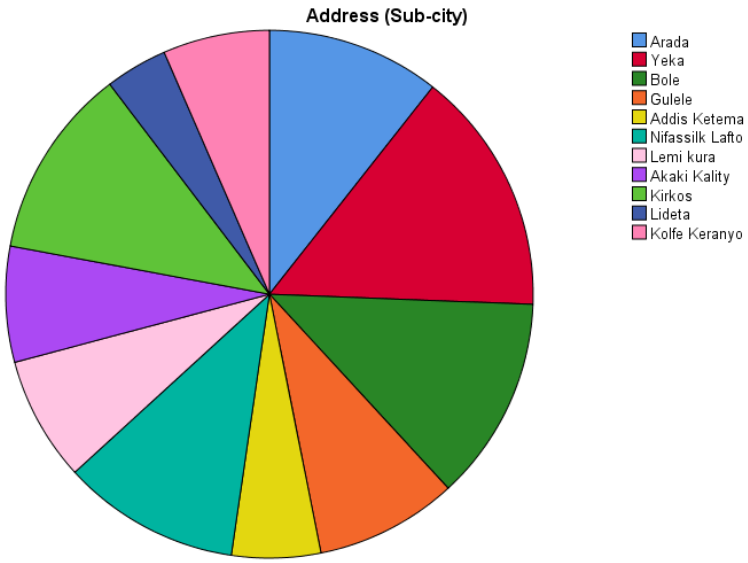

Figure 6 Address (Sub city) of participants

Source: Author's computation using SPSS v26(2024)

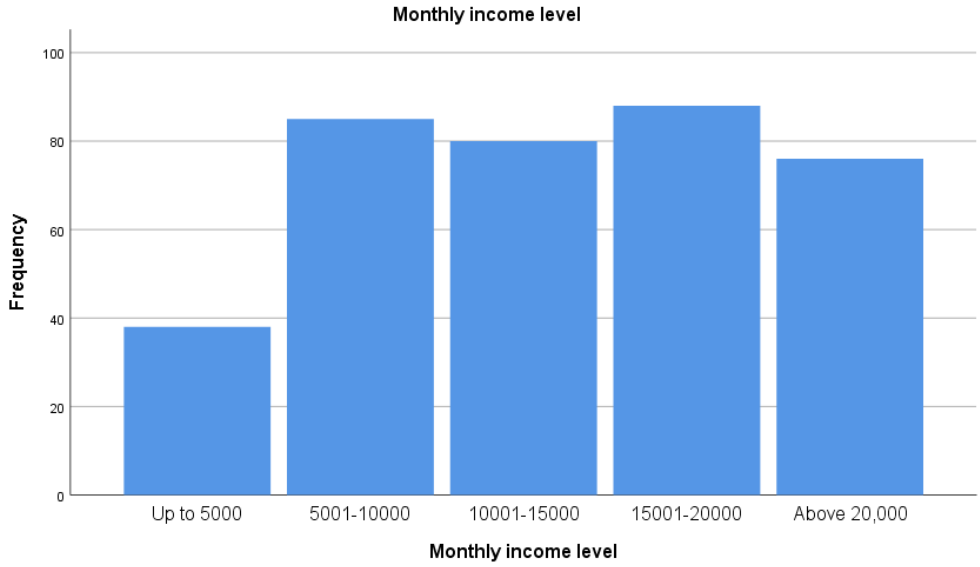

Figure 7 Monthly income level of participants

Source: Author's computation using SPSS v26(2024)

Among the participants, 38 participants with an income of up to 5000, representing 10.4% of the total. A significant portion, 85 participants, fell within the income range of 5001 to 10000, constituting 23.2% of the respondents. Additionally, 80 participants with incomes between 10001 and 15000, make up 21.8% of the sample. Furthermore, 88 participants with incomes

ranging from 15001 to 20000, representing 24% of the total. Lastly, 76 participants with incomes above 20000, accounting for 20.7% of the respondents.

4.4 Descriptive Statistics

4.4.1 Descriptive Statistics of Environmental Awareness

Table 2 Descriptive Statistics of Environmental Awareness

	N	Minimum	Maximum	Mean	Std. Deviation
I am aware of the environmental changes the world is going through	367	1	5	3.81	1.294
I am aware of environmentally ethical products	367	1	5	3.71	1.259
I am aware of the growing pressure to change the way of living to combat the deterioration of the environment	367	1	5	3.60	1.252
I am aware of the personal responsibility towards environmental changes	367	1	5	3.72	1.297
I am aware that individuals can influence environmental awareness levels	367	1	5	3.62	1.200
I am aware of the efforts individuals are making to deal with environmental changes	367	1	5	3.84	1.283
I am aware that societal influence can increase individuals' environmental awareness	367	1	5	3.72	1.265
Valid N (listwise)	367				

Source: Author's computation using SPSS v26(2024)

As we can see from the above table, 'I am aware of the environmental changes the world is going through' scored a mean of 3.81 and a standard deviation of 1.294 this suggests that most respondents were generally familiar with the environmental changes the world is going through, 'I am aware of environmentally ethical products' scored mean of 3.71 and standard deviation of 1.259 suggesting that. The provided data reveals awareness into respondents' awareness of various environmental aspects. The statement 'I am aware of the environmental changes the world is going through' received an average score of 3.81, indicating a general familiarity among

respondents with global environmental shifts. Similarly, 'I am aware of environmentally ethical products' garnered a mean score of 3.71, suggesting awareness of environmentally conscious consumer choices. Moreover, with a mean score of 3.60, 'I am aware of the growing pressure to change the way of living to combat the deterioration of the environment' underscores the recognition of societal pressure to adopt sustainable lifestyles. Additionally, 'I am aware of the personal responsibility towards environmental changes' scored a mean of 3.72, highlighting acknowledgment of individual accountability in addressing environmental challenges. 'I am aware that individuals can influence environmental awareness levels' attained a mean score of 3.62, indicating an understanding of individual impact on promoting environmental consciousness. Furthermore, 'I am aware of the efforts individuals are making to deal with environmental changes' scored a mean of 3.84, reflecting awareness of measures taken by individuals. 'I am aware that societal influence can increase individuals' environmental awareness' received a mean score of 3.72, suggesting awareness of the role of societal factors in shaping environmental awareness levels.

4.4.2 Descriptive Statistics Willingness to pay

Table 3 Descriptive Statistics of Willingness to Pay

	N	Minimum	Maximum	Mean	Std. Deviation
I perceive green-packaged products to be more expensive than conventional alternatives	367	1	5	3.80	1.226
It is acceptable for me to pay more money for green-packaged products	367	1	5	3.73	1.283
I am willing to support local initiatives to support green packaging	367	1	5	3.74	1.290
Valid N (listwise)	367				

Source: Author's computation using SPSS v26(2024)

The above table shows that 'I perceive green-packaged products to be more expensive than conventional alternatives' received an average score of 3.80 and a standard deviation of 1.226, suggesting a general awareness of the potential cost implications associated with green packaging. Similarly, 'It is acceptable for me to pay more money for green packaged products'

has a mean score of 3.73 and a standard deviation of 1.283, indicating a willingness among respondents to invest financially in environmentally friendly products. Additionally, 'I am willing to support local initiatives green packaging' scored a mean of 3.74 and a standard deviation of 1.290, reflecting a positive inclination towards endorsing local sustainability efforts through the purchase of green products. These scores collectively demonstrate a favorable disposition towards environmentally conscious consumption practices among the respondents.

4.4.3 Descriptive Statistics of Altruism

Table 4 Descriptive Statistics Altruism

	N	Minimum	Maximum	Mean	Std. Deviation
By buying green products I'd be fulfilling my duty to the society	367	1	5	3.66	1.124
By buying green products I'd be doing something to help others	367	1	5	3.58	1.066
By buying green products I'd be saving someone's life	367	1	5	3.58	1.081
Green consumption will save future generations	367	1	5	3.62	1.122
Valid N (listwise)	367				

Source: Author's computation using SPSS v26(2024)

The above table measuring the respondent's level of Altruism shows that 'By buying green products I'd be fulfilling my duty to society' shows a mean score of 3.66, and a standard deviation of 1.124 indicating a moderate agreement among respondents that purchasing green products aligns with their sense of societal responsibility. 'By buying green products I'd be doing something to help others' and 'By buying green products I'd be saving someone's life' both have a mean of 3.58, and a standard deviation of 1.066 and 1.081 respectively suggesting a belief among respondents that green consumption contributes positively to the well-being of others, although the agreement is slightly lower compared to the previous statement. 'Green consumption will save future generations' attained an average score of 3.62, and a standard

deviation of 1.122 indicating a shared belief among respondents in the potential long-term benefits of green consumption for future generations. These scores collectively signify a recognition among respondents of the societal implications and potential benefits associated with purchasing green products.

Table 5 Descriptive Statistics Consumer Green Buying Behavior

4.4.4 Descriptive Statistics Consumer Green Buying Behaviour

	N	Minimum	Maximum	Mean	Std. Deviation
I do not use anything harmful to the environment	367	1	5	3.62	1.155
I usually prefer to purchase green products	367	1	5	3.61	1.214
I try to buy green packaged products even when they cost more	367	1	5	3.62	1.133
I purchase bio-degradable products when they are disposed	367	1	5	3.61	1.137
I often try to refrain from purchasing easily disposable packaging	367	1	5	3.63	1.219
Valid N (listwise)	367				

Source: Author's computation using SPSS v26(2024)

The above table reflects the participants' attitudes and behaviors towards environmentally friendly practices to the statement "I do not use anything harmful to the environment" received a mean score of 3.62 with a standard deviation of 1.155. This indicates that, on average, respondents moderately agree with this statement, with some variation in their responses. The statement "I usually prefer to purchase green products" had a mean score of 3.61 and a standard deviation of 1.214, suggesting a similar moderate agreement and a slightly wider range of opinions among respondents. The statement "I try to buy green packaged products even when they cost more" scored a mean of 3.62 with a standard deviation of 1.133, indicating a moderate level of agreement and relatively consistent responses. "I purchase biodegradable products when they are disposed" also had a mean score of 3.61 and a standard deviation of 1.137, reflecting moderate agreement and consistency in responses. "I often try to refrain from purchasing easily

disposable packaging" received the highest mean score of 3.63 with a standard deviation of 1.219, indicating a moderate to strong agreement and a slightly wider variation in responses.

These mean scores suggest a generally positive inclination toward environmentally conscious purchasing behaviors among the respondents with an indication of variability in the responses.

4.4.5 Summary of descriptive statistics of variables

Table 6 Summary of descriptive statistics of variables

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Environmental Awareness	367	1.00	5.00	3.72	1.200
Willingness to Pay	367	1.00	5.00	3.76	1.237
Altruism	367	1.00	5.00	3.61	1.022
Consumer Behavior	367	1.00	5.00	3.62	1.129
Valid N (listwise)	367				

Source: Author's computation using SPSS v26(2024)

The above table summarizes the consumers green buying behaviour. It shows the respondents' green buying behavior with respect to the three independent variables and the dependent variable. For Environmental Awareness, the data ranges from a minimum of 1.00 to a maximum of 5.00, with a mean of 3.72 and a standard deviation of 1.200, indicating a moderate level of awareness among respondents with some variability in responses.

Similarly, Willingness to Pay with a mean of 3.7557 and a standard deviation of 1.23669, suggests a moderate level of willingness to invest financially in green products or initiatives, with some variability in responses. Altruism has a mean value of 3.61 and a standard deviation of 1.022, indicating a moderate level of selflessness or concern for the well-being of others among respondents, with relatively consistent responses. Lastly, Consumer Behavior ranges from 1.00 to 5.00, with a mean of 3.62 and a standard deviation of 1.129, suggesting a moderate level of environmentally conscious consumer behavior, with some variability in responses.

Overall, the descriptive statistics provide insights into the central tendency and variability of responses across these variables, aiding in the understanding of respondents' attitudes and behaviors toward green packaged products.

4.5 Correlation Analysis

In this section, the Pearson correlation test was employed to explore the relationships between environmental awareness, willingness to pay for green packaged products, altruism, and consumer behavior. As environmental concerns continue to grow, understanding the correlations between these factors can provide valuable insights into promoting sustainable practices. Utilizing the Pearson correlation test unveils the connections between these variables, offering a quantitative understanding of the relationships driving environmentally conscious decision-making among consumers.

According to (Schober, et al., 2018) the Pearson correlation coefficient (r), ranging from -1.0 to +1.0, indicates the strength of the linear relationship between two variables. A coefficient close to +1.0 or -1.0 suggests a strong relationship, while a result near 0 indicates a weak relationship. (Schober, et al., 2018) further categorizes correlation coefficients beyond 0.7 as strong, 0.3-0.7 as moderate, and below 0.3 as weak.

Table 7 Correlation Analysis

Correlations

		Consumer Behavior	Environmental Awareness	Willingness to Pay	Altruism
Consumer Behavior	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	367			
Environmental Awareness	Pearson Correlation	.884**	1		
	Sig. (2-tailed)	.000			
	N	367	367		
Willingness to Pay	Pearson Correlation	.899**	.923**	1	
	Sig. (2-tailed)	.000	.000		
	N	367	367	367	

Altruism	Pearson Correlation	.916**	.890**	.913**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	367	367	367	367

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Author's computation using SPSS v26(2024)

The above table shows that all the independent variables have a significant relationship with consumer green buying behavior. The most correlated dimension with consumer green buying behavior. The highest correlation can be observed between Altruism and Consumer Behavior, with a Pearson correlation coefficient of 0.916. This correlation is highly significant (p-value < 0.01). The strong positive relationship indicates that altruistic behavior positively influences consumer choices, with individuals demonstrating altruism more likely to make ethical and socially responsible consumption decisions.

Following closely, the correlation between Willingness to Pay and Consumer Behavior is notable, with a coefficient of 0.899, also highly significant (p-value < 0.01). This relationship shows the strong association between consumer behavior and a willingness to pay, indicating that individuals who are more inclined to pay for specific goods or services exhibit distinct consumption patterns.

Similarly, the correlation between Environmental Awareness and Consumer Behavior is substantial, with a coefficient of 0.884, and highly significant (p-value < 0.01). This finding suggests a strong positive relationship, indicating that as individuals become more environmentally aware, their consumer choices tend to align with sustainable and eco-friendly options. These correlations emphasize the significant roles of environmental awareness, willingness to pay, and altruism in shaping consumer behavior.

4.6 Multiple Linear Regression Analysis

4.6.1 Major tests for Multiple Regression

Before performing a multiple linear regression analysis, it is crucial to verify that key assumptions are met. These include assessing the presence of multi-collinearity, linearity,

normality, and homoscedasticity. Ensuring these assumptions are satisfied is essential for obtaining valid and reliable regression results. (Keppel & Wickens, 2004)

4.6.1.1 Multi Collinearity

Multi-collinearity exists when there is high correlation among the independent variables. In this study Variance Inflation Factor (VIF) was used to test Multi-collinearity between predictor variables. VIF analyses the outcome of correlations between independent variables. The VIF have to be less than 10, and should be close to 1. (Shrestha, 2020)

VIF Test for predictor variables

Table 8 VIF Test for predictor variables

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Environmental Awareness	.135	7.421
	Willingness to Pay	.108	9.249
	Altruism	.152	6.599

Source: Authors Computation using SPSS v.26 (2024)

As shown in the table above, the outcome of multi-collinearity statistical analysis suggests that the VIF value is less than 10, and the variance individual tolerance for each value is larger than 0.1. As a result, the findings indicate that there is no multi-collinearity problem in this model.

4.6.1.2 Linearity

Linear regression is a simple and versatile analysis. Simple linear regression shows the relationship between a dependent variable and an independent variable. Multiple regression controls for and models the effects of additional independent variables, and can include interaction effects. (Rosenthal, 2017)

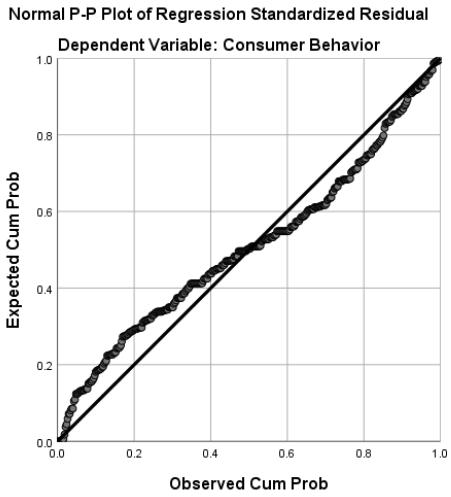

Figure 8 Linearity test

Source: Author's computation using SPSS v26(2024)

The plot assesses the normality of the residuals from a regression analysis. Residuals are the differences between the observed values and the predicted values. In an ideal scenario, the points should closely follow the diagonal line that represents perfect normality. When observing the above diagram, most points in this plot closely align with the diagonal line. This indicates that the association between the independent variables and the dependent variable is linear.

4.6.1.3 Normality

Normality necessitates the predictor variables in the model to be normally distributed and the error term to be normally distributed or expected value of error terms to be zero. If the residuals are distributed normally, the histogram will have a bell-shape. Hence, this study applied graphical methods to check normalityand that the data conforms to the assumption of normality.

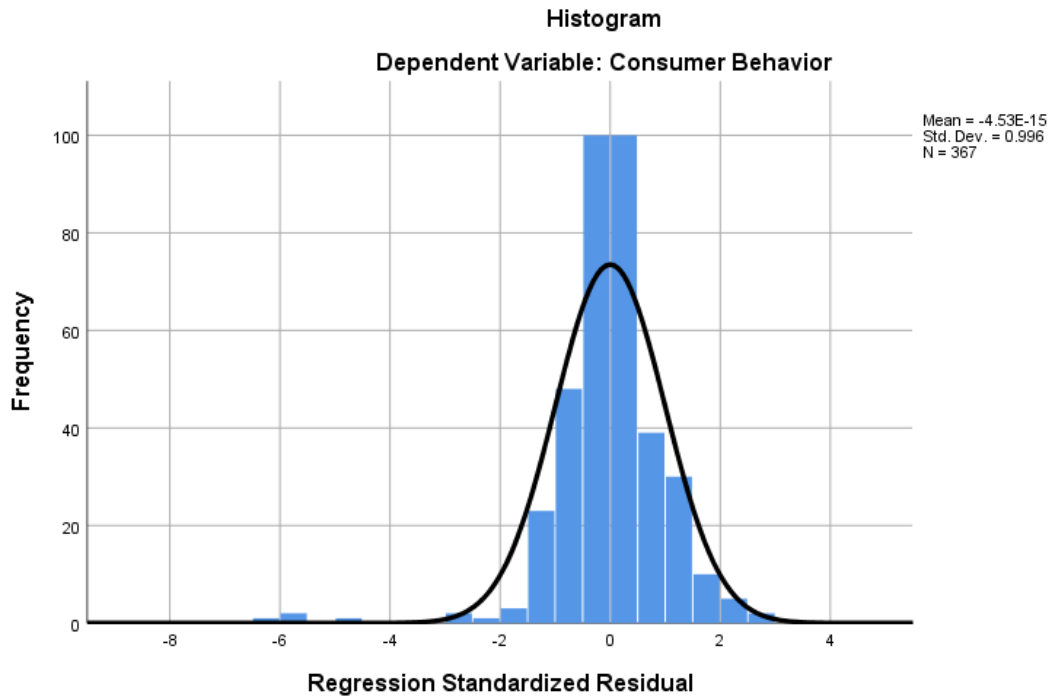

Figure 9 Normality Test

Source: Author's computation using SPSS v26(2024)

4.6.1.4 Homoscedasticity

Homoscedasticity is an assumption in regression analysis that the residuals at each phase of the independent variables have the same variations. This means that at each point besides any predictor variable, the spread of residuals should be fairly constant.

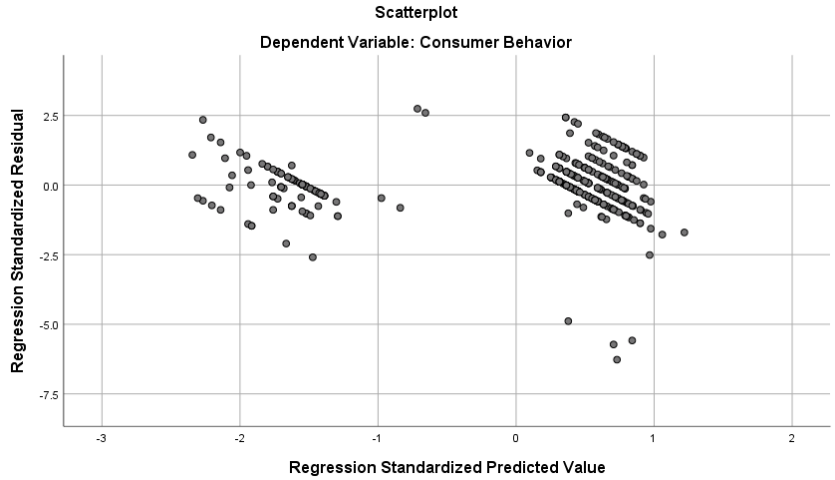

Figure 10 Homoscedasticity test

Source: Author's computation using SPSS v26(2024)

4.6.2 Result of the multiple regression analysis

The effect of three independent variables, Environmental Awareness, Willingness to Pay, and Altruism on the dependent variable which is consumer green buying behavior was examined by using multiple linear regression analysis.

4.6.2.1 Model summary

Table 9 Model Summary

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.931[a]	.868	.866	.41276	1.934
a. Predictors: (Constant), Altruism, Environmental Awareness, Willingness to Pay					
b. Dependent Variable: Consumer Buying Behavior					

Source: Author's computation using SPSS v26(2024)

The model summary offers the summary of the best-fit regression model. For this analysis the R (multiple R), which is the overall correlation between the predictor variables shows 0.931. The model explains about 86.6% of variation on consumer buying behavior. The adjusted R^2 indicates the percentage of variance in the dependent variable that is accounted by the independent variables. In this case the coefficient of determination adjusted R Square was 0.866. This implies that about 86.6% of the dependent variable that is consumer green buying behaviour can be explained by the independent variables which are environmental awareness, willingness to pay and atruism leaving about 13.4% to be explained by other exogenous factors.

$$\mathbf{Y= Xb + e}$$

$$\mathbf{100\% = 86.6\% + 13.4\%}$$

Table 10 ANOVA

4.6.2.2 ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	405.085	3	135.028	792.545	.000[b]
	Residual	61.845	363	.170		
	Total	466.931	366			

a. Dependent Variable: Consumer Behavior

b. Predictors: (Constant), Altruism, Environmental Awareness, Willingness to Pay

Source: Author's computation using SPSS v26(2024)

The ANOVA table presented above encapsulates crucial statistical measures, such as sums of squares and degrees of freedom, which are fundamental in assessing the effectiveness of a regression model. By computing mean squares from these values, we gain insights into the variability attributed to the model's predictors. However, the cornerstone of this analysis lies in the F-ratio, serving as a litmus test for the null hypothesis that all regression coefficients are insignificantly different from zero. In this specific scenario, the calculated F statistic stands at 792.545, with a significance level below 0.05, indicating a minuscule probability of observing such a substantial F-ratio under the assumption of no relationship between predictors and the dependent variable. Hence, with high confidence, we can deduce that the regression model significantly enhances the predictive capacity concerning consumer green buying behavior.

4.6.2.3 Coefficients of predictor variables

Table 11 Coefficients of predictor variables

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		.398
1	(Constant)	.032	.080		3.846	.691
	Environmental Awareness	.188	.049	.200	4.237	.000
	Willingness to Pay	.225	.053	.246	10.450	.000
	Altruism	.566	.054	.513	10.450	.000

Source: Author's computation using SPSS v26(2024)

The equation for a multiple regression model looks like

Y= 0.032 + 0.188 (Environmental Awareness) + 0.225 (Willingness to Pay) + 0.566 (Altruism)

The above table summarizes the outputs of the model predicting consumer green buying behavior with the dimensions of Environmental Awareness, Willingness to Pay, and Altruism. The p-values of these variables is less than 0.05 indicating that they are statistically significant. Additionally, their coefficients are positive, suggesting that a higher value of these variables is associated with a higher consumer green buying behavior.

Standardized coefficient (βeta value) shows the extent of significance of each predictor variables on consumer green buying behavior that means higher beta value refers to high effect of the independent variable on the dependent variable. Hence, based on their importance the dimensions can be presented ordered in the following way:

1. Altruism **0.566**
2. Willingness to Pay **0.225**
3. Environmental Awareness **0.188**

Since all three predictor variables have significant effect on consumer green buying behavior the interpretations are:

1. For every unit increase in the value of Altruism of an individual, the value of consumer green buying behavior will increase by 56.6%
2. For every increase in the value of willingness to pay for green packaged products, the value of consumer green buying behavior will increase by 22.5%.
3. For every unit increase in the value of environmental awareness, the value of consumer green buying behavior will increase by 18.8%.

Among the three predictor variables, Altruism shows the highest important effect on consumer green buying behavior followed by willingness to pay for green products and environmental awareness.

4.7 Hypothesis testing and discussion

Depending on the multiple linear regression results, the proposed hypothesis of the study is tested below:

H1: Environmental Awareness has a significant positive impact on consumers buying behavior toward green packaged products.

The multiple linear regression result in Table 11 clearly shows that environmental awareness significantly affects consumer behavior toward green packaged products ($p<0.01$). Additionally, the value of beta ($\beta=0.188$) indicates a positive effect of environmental awareness on consumer green buying behavior. This result is supported by (Kaufmann, et al., 2012) in which Environmental awareness is positively associated with consumers' green purchasing behavior. D'Souza (2007) discovered a substantial link between environmental knowledge and increased green purchasing behavior among 200 consumers. Barber (2012) found that 320 wine customers with higher environmental awareness were more likely to buy green products. Gleim (2013) found that environmental knowledge was a strong predictor of green purchase behavior among 400 consumers. Paul (2016) discovered that environmental awareness had a substantial impact on green shopping behavior among 450 Indian customers. Nguyen et al. (2020) found that among 500 urban millennials, higher levels of environmental awareness significantly boosted their chance of purchasing green products. The findings are consistent with prior research, which shows a positive relation between environmental knowledge and green purchasing behavior consistently demonstrating the strength of environmental awareness as a predictor of green purchasing behavior across various groups and circumstances. These findings support the hypothesis that increased awareness of environmental issues leads consumers to make more sustainable buying decisions.

H2: Willingness to pay has a significant positive impact on consumers' buying behavior toward green packaged products.

The multiple linear regression result in Table 11 clearly shows that willingness to pay significantly affects consumer buying behavior toward green packaged products ($p<0.01$). Additionally, the value of beta ($\beta=0.225$) indicates a positive effect of willingness to pay on consumer green buying behavior. This result is supported by in which Willingness to pay is positively associated with consumers' green purchasing behavior. Laroche et al. (2001) have shown that consumers with a higher willingness to pay are more likely to engage in green purchasing behavior. Wang (2019) demonstrated that while higher-income groups are more willing to pay for green items, lower-income groups are as prepared to pay when they are aware

of environmental benefits. Testa et al. (2015) discovered a strong willingness to pay for environmentally friendly packaging, with variations across nations and demographic categories. Gleim (2013) found that willingness to pay was a strong predictor of green shopping behavior. The findings are in line with the existing literature, which consistently shows that willingness to pay positively influences green buying behavior.

H3: Altruism has a significant positive impact on consumers' buying behavior toward green packaged products.

The multiple linear regression result in Table 11 clearly shows that altruism significantly affects consumer buying behavior toward green packaged products ($p<0.01$). Additionally, the value of beta ($\beta=0.566$) indicates a positive effect of altruism on consumer green buying behavior. This result is supported by in which altruism is positively associated with consumers' green purchasing behavior. Minton and Rose (1997) discovered that altruistic ideals are positively connected with green purchasing behavior. Roberts (1996) found that altruistic behavior strongly predicts green purchasing behavior. Hassan (2018) discovered that altruism had a beneficial effect on the propensity to purchase green products, with a stronger effect reported in female customers. The findings align with previous research, which suggests a link between benevolence and green purchasing habits. Minton & Rose, Roberts, and Hassan's studies all support the idea that altruistic instincts motivate consumers to make ecologically beneficial purchases. This consistency emphasizes the importance of ethical and moral issues in influencing consumer behavior toward sustainability.

Summary of hypothesis testing

Table 12 Summary of hypothesis testing

S.N	Hypothesis	Result	Result
1	*$H1_a$: Environmental Awareness has a significant positive impact on consumers buying behavior toward green packaged products.*	β = 0.188 t= 4.237 P=0.000<0.005	Accepted
2	*$H2_a$: Willingness to pay has a significant positive impact on consumers' buying behavior toward green packaged products.*	β = 0.225 t= 10.450 P=0.000<0.005	Accepted
3	*$H3_a$: Altruism has a significant positive impact on consumers' buying behavior toward green packaged products.*	β = 0.566 t=10.450 P=0.000<0.005	Accepted

Source: Author's computation using SPSS v26(2024)

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents a comprehensive summary of the findings from the study, deriving conclusions based on the analyzed data, and discusses the limitations encountered during the research. Additionally, it provides insightful recommendations aimed at promoting mindful consumption, production, and environmental sustainability. The chapter also suggests avenues for future research to further explore and address the factors influencing consumer behavior towards green packaged products. The findings and recommendations in this chapter are intended to inform stakeholders, policymakers, and researchers about the critical aspects of green consumer behavior and to encourage sustainable practices within the industry.

5.2 Summary of the Study

The primary objective of this study was to examine the factors influencing consumer buying behavior toward green packaged products in Addis Ababa, Ethiopia. The research specifically focused on three independent variables: environmental awareness, willingness to pay, and altruism, and their impact on the dependent variable: consumer buying behavior. A structured questionnaire was distributed among 384 participants, out of which 367 responses were correctly filled and used for the analysis, resulting in a response rate of approximately 95.6%.

The demographic profile of the respondents indicated a diverse representation with 47.7% female and 52.3% male participants. Age-wise, the majority of the respondents were between 26-35 years old, accounting for 44.1% of the sample. In terms of education level, a significant portion of the respondents held a BA/BSc degree, representing 64.6% of the sample.

The reliability of the questionnaire was assessed using Cronbach's Alpha, with values ranging from 0.815 to 0.913 for individual fields and 0.913 for the entire instrument, indicating high reliability. The validity of the data was ensured through established measures and a pilot test conducted prior to the main data collection.

The findings revealed that environmental awareness significantly and positively impacts consumer behavior towards green packaged products. Consumers with higher awareness levels

showed a stronger preference for environmentally friendly products. Willingness to pay also emerged as a crucial factor, with many consumers indicating a readiness to pay a premium for green products. Altruism was found to positively influence green buying behavior, with altruistic individuals more likely to purchase green packaged products.

Despite the high reliability and validity of the data, the study faced certain limitations, including the scope confined to Addis Ababa. The study concludes with recommendations for stakeholders to enhance consumer awareness, provide clearer information on the benefits of green packaging, and consider economic incentives to encourage sustainable consumer behavior.

5.3 Conclusion of the study

By focusing on three key independent variables—environmental awareness, willingness to pay, and altruism—the research aimed to understand how these factors drive consumer decisions in favor of environmentally friendly products.

The analysis revealed several important insights. The first specific objective of the research was to examine to what extent consumers are aware of the environmental impact of packaging materials, and how their awareness influences their green buying behavior and the findings concluded that environmental awareness has a significant positive impact on consumer behavior.

The second specific objective was to examine how environmental awareness influences consumer green buying behavior. The study findings concluded that consumers who are more aware of the environmental implications of packaging materials are more likely to choose green packaged products. Underscoring the importance of enhancing environmental education and awareness campaigns to foster sustainable consumer behavior.

The third specific objective was to look into how willing consumers are to pay more for green-packaged products and the study findings concluded that despite the generally higher cost associated with green products, many consumers indicated a readiness to pay more, driven by their perceived environmental benefits.

The fourth specific objective of the study was to identify how willingness to pay more for green packaged products influences consumer green buying behavior and the study findings concluded that Willingness to Pay has significant and positive impact on consumer green buying behavior.

The fifth specific objective was to examine how altruism influences consumer green buying behavior and the study finding concluded that altruism has a significant and positive impact on consumer green buying behavior. Altruistic individuals, who prioritize the welfare of others and the environment, are more inclined to purchase green packaged products.

In conclusion, the study highlights the multi dimensional nature of consumer behavior towards green packaging. Environmental awareness, Willingness to Pay, and Altruism all contribute to consumer green buying behavior. For policymakers, businesses, and environmental advocates, these findings offer valuable insights into how to promote sustainable consumption practices. By addressing these factors, stakeholders can work towards fostering a more environmentally conscious and proactive consumer base in Addis Ababa and beyond.

5.4 Recommendation

Based on the findings of this study, several recommendations can be made to enhance consumer buying behavior towards green packaged products in Addis Ababa, Ethiopia:

To increase Environmental Awareness

Civil Society Organizations can do a lot of actions through: Educational Campaigns Implementing comprehensive educational campaigns to raise awareness about the environmental impact of packaging materials, including school programs, community workshops, and media campaigns.

Creating Public Awareness Programs by Collaborating with environmental organizations and influencers to disseminate information about the benefits of green packaging. Highlighting the long-term environmental benefits to motivate consumers to make more sustainable choices.

To enhance Willingness to pay actions should be done through the respective industry organization create the ground for businesses to effectively communicate the value and benefits of green-packaged products. This can be achieved through informative marketing materials, and demonstrating the positive environmental impact of choosing green products.

Marketing companies should offer incentives, such as discounts or loyalty points, for purchasing green products. This can help mitigate the higher cost barrier and encourage more consumers to opt for environmentally friendly options.

The government should consider subsidies or tax incentives for green products to make them more affordable and competitive with conventional alternatives and establish standards and certifications for green packaging. This can help create a consistent and recognizable benchmark for consumers.

Altruistic values should be promoted by engaging communities in environmental initiatives and projects. By fostering a sense of collective responsibility and community involvement, individuals may be more inclined to support green products.

Regarding Policy and Regulation, advocacy for policies that support sustainable packaging practices. This can include regulations that encourage the use of biodegradable materials and discourage excessive packaging.

5.5 Limitations and Future Research

5.5.1 Limitation of the Study

Despite the remarkable findings, this study has numerous limitations that should be recognized: The study focuses on Addis Ababa, Ethiopia. This geographic constraint may limit the findings' generalizability to other regions with differing socioeconomic and cultural circumstances. Other potentially relevant variables, such as societal conventions, cultural attitudes, technological developments in packaging, green marketing techniques, and government legislation, were left out, which could provide a more complete picture of consumer behavior. The study's cross-sectional design limits its ability to capture consumer behavior over time. This technique does not account for changes in behavior over time, which hinders understanding of patterns and their long-term impact.

5.5.2 Direction for Future Research

To build on the findings of this study, future research should consider the following expanding the Geographic Scope, to compare consumer behaviors across diverse socio-economic and cultural backgrounds. This would help in understanding regional differences and developing more targeted strategies. Incorporate additional variables such as social norms, cultural attitudes,

technological advancements in packaging, green marketing, and government policies. Including these variables can provide a more holistic view of consumer behavior. Utilize a mixed-methods approach combining quantitative surveys with qualitative interviews or focus groups. This can provide deeper insights into the motivations behind consumer behaviors and preferences. Conduct experimental studies to evaluate the effectiveness of different interventions (e.g., awareness campaigns, price incentives) in promoting green buying behavior. Assessing the impact of these interventions can inform better policy and marketing strategies. Future research could also focus on measuring the actual environmental impact of increased green buying behavior. This would provide concrete evidence of the benefits of promoting green packaging and help in further justifying such initiatives. By addressing these limitations and exploring these areas, future research can contribute to a more comprehensive understanding of consumer behavior towards green packaging and support the development of effective strategies for promoting sustainable consumption to protect the environment and reduce our ecological footprint.

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APPENDIX

SURVEY QUESTIONNAIRE

Addis Ababa University

School of Commerce

Department of Marketing Management

ውድ ምላሽ ሰጪ ይህ መጠይቅ የተዘጋጀው በአዲስ አበባ ዩኒቨርሲቲ ንግድ ትምህርት ቤት የማርኬቲንግ ማኔጅመንት ኤም.ኤ ዲግሪ ለማጠናቀቅ ለሚሰራ ጥናት ነው።

ጥናቱ **የሸማቾች የመግዛት ባህሪ በአረንጓዴ (አካባቢን በማይበክሉ) የማሸጊያዎች የታሸጉ ምርቶች ላይ ያተኮረ ነው።**

አረንጓዴ ማሸጊያ የምንለው በሂወታቸው ኡደት ላይ የአካባቢ ተፅዕኖን ለመቀነስ የተነደፉ የማሸጊያ ቁሳቁሶችን እና ልምዶችን መጠቀም ነው። ለግንዛቤ ይረዳ ዘንድ በአሁኑ ሰዐት በብዛት ጥቅም ላይ የሚውሉ ማሸዚያዎችን ከ"አረንጓዴ ማሸጊያ" አማራጮች ጋር በማነፃፀር ከዚህ ማብራሪያ በላይ በሚታየው ምስል ተቀምጠዋል። በምስሉ ላይ እንደሚታየው ከላይ የተሰደሩት በአሁኑ ወቅት በብዛት የምናውቃቸው ማሸጊያዎችና ምርቶች ሲሆኑ በታችኛው ረድፍ የተሰደሩት አረንጓዴ (አካባቢን የማይበክሉ) ምርቶች ናቸው።

ለዚህ ዳሰሳ የሚሰጡት ምላሾች ሚስጥራዊ ይሆናሉ እንዲሁም ሁሉም መረጃዎች ለዚህ አካዳሚክ ዓላማ ብቻ ጥቅም ላይ ይውላሉ። ለምታደርጉት መልካም ትብብር አስቀድሜ ላመሰግናችሁ እወዳለሁ።

መጠየቅያውን ሲሞሉ ስምዎን መፃፍ አያስፈልግዎትም። የሚፈልጉት ምርጫ ሳጥን ውስጥ ምልክት ያድርጉ።

Dear respondent, this study is intended for partial fulfillment of an MA degree in Marketing Management at Addis Ababa University School of Commerce. The research is focused on factors affecting consumer buying behavior towards green packaged products**.** Green Packaging is the use of packaging materials and practices designed to minimize environmental impact across their lifecycle. To help with understanding, a comparison of the packaging that are mostly used with "green packaging" alternatives is pictured above this explanation. Your responses to this survey will be held confidential and all information will be used for this academic purpose only. I would like to thank you in advance for your kind cooperation. Please note that **you don't need to write your name.** Ahlam Bogale 0920159619

Part I: Demographic Factors:

Please put a tick (✓) mark for your choice.

1. Your age category (in years): እድሜ

☐8-25 ☐26 – 35 ☐ 36 – 45 ☐ 46 - 55 ☐ Above 55

2. Gender ፆታ: ☐ Female ☐ Male

3. Occupation/work የስራ ሁኔታ:

☐ Unemployed ☐Government employee ☐Self Employed ☐ Private org. employee ☐Other

4. Education level የትምህርት ደረጃ

☐ Primary/elementary ☐ Secondary/TVET ☐ BA/BSc degree ☐MA/MSc degree ☐Doctoral degree

5. Monthly income (in Birr) ወርሀዊ ገቢ (በብር):

☐ Up to 5,000 ☐5001 – 10,000 ☐10,001 – 15,000 ☐15,001 - 20,000 ☐Above 20,000

Part II:

በአረንጓዴ የታሸጉ ምርቶች ላይ የአካባቢ ግንዛቤ፣ ኢኮኖሚያዊ ምክንያቶች፣ አልትሩዝም፣ ግልጽነት እና የምርት መረጃ የሸማቾች ግዢ ባህሪ ላይ ያለው ተጽእኖ። እባክዎ በመለያዎቹ ላይ በተመሠረቱ መግለጫዎች ላይ የስምምነትዎን ደረጃ ያመልክቱ (1. በጭራሽ አልስማማም፣ 2. አልስማማም፣ 3. ገለልተኛ ነኝ፣ 4. እስማማለሁ፣ 5. በሚገባ እስማማለሁ)

The effects of Environmental Awareness, Willingness to Pay, and Altruism on consumer buying behavior towards green packaged products. Please indicate the level of your agreement to the statements below based on the labels (1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree and 5. Strongly Agree) Indicate your level of agreement with a tick (✓) mark under the dedicated answer.

S/N	Variables	1. Strongly Disagree (በጭራሽ አልስማማም)	2.Disagree (አልስማማም)	(3) Neutral (ገለልተኛ ነኝ)	(4) Agree (እስማማለሁ)	(5) Strongly Agree (በሚገባ እስማማለሁ)
1	**Environmental Awareness**					
EA1	I am aware of the environmental changes the world is going through ዓለም እየሄደችበት ያለውን የአካባቢ ለውጥ አውቃለሁ					
EA2	I am familiar with environmentally ethical products ከአየር ንብረት ለዉጥ ጋር ተስማሚ ምርቶች በደንብ አውቃለሁ					
EA3	I am aware of the growing pressure to change the way of living to combat the deterioration of the environment የአየር ንብረት ለዉጥን ለመዋጋት የኑሮ ዘይቤን የመቀየር ግፊት እየጨመረ መሆኑን አውቃለሁ					
EA4	I am aware of the personal responsibility towards environmental changes በአየር ንብረት ለውጥ ላይ ያለውን የግል ሃላፊነት አውቃለሁ					
EA5	I am aware that individuals can influence the overall environmental awareness levels ግለሰቦች በአጠቃላይ የአየር ንብረት ለዉጥ ደረጃዎች ላይ ተጽዕኖ እንደሚያሳድሩ አውቃለሁ					
EA6	I am aware of the efforts individuals are making to deal with environmental changes የአየር ንብረት ለውጥ ለመቋቋም ግለሰቦች የሚያደርጉትን ጥረት አውቃለሁ					
EA7	I am aware that societal influence can increase environmental awareness የማህበረሰቡ ተጽእኖ የአየር ንብረት ለውጥ ግንዛቤን እንደሚያሳድግ አውቃለሁ					

2	**Willingness to pay**					
WT1	I perceive green packaged products to be more expensive than conventional alternatives. ለአካባቢ ጥበቃ ተስማሚ በሆነ መንገድ የታሸጉ ምርቶች ከተለመዱት አማራጮች የበለጠ ውድ እንደሆኑ አስባለሁ።					
WT2	It is acceptable for me to pay more money for products that are packaged in an environmentally friendly way. ለአካባቢ ጥበቃ ተስማሚ በሆነ መንገድ ለታሸጉ ምርቶች ተጨማሪ ገንዘብ መክፈል ለእኔ ተቀባይነት አለው.					
WT3	I am willing to support local initiatives to support green packaging ለአካባቢ ጥበቃ ተስማሚ የሆኑ ማሸጊያዎችን ለመደገፍ የአገር ውስጥ ተነሳሽነትን ለመደገፍ ፈቃደኛ ነኝ					
3	**Altruism**					
AT1	By buying green products I would be fulfilling my duty to the society. ለአካባቢ ጥበቃ ተስማሚ የሆኑ ምርቶችን በመግዛት ማህበረሰባዊ ግዴታዬን እወጣለሁ።					
AT2	By buying green products I would be doing something to help others. ለአካባቢ ጥበቃ ተስማሚ የሆኑ ምርቶችን በመግዛት ሌሎችን ለመርዳት አንድ ነገር አደርጋለሁ					
AT3	By buying green products I would be saving someone's life. ለአካባቢ ጥበቃ ተስማሚ የሆኑ ምርቶችን በመግዛት የአንድን ሰው ህይወት ማዳን እችላለሁ።					
AT4	Green consumption will save future generations ለአካባቢ ጥበቃ ተስማሚ የሆኑ ምርቶች መጠቀም የወደፊት ትውልዶችን ያድናል					

PART III **በዚህ ክፍል የተቀመጡት ጥያቄዎች የሸማቹን አረንጓዴ (አካባቢን የማይበክሉ ምርቶች) የመግዛት ባህሪ የሚመዝኑ ናቸው** **The questions set in this section are to measure the consumer green buying behavior**						
4	**Consumer Behaviour**					
CB1	I do not use anything harmful to the environment in all possible ways በቻልኩት መንገድ ለአካባቢ ጎጂ የሆነ ነገር አልጠቀምም።					
CB2	I usually prefer to purchase green products ብዙውን ጊዜ ለአካባቢ ጥበቃ ተስማሚ የሆኑ ምርቶችን መግዛት እመርጣለሁ					
CB3	I try to buy green-packaged products even though they cost more ብዙ ወጪ ቢጠይቁም ለአካባቢ ጥበቃ ተስማሚ የሆኑ ምርቶችን ለመግዛት እሞክራለሁ።					
CB4	I purchase bio-degradable products when they are disposed of ከተጠቀምን በኋላ ሲጣሉ ሊበሰብሱ የሚችሉ ምርቶችን እገዛለሁ።					
CB5	I often try to refrain from purchasing easily disposable packaging ብዙ ጊዜ በቀላሉ የሚጣሉ ማሸጊያዎችን ከመግዛት ለመቆጠብ እሞክራለሁ።					