The Eco - Conscious Consumer: Unveiling How Advertising, Price, and Quality Shape Eco - Label Decisions in Ernakulam

Dissertation submitted to the Mahatma Gandhi University, Kottayam

in partial fulfilment of the requirement for the award of

Bachelor 's degree of Arts (ECONOMICS)

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This is to certify that this dissertation entitled   — "**THE ECO-CONCIOUS CONSUMER -UNVEILING HOW ADVERTISING , PRICE , AND QUALITY SHAPE ECO-LABEL DECISIONS IN ERNAKULAM** " has been prepared by FATHIMA MUHSINA K K , NICOLE ELIZABETH SAJEEV under the supervision and guidance in partial fulfilment of the requirement for the award of the degree of Bachelor of Economics of the Mahatma Gandhi University.

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DECLARATION

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Economics, Bharata Mata College, Thrikkakara hereby declare that
the dissertation submitted for award of Bachelor Degree in
Economics is our work. We further declare that the said work has not
previously been submitted to any other University or Academic body

FATHIMA MUHSINA K K

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Date :

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At the outset, we bow before God, the Almighty for this bountiful blessing without which we would not have completed this endeavor successfully.

We gratefully acknowledge our indebtedness to our academic guide Dr. Vinitha Xavier K, for her meticulous guidance and constant encouragement throughout the project.
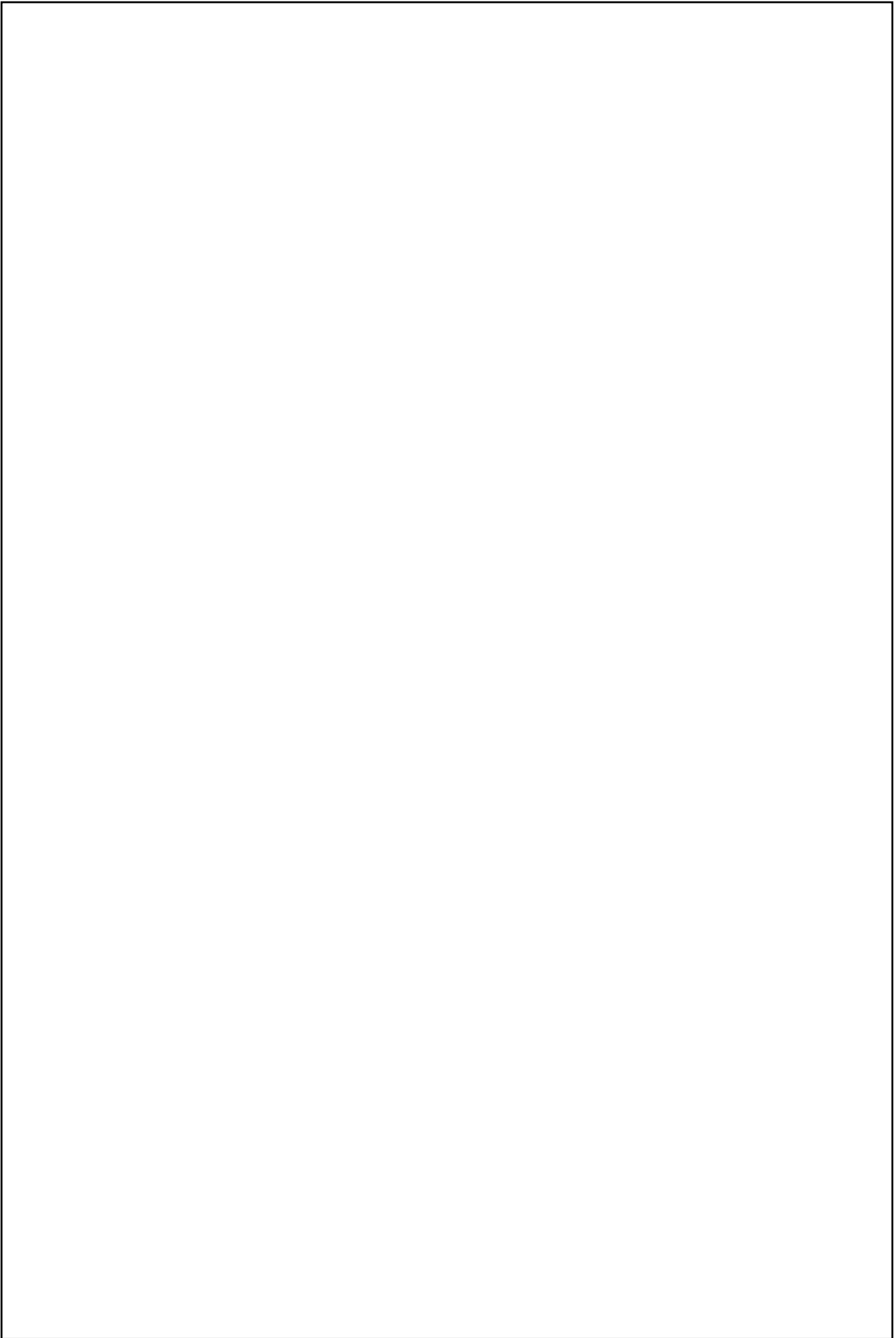
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1.INTRODUCTION

1.1 INTRODUCTION

In today's world, environmental consciousness is at an all-time high. Concerns about climate change, pollution, and resource depletion are driving individuals towards sustainable alternatives. This has led to a significant transformation in consumer behavior. People are increasingly seeking to align their purchasing decisions with their environmental values, prioritizing products that minimize their ecological footprint.

This shift in consumer behavior has had a profound impact on businesses. To remain competitive, companies are incorporating eco-labeling into their marketing strategies. Eco-labels serve as a badge of honour, signifying that products or services meet predetermined environmental standards set by independent third-party organizations.

Eco-labeling has become a powerful tool for promoting sustainability. It bridges the gap between a product's environmental impact and the information available to consumers. By highlighting a product's environmental credentials, eco-labels encourage responsible practices among businesses and empower consumers to make informed choices.

These labels act as a crucial countermeasure against environmentally damaging practices. Eco-labels provide readily understandable information about a product's environmental impact, including its manufacturing processes, resource consumption, and overall ecological footprint. This empowers consumers to understand the potential environmental consequences of their purchases and make informed decisions that align with their desire for a sustainable future.

Imagine you're standing in a supermarket aisle, overwhelmed by a sea of cleaning products. With eco-labels guiding your choices, you can easily identify products formulated with biodegradable ingredients, packaged in recycled materials, and produced with minimal energy consumption. These clear visual cues on product packaging act as informative beacons, empowering you to make a real difference through your purchasing decisions.

In conclusion, eco-labeling has emerged as a practical tool in response to the growing consumer demand for transparency and sustainability. It empowers consumers to navigate the complex world of products and make informed choices that promote a more sustainable future for our planet.

1.2 STATEMENT OF THE PROBLEM

The modern market landscape is experiencing a remarkable surge in consumer demand for eco-labeled products. This trend isn't a fad, but rather a reflection of a growing integration of environmental consciousness into purchasing decisions. Consumers are increasingly aligning their values with their wallets, prioritizing products that minimize their ecological footprint. This shift in consumer behavior has had a profound impact on businesses, with sustainability

becoming a key differentiator in a competitive market. Recognizing this new reality, our research study, titled "The Eco-Conscious Consumer: Unveiling How Advertising, Price, and Quality Shape Eco-Label Decisions in Ernakulam," delves deeper into the intricate web of factors influencing consumer choices for eco-friendly goods within the specific city of Ernakulam.

Ernakulam serves as a microcosm of this global trend, with a burgeoning population of environmentally conscious consumers. Our multifaceted investigation will analyse how exposure to eco-friendly advertising campaigns, which promote sustainable practices and the benefits of eco-labeled products, intertwines with consumer perceptions of price and quality. We'll explore how these perceptions influence purchasing decisions. Specifically, we'll examine how consumers view the price points of eco-labeled products compared to conventional alternatives. Do they perceive them as a worthwhile investment in the environment, or a barrier to affordability? Additionally, we'll investigate how consumers perceive the quality of eco-labeled products in terms of durability, functionality, and overall performance. Do they believe eco-friendly options can compete with or even surpass their conventional counterparts?

This research has the potential to illuminate valuable insights for a range of stakeholders. Policymakers can leverage our findings to inform decisions that promote and incentivize the production and consumption of eco-labeled products. Marketers can gain valuable insights into consumer behavior related to eco-labeled goods, enabling them to develop targeted and effective marketing strategies that resonate with this growing segment of the market. Ultimately, this research contributes to fostering environmentally conscious consumer behavior by providing a deeper understanding of the factors influencing choices related to eco-labeled products. By examining these key variables within the context of Ernakulam, our research has the potential to contribute valuable knowledge that can be applied to a wider market landscape, promoting a more sustainable future for our planet.

1.3   OBJECTIVES

- To find out how environmental advertising and social media influence consumers in the purchasing decision of Eco labelled products
- Exploring the price sensitivity of consumer segments in purchasing eco-labelled products.
- Understanding how perceived quality of eco-labelled products influences its purchase decisions

1.4. SIGNIFICANCE

As environmental awareness skyrockets, consumer demand for eco-labeled products - those badges of environmental responsibility - is experiencing a meteoric rise. Yet, a critical knowledge gap remains regarding the intricate factors influencing consumer behavior in this burgeoning market. To bridge this gap and illuminate the path towards a more sustainable future, our research study, titled "The Eco-Conscious Consumer: Unveiling How Advertising,

Price, and Quality Shape Eco-Label Decisions in Ernakulam," delves into the multifaceted influences shaping consumer decisions regarding eco-labeled products within the specific city of Ernakulam, a microcosm of this global trend. We will explore the complex interplay between advertising exposure, price perception, and quality perception. By investigating how exposure to eco-friendly advertising campaigns promoting sustainable practices and the benefits of eco-labeled products influences consumer choices, we can equip marketers with the knowledge to craft targeted campaigns that resonate with this growing segment. Additionally, by examining consumer perceptions of price points compared to conventional alternatives, we aim to understand if eco-friendly options are viewed as a premium worth paying or a barrier to affordability, informing businesses in developing pricing strategies and policymakers in crafting potential incentives. Furthermore, we will explore how consumers perceive the quality of eco-labeled products in terms of durability, functionality, and overall performance. A positive perception of quality is essential for long-term consumer adoption, and this research can illuminate this aspect for businesses to focus on. Ultimately, by illuminating these consumer preferences, this study will offer valuable insights not only for businesses and policymakers to shape eco-labeled product development and market strategies, but also empower consumers to make informed decisions that benefit the planet, fostering environmentally conscious behavior and contributing to a more sustainable future for all.

1.5. METHODOLOGY

SAMPLE : The sample unit of the study comprises of people residing in Ernakulam District

SAMPLE SIZE: The study is conducted based on the responses of 200 sample units who are residents to Ernakulam District

SOURCE OF DATA

PRIMARY DATA : The primary data was collected with the help of structured questionnaire developed through google form which were sent to the respondents

PERIOD OF STUDY - 2024

1.6. LIMITATIONS

1. Our model focused on key factors, but additional influences like product availability or social pressures could be explored in future research

2.Our sample size, though significant, might not fully represent wider trends. Exploring larger, diverse groups could help.

3.Surveys helped us gather data, but they come with biases

4.Studying choices at one point in time limits our understanding of long-term behaviour. Tracking consumers over time could tell us more.

2.LITERATURE REVIEW

 Aysu Gocer Bengu SEVIL OFLAC conducted a research on the subject "Understanding young consumers' tendencies regarding eco-labelled products" This study examines factors that shape young consumers' attitudes towards eco-labelled products in Turkey, an emerging country facing environmental challenges due to industrialization and changing lifestyles. The results show that perceived environmental knowledge significantly influences the inclination to purchase eco-labelled products, and educational programs and refined marketing strategies can enhance eco-labelled product adoption. Companies operating in emerging markets should aim to boost environmental concern through increased knowledge to drive eco-label adoption. The study's shortcomings include a private sample from Izmir University of Economics and an imprecise definition of the term "eco-label," which could lead to an inaccurate representation of Turkish public colleges and a failure to capture the range of customer reactions to eco-labels. Future research should explore the role of eco-labels in purchase decisions and the influences on green consumerism.

Ihemezie, Eberechukwu Johnpaul, Ukwuaba, Ikenna Charles Nnaji, and Amaka Precious conducted a systematic review analysis titled "Impact of 'Green' Product Label Standards on Consumer Behaviour." The study addresses the ongoing debate surrounding the influence of 'green' product labels on consumers' eco-friendly behaviours, with conflicting opinions regarding their efficacy. The research critically reviews evidence-based studies, encompassing various consumer classes and products in both developed and developing economies. The review identifies four key themes in the literature: positive impact, negative impact, mixed impact, and zero impact. Articles suggesting a positive impact propose that green labels effectively prompt environmentally conscious consumers to contemplate their consumption habits and opt for green-certified products. Conversely, articles highlighting a negative impact contend that the proliferation of green-labelled products confuses consumers, raising concerns about label integrity. Those indicating mixed impact suggest varied effects on consumer behaviour, while articles reporting zero impact imply no discernible influence on consumer purchasing decisions. The findings advocate for a more comprehensive understanding of the factors influencing consumers' responses to eco-labelling, recognizing that additional interventions may be necessary to effectively shape eco-friendly consumer behaviours.

 Gunne Grankvist and Anders Biel conducted a panel study on "Predictors of purchase of eco-labelled food products: A panel study". The influence of environmental consequences

and beliefs on buying Eco labelled food products was examined. The findings indicated a notable rise in the purchase of Eco labelled items initially. However, as time progressed, beliefs regarding particular product attributes, such as taste and price, became more critical predictors than environmental consequences. The research underlines the importance of promoting environmental concerns during shopping and urging for prompts to inspire eco-friendly attitudes while making purchases.

Aytekin Mehmet & Büyükahraz Gül carried out a study on "Demographic characteristics of consumer buying behaviour effects of environmentally friendly products and an application in Gaziantep " wherein a study was conducted at Gaziantep's premier shopping centre and the purchasing habits of 818 consumers over the age of 35 were analysed. The study discovered a positive correlation between demographic variables, such as gender, age, education level, marital status, income level, and the propensity to buy environmentally conscious products. Specifically, women and older individuals were more inclined to make such purchases. The study suggests that future research should delve into additional factors to gain a more comprehensive understanding to inform targeted marketing strategies and interventions.

 Seema Bhate and Kevin Lawler conducted a study on "Environmentally friendly products: Factors that influence their adoption " According to their findings, consumers are displaying a growing interest in the environment, but the impact on their purchasing habits remains uncertain. While many associate eco-friendly behaviour with innovation, involvement levels suggest that consumers are not fully committed to the cause. Although they are willing to pay a premium for environmentally-friendly products, actively seeking them out is not a top priority. The availability of such products is more important than pricing. The study aims to provide marketers with effective strategies for targeting eco-conscious consumers. This research employs a variety of metrics to create a profile of a socially aware consumer, including Kirton's Adaption-Innovation Inventory, Zaichowsky's Personal Involvement, as well as demographic information such as age, gender, and social class. Interestingly, there is no significant correlation between adaptiveness and purchasing behaviour, which could be attributed to the way eco-friendly products are marketed. This study emphasizes the need for a deeper understanding of consumer behaviour in relation to environmental consciousness.

Andrea K Moser conducted a study on 'Consumers' Purchasing Decisions Regarding Environmentally Friendly Product :An Empirical Analysis Of German Consumers' in 2016 . As environmental awareness blossoms, consumers are increasingly seeking to align their values with their purchasing choices, propelling green buying into a significant domain for enacting eco-conscious principles. This study embarks on a mission to unveil the multifaceted symphony of influences that orchestrate such behavior, crafting a model that transcends the lone note of consumer attitudes. Recognizing the limitations of relying solely on this melody, the model integrates the chorus of personal norms and the delicate counterpoint of price sensitivity, creating a harmonious composition that unveils the true concerto of why consumers choose environmentally friendly options.

Järvi, Jyri in 2010 have done a research study about eco labelled goods on the topic " The Behaviour Of Finnish Consumers Towards Eco-labelled Products Case : S-Group OYJ ". As Eco labels increasingly dot shelves, their subtle influence on consumer behaviour begs exploration. A surprising number of consumers, it seems, possess a baseline understanding of eco labelled products. This awareness fuels a stronger desire to act on their environmental values, translating into a willingness to pay more for Eco conscious offerings. This shift signals a potential turning point, where informed consumers drive the market towards responsible practices.

Sandra Larsson , Muhammed Arif Khan conducted a research on the topic " A Study Of Factors That Influence Green Purchase " .This study aimed to unravel the factors driving consumers' preference for eco labelled products over conventional alternatives. Through a quantitative analysis of 150 responses, it revealed that environmental motivation and product visibility play crucial roles in purchase decisions. Interestingly, price and income appeared to have minimal or negligible influence, suggesting that Eco conscious values take precedence for many consumers.

Norsiah Ahmad, Norfazlina Ghazali, Mohammad Fariz Abdullah, Raslan Nordin, Intan Najihah Mohd Nasir , Nur Amira Mohd Farid has done study on ' Green Marketing And Its Effects On Consumers' Purchase Behaviour :An Empirical Analysis' . This study delved into the influence of green marketing tools like Eco labels, eco-packaging, eco-branding, and environmental advertising on consumer choices for green products and services. Analysing 189 responses, the researchers discovered that not all tools wielded equal power. While eco-packaging and environmental advertising emerged as significant drivers of purchasing behaviour, the impact of Eco labels and eco-branding appeared less pronounced. This suggests that tangible cues like packaging and relatable messaging resonate more readily with consumers, prompting them to consider eco-conscious options. However, further research is needed to explore the potential synergy between different green marketing tools and unravel the complex interplay of factors influencing consumer decisions in the evolving green marketplace.

Norazah Mohd. Suki conducted a study on "Green Awareness Effects on Consumers Purchasing Decision :Some Insights From Malaysia " . Consumer awareness of green marketing plays a crucial role in guiding their purchase decisions towards eco-friendly products. Recognizing this importance, this study delves deeper, examining how environmental concerns, product price, brand image, and awareness interact to influence purchasing decisions. The findings reveal that both price and brand image exert significant influence, indicating that affordability and trust go hand-in-hand with eco-conscious choices. Interestingly, the study also discovered that individuals with heightened environmental concerns, coupled with a positive brand perception, are particularly inclined to choose green products. This suggests that a synergistic effect exists, where personal values and brand trust combine to drive responsible consumption.

3.BACKGROUND OF THE STUDY

3.1. Introduction:

Ernakulam, Kerala, India, faces critical environmental challenges. Understanding consumer behavior regarding eco-labeled products is crucial to address these issues. This study, titled "The Eco-Conscious Consumer: Unveiling How Advertising, Price, and Quality Shape Eco-Label Decisions in Ernakulam," investigates the influence of advertising, price, and product quality on consumer choices for eco-labeled products.

3.2. Research Justification:

The findings from this research hold significant value. By shedding light on consumer decision-making processes, policymakers can develop strategies to promote eco-labeled products and encourage more sustainable consumption patterns. This will contribute to environmental protection for future generations.

3.3. Indian Eco-Labeling Landscape:

India boasts several prominent eco-labeling schemes:

Indian Eco Mark (1991): This government-introduced program identifies environmentally friendly consumer products across 14 categories. While facing initial challenges with manufacturer participation, the Eco Mark offers a valuable framework for eco-labeling in India.

Bureau of Indian Standards (BIS) Certification: The BIS offers product certifications that may encompass environmental considerations, though not exclusively. This study can explore how consumers differentiate between BIS certification and dedicated eco-labels.

Organic Certification: Multiple bodies, including the National Programme for Organic Production (NPOP) and APEDA-accredited agencies, provide organic certification for agricultural products. This certification assures consumers of environmentally responsible production practices and product quality, aligning with the study's focus on quality as a decision factor.

Energy Star Label: This program by the Bureau of Energy Efficiency (BEE) certifies energy-efficient appliances. The label empowers consumers to make eco-friendly choices and reduce their environmental impact.

Consumer behavior in Kerala is mirroring a global trend towards eco-consciousness. Studies suggest a growing segment of consumers prioritizing products with minimal environmental impact (Gupta et al., 2021). This shift is driven by factors like increased environmental awareness, media influence, and a sense of ethical responsibility (Chen & Chang, 2013). Kerala, with its unique dependence on its natural resources, is likely to witness a further rise in demand for eco-labeled products. To address these challenges and maximize the impact of eco-labeling in Kerala, a collaborative approach involving various stakeholders is crucial

Eco-labeling presents a powerful opportunity for Kerala to promote sustainable consumption and protect its precious environment. By fostering consumer awareness, encouraging responsible business practices, and fostering collaboration, Kerala can position itself as a leader in the eco-conscious consumer movement.

4.ANALYSIS OF THE RESPONSES

4.1. Distribution of age
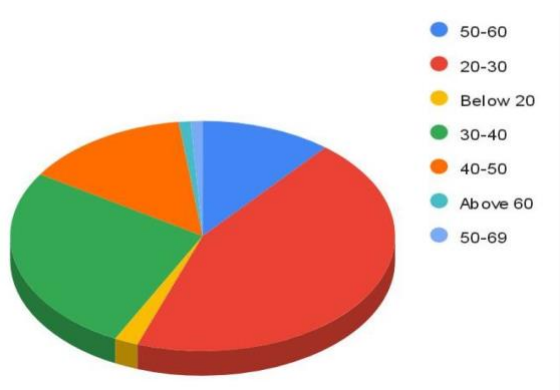
Fig. 4.1.1. Distribution of age of respondents

Data analysis revealed a significant concentration of responses from the 20-30 year old demographic. Conversely, participation from those under 20 and over 60 was minimal. This key demographic, characterized by its increased purchasing power, offers a strategic lens through which to examine consumer behavior and identify current purchasing trends. The data reveals a potential generational shift in eco-labeled product purchases. Younger consumers exhibit a stronger tendency to buy these goods, suggesting growing environmental awareness among this demographic

4.2. Distribution of monthly income
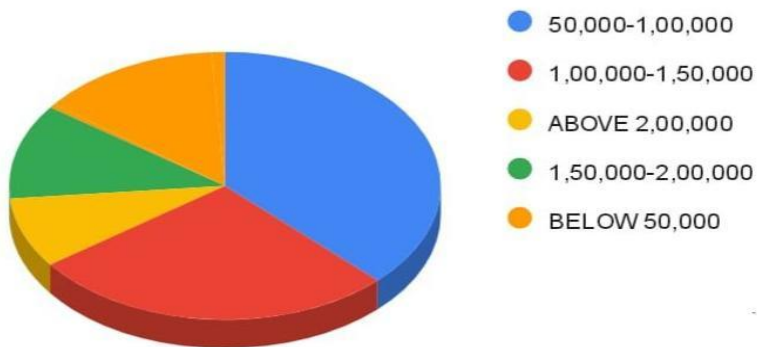
Fig.. 4.2.1. Distribution of monthly income of respondents

Our analysis revealed a noteworthy skew in income distribution among respondents. A substantial proportion fell within the ₹50,000 to ₹1,00,000 monthly income bracket. Conversely, participation from those exceeding ₹2,00,000 per month was minimal. This finding aligns with well-documented consumer behavior patterns, suggesting that individuals within this middle-income segment often navigate a strategic balance between discretionary spending and financial prudence. While there wasn't a significant difference in purchasing behavior across income levels, individuals with higher monthly incomes showed a slight bias towards eco-labeled options. This suggests potential factors like lower price sensitivity, heightened environmental awareness, or greater access to information influencing purchase decisions among higher income earners.

4.3. Distribution of location

Fig. 4.3.1. Distribution of location of respondents

An interesting aspect of our data is the geographic distribution of respondents. The majority (154 responses) originated from urban areas. While this provides valuable insights into the preferences and behaviours of this specific demographic, it's important to acknowledge the potential limitations of generalizing these findings to the broader population. Examining eco-labeled product purchases between rural and urban populations reveals a trend. While rural residents express future purchase intent, urban consumers boast a higher historical purchase

rate. This disparity might be linked to regional availability of eco-labeled products, potentially limiting rural purchasing opportunities despite interest

4.4. Distribution of gender

Fig. 4.4.1. Distribution of gender of respondents

Our analysis revealed a notable skew in gender representation among respondents, with a higher participation rate from females (126) compared to males (76). This finding is important to consider when interpreting the study's conclusions, as purchasing decisions and product preferences can be influenced by gender. Men and women may prioritize different product features, be swayed by varying marketing tactics, or have distinct purchasing styles. Our analysis regarding gender and purchase decisions for eco-labeled products is encouraging. While the data suggests a relatively balanced landscape, with no statistically significant difference between men and women, there appears to be a slight tendency for females to exhibit a stronger inclination towards purchasing eco-labeled products

5.ANALYSIS OF THE STUDY

5.1. Exposure to Eco label advertisements
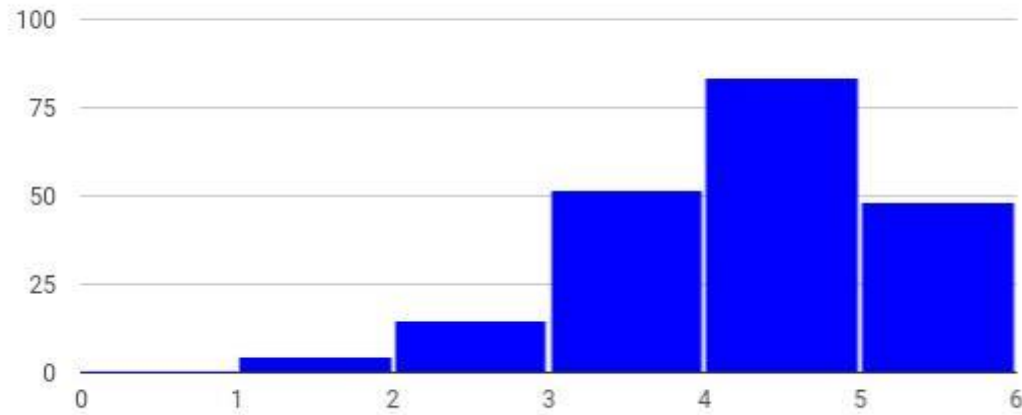
**Fig. 5.1.1. Exposure to Eco label advertising of respondents**

Our analysis of survey responses on exposure to eco-labelled product advertisements in the past month paints a picture of moderate consumer awareness. The average score of 3.79 (on a scale of 1-5, with 1 being "never" and 5 being "most likely") suggests participants encounter these ads "somewhat often," indicating eco-label advertising campaigns are reaching a sizeable audience. However, the standard deviation of 0.96 reveals some variation in exposure, with some encountering these ads more frequently than others. This variation highlights the potential to broaden the reach by understanding the demographics of those with lower exposure and tailoring marketing strategies to their media consumption habits or geographic location. Encouragingly, this trend signifies a growing awareness of eco-labelled products, which can be leveraged by crafting compelling and informative advertising campaigns that resonate with consumers' values and buying decisions. By educating consumers about the benefits of these products, eco-label advertising can play a key role in promoting sustainable consumption practices.

5.2. Influence of advertisements on purchasing decisions of Eco labeled products
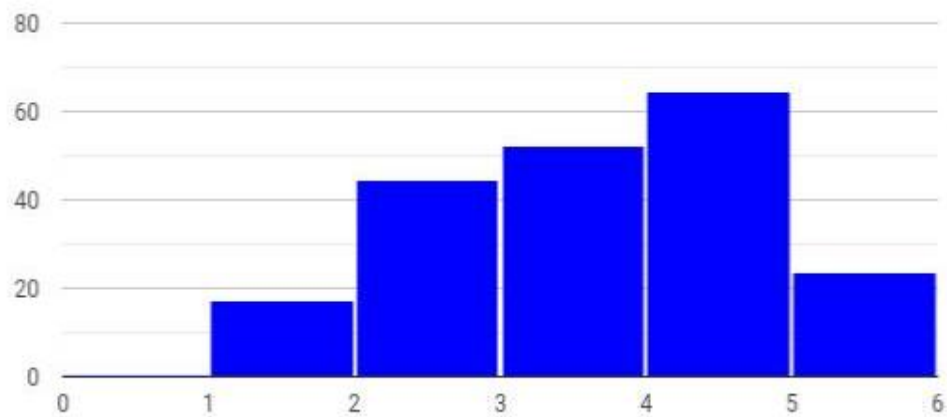
Fig. 5.2.1. Influence of advertisement on the purchasing decision of respondents

While our analysis reveals a consumer base somewhat swayed by eco-labelled product advertising (average score: 3.16 on a 5-point scale), a significant portion remains unconvinced (data skew towards lower scores). The high standard deviation (1.14) suggests varying levels of influence, highlighting the need for targeted marketing strategies based on demographics and media consumption habits. However, the trend towards moderate influence is promising, indicating growing consumer openness to eco-friendly choices. By crafting clear, informative advertising that emphasizes the benefits of eco-labelled products, eco-label advertising can play a key role in promoting sustainable consumption and nudging consumers towards a greener future.

## 5.3. Effectiveness of advertising on conveying information about Eco labeled products
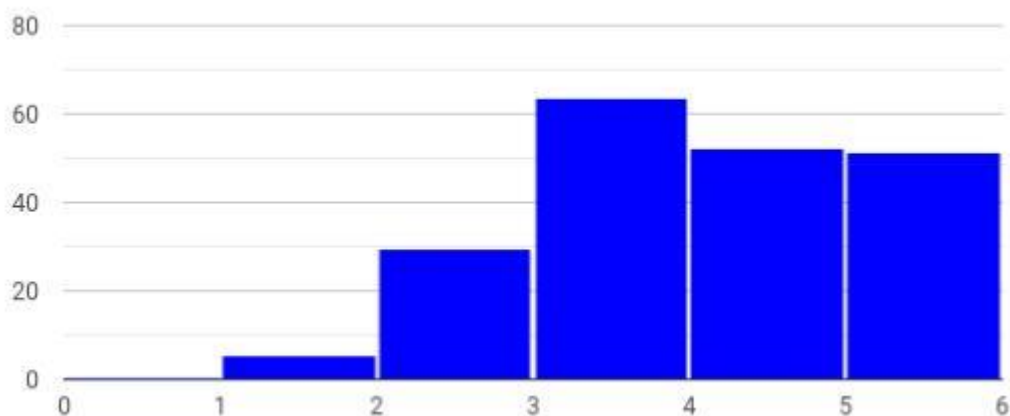
Fig. 5.3.1. Effectiveness of advertising to convey information to respondents

Examining survey responses from 200 participants reveals a mixed picture of consumer sentiment towards eco-label advertising's ability to inform about eco-friendly features. The average score of 3.58 on a 5-point scale suggests consumers feel "somewhat informed"

(leaning towards the positive), but the standard deviation of 1.095 highlights a range of experiences. This implies the effectiveness might vary depending on factors like the complexity of eco-label information, the ad design's attention to detail, and the consumer's prior environmental knowledge. Optimizing eco-label campaigns requires addressing these factors. Simplifying messaging, segmenting the audience, and incorporating interactive elements can all improve knowledge transfer. While the current data suggests moderate effectiveness, there's room for improvement. By acknowledging these influencing factors and implementing targeted strategies, eco-label advertising can play a key role in educating consumers, empowering informed purchasing decisions, and ultimately paving the way for a more sustainable future.

5.4. Willingness to pay for Eco labeled products
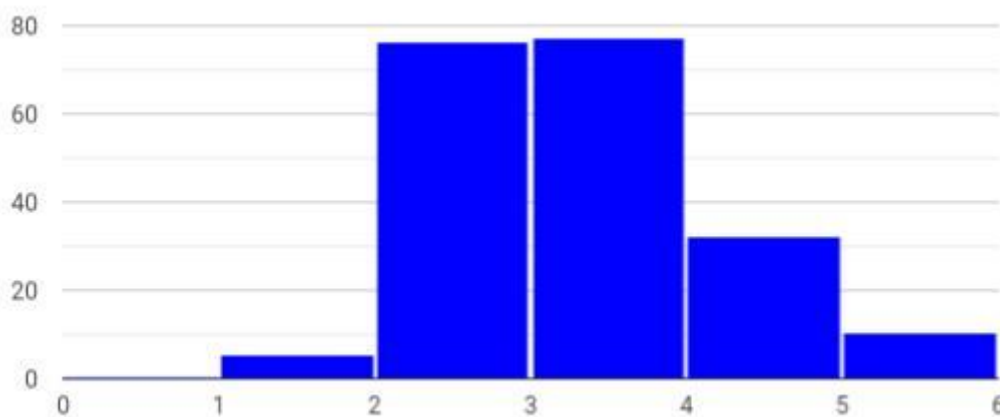
Fig. 5.4.1 Distribution of respondents willingness to pay for Ecolabeled products

Examining survey responses from 200 people unveils a complex picture of willingness to pay extra for eco-labeled products. While the average score (2.83 on a 5-point scale) leans towards "somewhat willing," the standard deviation (1.095) reveals a range of opinions. Some consumers might readily pay a premium, driven by environmental values or a desire for sustainable goods. Others, however, might be cautious due to budget concerns, scepticism about eco-labels, or a lack of understanding of the price increase's justification. This variation highlights the need for targeted marketing strategies. By understanding the factors influencing willingness to pay, eco-friendly brands can tailor their messaging to resonate with different consumer segments, ultimately promoting informed purchasing decisions for a more sustainable future.

5.5. Justification of high prices of Eco labeled products
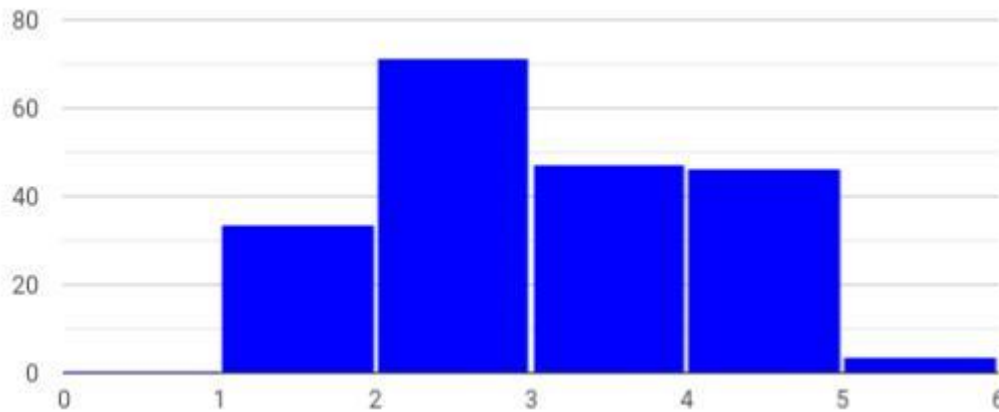
Fig. 5.5.1. Distribution of justification of high prices by respondents

An examination of 200 survey responses reveals a complex picture of consumer views on price justification for eco-labeled goods. The average score of 2.58 on a likely 5-point Likert scale (1 = "not at all" and 5 = "most likely") suggests a slight majority finds high prices for eco-friendly products "not very justifiable." However, the standard deviation of 1.06 paints a more nuanced picture. This variation indicates a segment of respondents is more accepting of premium pricing, potentially due to perceived environmental benefits. For these consumers, the higher price might reflect a more sustainable production process, aligning with their values. Brand trust could also play a role, with established eco-conscious brands commanding a premium for their environmental responsibility. Ultimately, understanding these factors influencing price perception is crucial for eco-friendly companies. By tailoring their messaging to resonate with different consumer segments, they can bridge the gap between eco-friendly products and consumer willingness to pay, paving the way for a more sustainable future

5.6. Agreement on cheap price of Eco labeled products
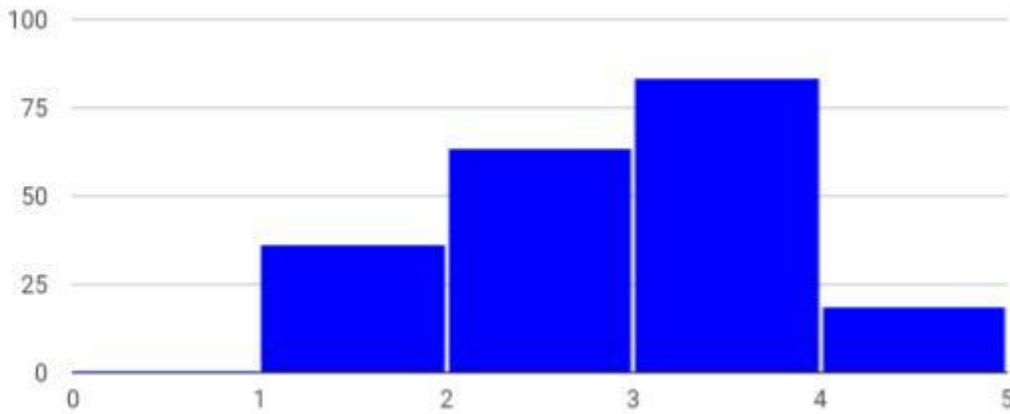

Fig. 5.6.1. Respondents agreement on cheap prices for Ecolabeled products

An examination of consumer sentiment regarding pricing for eco-labeled products reveals a nuanced landscape. The data, likely structured on a 5-point Likert scale (1 = "strongly disagree" and 5 = "strongly agree") with the statement "eco-labeled products charge only cheap prices," leans towards disagreement with an average score (mean) of 2.415. While this suggests a general understanding that eco-friendly options might not be the most affordable (mean slightly below the midpoint), the standard deviation of 0.886 paints a more complex picture. This variation indicates a range of viewpoints. Some respondents might find eco-labeled products slightly inexpensive, potentially due to occasional sales or budget-friendly eco-conscious brands. Conversely, others might perceive them as priced similarly to conventional options, perhaps due to factors like the perceived value of the eco-friendly features or the expectation of high-quality materials. Understanding these reasons behind price perception is crucial. By addressing potential concerns about affordability through transparent communication and highlighting the value proposition of eco-friendly products, companies can bridge the gap between consumer willingness to pay and the reality of eco-label pricing. Ultimately, this can lead to more informed purchasing decisions and a more sustainable future

5.7. Agreement on quality
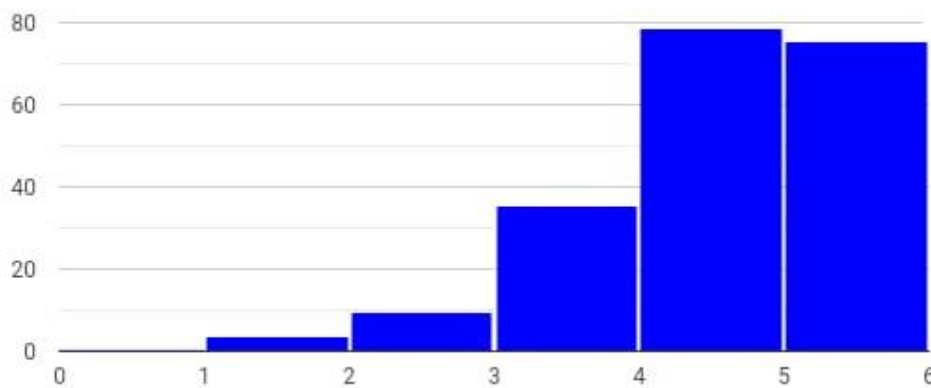
Fig. 5.7.1. Respondents agreement on quality of Ecolabeled products

Examining survey data from 200 participants on a 1-to-5 scale (1 = "strongly disagree" and 5 = "strongly agree") regarding the perceived quality of eco-labeled products offers intriguing insights. The average score of 4.065 leans towards agreement, suggesting a general perception among participants that eco-labeled goods offer superior quality compared to non-eco-labeled alternatives. This aligns with potential positive associations between eco-labels and the use of premium ingredients or sustainable sourcing practices. Furthermore, the low standard deviation of 0.233 indicates a degree of consistency in this perception, suggesting a collective trend towards associating eco-labels with higher quality. This highlights a potential opportunity for businesses to leverage eco-labels not just for their environmental merits, but also to communicate a message of premium quality to environmentally conscious consumers. However, it is important to acknowledge that eco-labels themselves don't inherently guarantee superior quality, and further research might be needed to explore whether this perception is entirely accurate or based on broader associations with sustainability efforts.

5.8. Ecolabels aid in making informed decisions
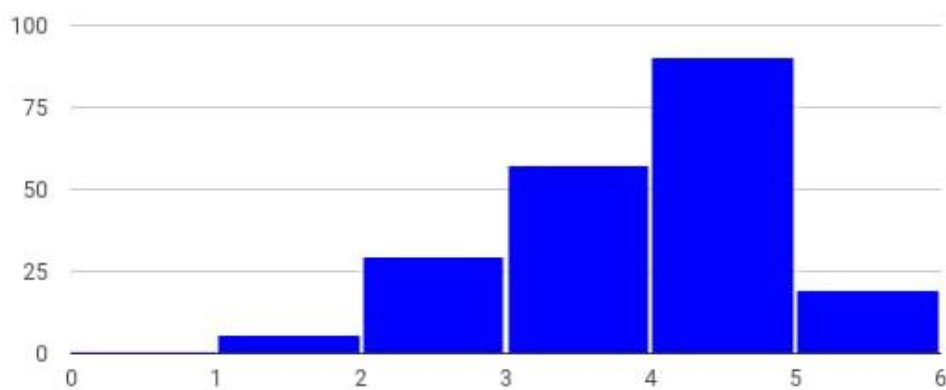
Fig. 5.8.1. Distribution of responses on Ecolabels aid in making informed decisions

 Analysing survey data from 200 participants on a 1-to-5 scale (1 = "strongly disagree" and 5 = "strongly agree") regarding the statement "Eco-labels aid in making informed choices about quality and environmental impact" unveils a nuanced perspective on consumer perception. The average score of 3.444 leans towards agreement, suggesting that a significant portion of participants find eco-labels somewhat helpful for informed decision-making. Additionally, the low standard deviation of 0.221 indicates a degree of consistency in these opinions. However, the data falls short of a resounding endorsement. This highlights the potential of eco-labels as a tool for consumer empowerment, but also acknowledges the need for improvement in comprehensiveness, clarity, and potentially, consumer education initiatives. By addressing these areas, eco-labels can evolve into more effective instruments for promoting sustainable consumption practices and well-informed purchasing choices.

5.9. Agreement on purchase of ecolabeled product with high quality
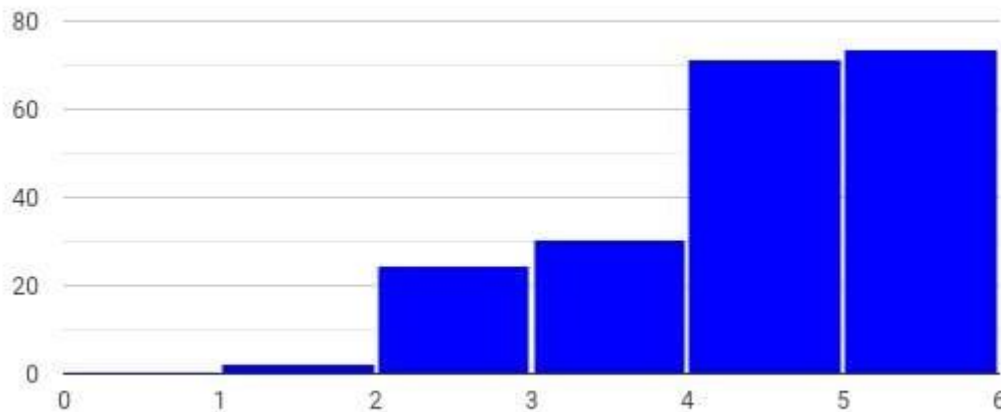
Fig. 5.9.1. Distribution of respondents agreement on purchase of Ecolabeled product with high quality
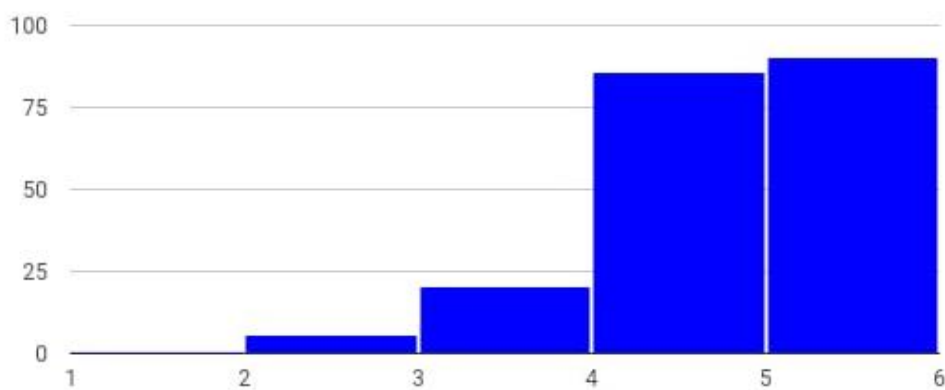
Analysing the survey data from 200 participants on a 1-to-5 scale (likely 1 = "strongly disagree" and 5 = "strongly agree") regarding their agreement on purchasing high-quality eco-labeled products reveals an interesting trend.

Encouraging Tendency: The average score of 3.945 leans towards agreement. This suggests a general inclination among participants to favor high-quality eco-labeled products. Nuances Revealed by Standard Deviation: The relatively low standard deviation of 0.212 indicates a degree of consistency in this trend. While individual preferences might vary slightly, the data implies a collective movement towards prioritizing both eco-labels and high quality. The data paints a promising picture for the future of eco-labeled products, particularly when quality is not compromised. Consumers are increasingly seeking out sustainable options without sacrificing quality. Consumers who prioritize both environmental well-being and product quality might be more drawn to eco-labeled options that meet high standards. A wider range of high-quality eco-labeled products entering the market could be driving this trend. Eco-labeled products might be shedding perceptions of being lower quality, leading to a more positive consumer image.

5.10. Willingness to choose ecolabeled product if their prices align with other products

Fig. 5.10.1. Distribution of respondents willingness to purchase ecolabeled product if their prices align with other products

Examining survey data from 200 participants on a 1-to-5 scale (1 = "never" and 5 = "most likely") regarding their willingness to purchase eco-labeled products unveils a promising synergy between environmental consciousness and price sensitivity. The average score of 4.3, positioned well above the midpoint of the scale, suggests a general tendency among participants to prioritize eco-labeled options when cost remains competitive. The remarkably low standard deviation of 0.263 further strengthens this observation. It signifies a high degree of consistency within this trend, suggesting a potentially significant shift towards sustainable consumption on a population level, particularly when affordability concerns are addressed. This trend is likely fuelled by a confluence of factors beyond just price. Increased environmental awareness, coupled with a potential perception of higher quality associated with eco-labels (as suggested in other studies), might be further contributing to this shift in consumer behavior. Understanding these additional factors alongside price sensitivity will be crucial for informing future strategies to promote sustainable consumption practices. Businesses can leverage this trend by developing competitively priced eco-friendly options that resonate with environmentally conscious consumers, while policymakers can focus on initiatives that foster trust in eco-labeling programs and ensure clear communication about their environmental benefits.

5.11. Considering ecolabels in future purchase
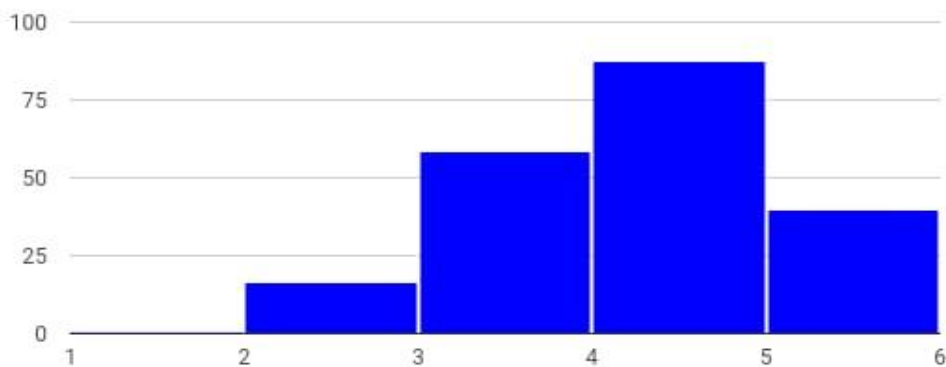
Fig. 5.11.1. Distribution of respondents willingness in considering Ecolabels in future purchase

From inferring the survey data of 200 participants on a 1-to-5 scale (1 = "never," 5 = "most likely") regarding their likelihood of purchasing eco-labeled products in the future unveils a promising yet multifaceted picture. The average score of 3.75 suggests a positive trend. This score, positioned above the midpoint of the scale, indicates a general inclination among participants to consider eco-labels in future purchases. This is a positive sign for the future of sustainable consumption.

However, the analysis is enriched by examining the standard deviation of 0.25. This relatively low value suggests a degree of consistency in this trend. While individual purchase frequency will likely vary, the data implies a collective movement towards incorporating eco-labels into future buying decisions. This consistency strengthens the potential for a significant shift towards more sustainable consumption practices.

5.12. History of purchase of ecolabeled products
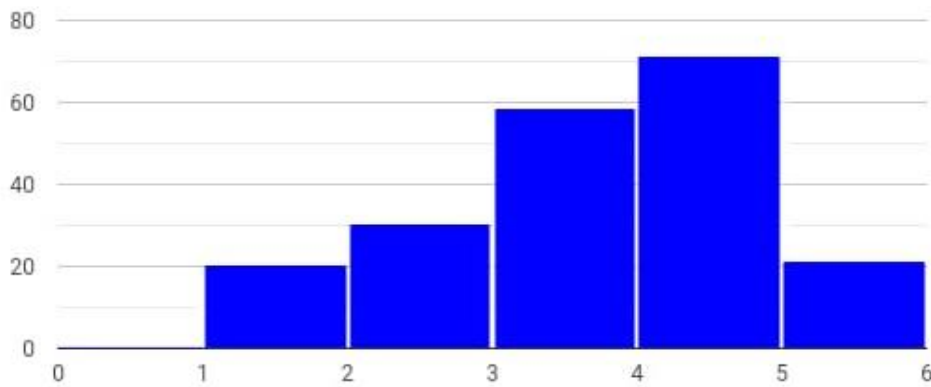
Fig. 5.12.1. Distribution of respondents history of purchase of ecolabeled products

Analysing the survey data from 200 participants on a 1-to-5 scale (1 = "never," 5 = "most likely" to purchase eco-labeled products) unveils a nuanced picture of consumer behavior regarding eco-labeling. The average score of 3.215 suggests a trend of eco-conscious purchases, with a significant portion of participants having opted for eco-labeled products at least occasionally. However, the standard deviation of 1.13 adds an important layer of complexity. This variation indicates a spectrum of consumer behavior, with some participants potentially acting as strong advocates for eco-labels by frequently choosing them (scores closer to 5), while others might be more sporadic purchasers (scores around 3) or abstain altogether (scores closer to 1). This heterogeneity underscores the multifaceted nature of consumer decision-making regarding eco-labeled products. By delving deeper into the factors influencing these variations, we can glean valuable insights for promoting sustainable consumption practices through informed purchasing choices.

6.OBSERVATIONS OF THE STUDY

6.1. Regression Statistics

Multiple R	0.86881783
R Square	0.7548444217
Adjusted R Square	0.7510920404
Standard Error	0.3525793856
observations	200

Table 6.1.1. Summary of regression results

	Df	SS	MS	F	Significance F
Regression	3	75.02147092	25.00715697	201.1641039	1.43E-59
Residual	196	24.36519574	0.1243122232		
Total	199	99.38666667			

Table 6.1.2. Regression statistics of the study

The statistical analysis of the regression model indicates that the underlying assumptions are largely satisfied. The homoscedasticity test indicates no substantial violations of the assumption of equal variance across the data points. This implies that the variability of the dependent variable remains consistent across different values of the independent variables, supporting the reliability of the model's predictions. Additionally, there are no significant concerns regarding Multicollinearity among the independent variables. Multicollinearity, which occurs when independent variables are highly correlated, can distort coefficient estimates. The absence of significant Multicollinearity suggests that each independent variable contributes unique information to the model without redundancy. This enhances the interpretability and reliability of the estimated coefficients.

The R-squared value of 0.754844 signifies that the regression model explains a substantial portion, approximately 75.5%, of the variance observed in the dependent variable. A higher R-squared value indicates a better fit of the model to the observed data. In the context of eco-labels, this suggests that the selected independent variables effectively capture a significant proportion of the variation in the dependent variable, which could be factors such as consumer preferences, marketing strategies, or product attributes related to eco-labelling.

Furthermore, the standard error of 0.35279386 represents the average prediction error of the model. It indicates the typical deviation of observed values from the predicted values by the regression model. A lower standard error suggests that the model's predictions are more accurate on average. In the context of eco-labels, this implies that the model can provide reasonably precise estimates of the impact of various factors on consumer behavior or attitudes towards eco-labelled products. Residual normality 0.1877 would suggest that the differences between observed and predicted values (residuals) follow a normal distribution, as expected in linear regression analysis.

	Coefficients	Standard Error	t Stat	P-value
Intercept	1.032753347	0.2171088902	4.756845037	0.000003806441⸱
quality	0.5331878671	0.03697350878	14.42080789	1.31E-32
price	-0.1195547811	0.03918848467	-3.050763051	0.002598574861
advertisements	0.2851383163	0.0365611466	7.798943492	3.62E-13

Table 6.1.3. Regression coefficient table

6.2. Effect of advertising on consumer behaviour

Unveiling the intricate relationship between eco-labeled product advertising and consumer purchasing decisions, our mini-research project, analyzing data from 200 participants, offers valuable insights. While perceived quality remains the dominant factor influencing eco-friendly product choices, advertisements do play a significant, albeit moderate, role. The analysis revealed a positive correlation with a coefficient of 0.285. This indicates that eco-label advertisements do nudge consumers towards eco-friendly options. The highly significant p-value of less than 0.00000000000000000362 further emphasizes the statistical relevance of this connection. The narrow confidence interval, ranging from 0.213 to 0.357, strengthens this conclusion by suggesting a high degree of certainty surrounding this effect.

These findings present a compelling opportunity for companies to leverage the power of advertising to promote eco-labeled products. However, the data also suggests there's room for improvement in crafting eco-label ad campaigns. By understanding what resonates with consumers, companies can develop more targeted and impactful messaging. Focusing on crafting compelling messages that not only highlight the environmental benefits of eco-labeled products but also emphasize their unique value proposition can be highly effective. Building trust through transparency is also crucial. Consumers are more likely to be swayed by advertisements that are perceived as honest and informative. Showcasing certifications and production processes can significantly enhance the credibility of eco-label advertisements. Furthermore, segmenting the audience and tailoring messages to resonate with different levels of environmental awareness and purchase motivations can be another avenue for improvement. Finally, further research exploring the specific types of eco-label advertisements that resonate most with consumers can be invaluable. By understanding what makes an eco-label ad truly effective, companies can develop more targeted and impactful campaigns, ultimately leading to a greater influence on purchasing decisions that pave the way for a more sustainable future.

6.3. Exploring how price of the commodity affect purchasing behaviour

In a bid to understand how price influences consumer decisions regarding eco-labeled products, we conducted a survey and analysed the responses of 200 participants. .The findings reveal a statistically significant negative impact of price on purchasing decisions

which means there's a strong correlation between a product's price tag and the likelihood of a consumer choosing it.

Delving deeper into the data, we see a coefficient of -0.1196. This indicates that for every unit increase in price (e.g., every rupee increase), the probability of a consumer opting for an eco-labeled product decreases by 0.1196, while holding all other factors constant. This negative relationship is further substantiated by the p-value of 0.0026, which falls well below the standard threshold of 0.05 for statistical significance at a 95% confidence level.

To translate these findings into simpler terms, with a 95% confidence interval ranging from -0.1968 to -0.0423, we can be fairly certain that price acts as a significant barrier. As the price of eco-labeled products increases, consumers become less likely to choose them. This highlights the importance of acknowledging price sensitivity when promoting environmentally friendly products.

Moving forward, businesses can leverage this knowledge to develop strategies that mitigate this price barrier. For instance, they could implement competitive pricing models or highlight the long-term cost benefits associated with eco-friendly products, such as lower energy consumption or reduced maintenance costs. Policymakers can also play a crucial role by exploring initiatives that incentivize the production and consumption of eco-labeled products. This could involve subsidies, tax breaks, or other programs that make these products more affordable for consumers.

By understanding the quantifiable impact of price, as evidenced by the coefficient and p-value, and taking action based on these insights, we can move towards a future where eco-conscious choices are not only beneficial for the environment but also easier on wallets. This will require a collaborative effort from businesses, policymakers, and consumers, all working towards a more sustainable future..

6.4. Investigating the relationship between quality of a product and its purchasing behaviour

Delving deeper into the relationship between perceived quality and consumer willingness to purchase eco-labeled products, our mini-research project yielded fascinating results. Analysing data from 200 survey responses revealed a strong positive correlation. The statistical evidence speaks volumes: a coefficient of 0.533, coupled with an incredibly significant p-value of 1.31E-32, indicates a substantial influence of perceived quality on eco-labeled product choices. In simpler terms, for every unit increase in perceived quality, there's a corresponding rise of 0.533 units in the likelihood of choosing an eco-friendly option. The narrow confidence interval, ranging from 0.460 to 0.606, further strengthens this conclusion, suggesting a high degree of certainty surrounding this association.

This research sheds light on the critical role quality plays in consumer decisions regarding eco-labeled products. Companies can leverage this valuable finding by strategically emphasizing the quality aspects of their eco-friendly offerings. Highlighting certifications for material quality, showcasing durability testing results, or even drawing comparisons to

conventional products can significantly influence consumer perception. Furthermore, addressing any lingering concerns about quality through targeted communication can be crucial. Consumers might still harbor misconceptions about the capabilities of eco-friendly options. By proactively showcasing the advancements in sustainable materials and production processes, companies can bridge the gap between perception and reality. Additionally, further research could delve deeper into the factors that truly influence perceived quality. Are there specific quality attributes, like durability or performance, that resonate most with consumers? Understanding these drivers can be immensely valuable. By tailoring messaging and product development to better meet consumer expectations on quality, companies can empower informed purchasing decisions that not only support sustainable practices but also pave the way for a more sustainable future.

While the data focuses on quality, price, and advertising, it's important to acknowledge the influence of cultural and social factors on consumer behavior in Ernakulam. Here are some additional considerations:

Environmental Awareness: The level of environmental awareness in Ernakulam can influence consumer receptiveness to eco-labelled products. Understanding the existing environmental concerns and knowledge base of the target audience is crucial for crafting effective messaging.

Social Norms and Status: Social norms and the perception of eco-friendly products as status symbols can also play a role. Advertising campaigns could leverage this by Highlighting Social Approval: Advertising campaigns could showcase eco-conscious celebrities or influencers using the products. This taps into the desire to emulate admired figures and project an image of environmental responsibility within social circles.

Emphasizing Exclusivity: Limited edition eco-labelled products or collections can create a sense of exclusivity and desirability. This approach caters to consumers who value owning unique items and being seen as trendsetters.

7.RECOMMENDATIONS

Gaining Consumer Insights:

Decoding Existing Marketing & Social Media: Analyzing existing eco-label advertising campaigns and monitoring social media conversations can reveal successful themes, messaging strategies, preferred communication channels, and key influencers. This provides valuable insights into consumer perceptions and preferred methods of communication regarding eco-labelled products.

Surveys & A/B Testing: Conducting surveys to gauge consumer awareness, campaign recall, and the influence of social media on purchasing decisions provides a foundation of data. A/B testing different advertising messages and social media strategies further optimizes outreach by revealing the most impactful approaches for specific consumer groups.

Consumer Segmentation: Segmenting consumers based on demographics, environmental consciousness, and price sensitivity allows for targeted messaging. Tailoring outreach to address the unique values, motivations, and concerns of different consumer segments fosters a more effective and persuasive approach.

Empowering Informed Choices:

Public Awareness Campaigns: Educational campaigns can highlight the environmental and personal benefits of choosing eco-labelled products. This raises public awareness about the significance of eco-labels and empowers consumers to make informed purchasing decisions.

Educational Resources: Developing and disseminating readily available educational materials (online and offline) that explain the meaning and significance of different eco-labels empowers consumers. This fosters understanding and transparency within the eco-label landscape.

Policy Recommendations for Widespread Adoption:

Cost-Benefit Analysis: Highlighting the potential long-term financial benefits associated with eco-labelled products (e.g., energy efficiency, durability) can incentivize consumer adoption. By emphasizing the economic advantages alongside environmental benefits, the cost barrier can be lessened.

Subsidies: Advocating for subsidies that partially offset the potential price premiums of eco-labelled products can make them more accessible to a wider range of consumers. This policy intervention promotes affordability and encourages broader adoption.

Green Procurement: Encouraging public institutions, schools, and businesses to prioritize the purchase of eco-labelled products sets a positive example and stimulates market demand. Additionally, "green procurement" policies actively contribute to environmental sustainability.

Conclusion:

By employing a multi-faceted approach that combines market research, public education, and policy recommendations, significant progress can be made in promoting the adoption of eco-labelled products. Understanding consumer behavior, fostering public awareness, and implementing supportive policies will ultimately contribute to a more sustainable future for all.

8.CONCLUSION

In conclusion, by meticulously dissecting the intricate web of advertising exposure, price perception, and quality perception, this study has unveiled a treasure trove of insights into consumer preferences for eco-labeled products within the microcosm of Ernakulam. These findings serve as a powerful compass, guiding various stakeholders towards navigating the burgeoning eco-friendly product market.

Businesses can leverage this knowledge to develop a winning formula. By aligning product development with both environmental responsibility and consumer expectations regarding price and quality, they can create eco-conscious products that resonate with this growing market segment. Policymakers, armed with these insights, can craft targeted strategies that incentivize the production and consumption of eco-labeled goods, fostering a more sustainable marketplace for all.

Furthermore, this research empowers consumers to become active participants in shaping a greener future. By understanding the factors influencing eco-label choices, they can make informed decisions that not only benefit the planet but also align with their budgetary constraints and performance expectations. Marketers can translate these insights into effective promotional strategies that resonate with this environmentally conscious segment. Imagine targeted campaigns that not only raise awareness but also address specific consumer concerns about price and quality.

Ultimately, this research has the potential to create a ripple effect, fostering a wave of environmentally conscious consumer behavior. These empowered consumers, coupled with effective marketing strategies and informed policy decisions, can pave the way for a more sustainable future. The combined efforts of these stakeholders, illuminated by the findings of this research, can bridge the gap between environmental responsibility and informed consumer choices, leading to a future where both can flourish hand-in-hand

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Appendix

1. **Name***

Your answer

2. **Gender***

Male

Female

Other:

3. **Location***

Urban

Rural

4. **Age***

Below 20

20-30

30-40

40-50

Above 60

5. **Monthly Family Income ***

Below 50000

50,000- 1,00,000

1,00,000- 1,50,000

1,50,000-2,00,000

Above 2,00,000

6. **Have you ever seen any ads related to eco-labeled products in the past month?***

1 Never

2 Slightly Likely

3 Moderately Likely

4 Quite Likely

5 Most likely

7. **Have you ever thought of purchasing an eco-labeled product after seeing an ad ?**

1 Not at all

2 Slightly Likely

3 Moderately Likely

4 Quite Likely

5 Most likely

8. **Do you feel well-informed about the eco-friendly features of products after seeing these ads?***

1 Not at all

2 Slightly Likely

3 Moderately Likely

4 Quite Likely

5 Mist likely

9. **Are you willing to pay extra money for eco-labeled products***

1 Not at all

2 Slightly Likely

3 Moderately Likely

4 Quite Likely

5 Most likely

10. **Do you think that charging high prices for eco-labeled goods is justifiable?***

1 Not at all

2 Slightly Likely

3 Moderately Likely

4 Quite Likely

5 Most likely

11. How much do you agree with the statement that eco-labeled products charge only cheap price*

1 Strongly disagree

2 Somewhat Disagree

3 Neutral

4 Somewhat Agree

5 Strongly agree

12. Do you agree with the statement " Ecolabeled goods offer more quality by using premium ingredients than non ecolabeled ?

1 Strongly disagree

2 Somewhat Disagree

3 Neutral

4 Somewhat Agree

5 Strongly agree

13. Do you think that Ecolabels help you make informed choices about quality and environment impact of products*

1 Not at all

2 Slightly Likely

3 Moderately Likely

4 Quite Likely

5 Most likely

14. How much you agree with the statement " I am willing to purchase more ecolabeled products if they offer great quality" *

1 Strongly disagree

2 Somewhat Disagree

3 Neutral

4 Somewhat Agree

5 Strongly agree

15. How much do you agree with the statement "I will purchase an eco-labeled product if the price of both eco-labeled and non-eco-labeled products are equal"?*

1 Strongly disagree

2 Somewhat Disagree

3 Neutral

4 Somewhat Agree

5 Strongly agree

16. How likely are you to consider purchasing eco-labeled goods in the future?*

1 Not at all

2 Slightly Likely

3 Moderately Likely

4 Quite Likely

5 Most likely

17. Have you ever purchased an eco-labeled product?*

1 Not at all

2 Slightly Likely

3 Moderately Likely

4 Quite Likely

5 Most likely