

Consumers Awareness and Experience Towards Green Marketing of Consumer Durable Products: Evidence from Coimbatore District

Mrs. A. Elizabeth Prema¹, Dr. R. Devapriya²

¹Assistant Professor, Research Scholar, Department of Commerce

²Vice Principal, Associate Professor and Head, Department of Commerce

^{1,2}Dr. R. V. Arts and Science College, Karamadai, Coimbatore.

Abstract—Green marketing has become an important approach for promoting environmentally responsible consumer durable products. The present study examines the level of awareness and experience of consumers towards green marketing of selected consumer durable products in Coimbatore District. Primary data were collected from 766 respondents using the convenience sampling method. The study employed Analysis of Variance (ANOVA) to analyze age-wise differences in awareness and experience towards various green marketing dimensions such as eco-labels, environmental impact, greenwashing, and sustainability. The findings reveal that age significantly influences certain aspects of green marketing awareness, while no significant difference is observed in some areas such as energy efficiency and belief in sustainability. The study emphasizes the need for targeted awareness programmes and effective communication strategies to enhance consumers' understanding of green marketing and promote sustainable consumption.

Index Terms—Green Marketing, Consumer Awareness, Consumer Durable Products, Age-wise Analysis, ANOVA, Environmental Sustainability, Coimbatore District.

I. INTRODUCTION

In recent years, environmental sustainability has become a major concern for governments, businesses, and consumers across the globe. Green marketing has emerged as an important strategy adopted by companies to promote eco-friendly products and environmentally responsible practices. Consumer durable products such as refrigerators, washing machines, air conditioners, and electronic appliances significantly contribute to energy consumption and

environmental pollution. Hence, creating awareness about green marketing practices, eco-labels, recycled materials, and environmental impact is essential for encouraging sustainable consumption behaviour. Consumers' awareness and experience towards green marketing vary according to demographic factors, particularly age, which influences perception, knowledge, and information-seeking behaviour. Understanding how different age groups perceive green marketing practices related to consumer durables is crucial for marketers and policymakers to design effective strategies. Therefore, the present study attempts to analyse the level of awareness and experience towards green marketing of selected consumer durable products among consumers in Coimbatore District, with special reference to age-wise differences.

II. REVIEW OF LITERATURE

Huang and Yue (2025) examined the influence of green marketing initiatives on customers' green purchasing behaviour and found that green marketing strategies significantly shape consumers' intentions to buy environmentally friendly products. Their literature synthesis highlights that theory-based marketing approaches—including green promotion, eco-labelling, and environmentally oriented messaging—positively influence consumer behaviour and increase green purchase intentions as environmental awareness improves. This underscores the role of *consumer knowledge and green marketing information* in fostering pro-environmental buying decisions.

Research indicates that eco-labels and environmental advertising have a significant role in shaping consumers' attitudes and awareness toward green products. A study published in *BMC Psychology* reports that eco-labelling increases consumer trust and transparency about environmental attributes, which enhances the likelihood of consumers choosing green products. The study also finds that green advocacy through advertising positively impacts purchase intentions by educating consumers about environmental benefits, reinforcing the importance of *marketing communications in promoting sustainable consumption*.

A recent sustainability study highlighted how greenwashing awareness influences consumer purchase behaviour. Apostolopoulos et al. (2025) found that when consumers are more aware of deceptive environmental claims, they experience less confusion and are more likely to engage in genuine green buying behaviour. This research emphasizes the mediating role of consumer clarity and perceived benefits in green markets, suggesting that heightened awareness of misleading green claims (greenwashing) can reduce scepticism and build more meaningful engagement with truly sustainable products.

III. OBJECTIVES OF THE STUDY

1. To examine the level of awareness and experience towards green marketing practices of selected consumer durable products among consumers in Coimbatore District.
2. To analyse whether there is a significant difference among age groups with respect to awareness and experience towards green marketing of selected consumer durable products using ANOVA.

IV. STATEMENT OF THE PROBLEM

Although green marketing has gained prominence in the consumer durable sector, there exists a considerable gap between marketing efforts and consumers' actual understanding of green concepts such as eco-labels, greenwashing, recycled materials, and environmental impact reduction. Many consumers are exposed to green advertisements, but their awareness and experience may differ across age groups due to variations in education, media exposure, and lifestyle.

In Coimbatore District, which is a rapidly growing industrial and commercial hub, the demand for consumer durable products is continuously increasing. However, limited empirical studies have examined how age influences consumers' awareness and experience towards green marketing practices related to consumer durables. This creates a need to investigate whether age plays a significant role in shaping consumer perceptions and awareness. Hence, the present study seeks to analyse age-wise differences in awareness and experience towards green marketing of selected consumer durable products in Coimbatore District.

V. RESEARCH METHODOLOGY

The study is empirical in nature and is based on primary data collected from consumers in Coimbatore District. A structured questionnaire was designed to measure consumers' awareness and experience towards green marketing practices related to selected consumer durable products. The questionnaire included statements relating to awareness of green marketing, eco-labels, recycled materials, greenwashing, environmental impact, and sustainability.

A total of 766 respondents were selected for the study. The collected data were coded, classified, and analysed using appropriate statistical tools. To test whether significant differences exist among different age groups with respect to awareness and experience towards green marketing, Analysis of Variance (ANOVA) was employed. Descriptive statistics such as mean and standard deviation were also used to understand the overall level of awareness.

Convenience Sampling Method

The study adopted the convenience sampling method to select respondents from different parts of Coimbatore District. This method was chosen due to time constraints and ease of access to respondents. Consumers who were readily available and willing to participate in the survey were included in the sample. Although convenience sampling does not ensure complete representativeness, it enabled the researcher to gather a large sample size of 766 respondents, thereby providing sufficient data for statistical analysis and meaningful interpretation.

VII. NEED FOR THE STUDY

There is an increasing emphasis on promoting green products and sustainable consumption, especially in the consumer durable sector which significantly affects environmental resources. However, consumers' awareness and experience towards green marketing practices remain uneven and fragmented. Understanding age-wise differences in awareness can help marketers, policymakers, and educators to design targeted awareness programmes and communication strategies.

The study is needed to identify gaps in knowledge related to eco-labels, greenwashing, environmental impact, and sustainability among different age groups. It also helps in assessing the effectiveness of current green marketing efforts and provides insights for improving environmental education and responsible consumer behaviour in Coimbatore District.

VIII. SCOPE OF THE STUDY

The scope of the study is confined to consumers of selected consumer durable products in Coimbatore District only. The study focuses exclusively on the level of awareness and experience towards green marketing practices such as eco-friendly products, eco-labels, recycled materials, environmental impact, and sustainability.

The analysis is limited to age-wise comparison using ANOVA and does not include other demographic variables such as income, education, or occupation. The findings of the study provide useful insights for marketers and policymakers in understanding how age influences awareness towards green marketing and can serve as a reference for future studies conducted in other regions or on other product categories.

IX. LIMITATIONS OF THE STUDY

1. The study is confined to Coimbatore District and hence the findings cannot be generalized to other districts or states.
2. The study is based on primary data collected through a questionnaire; therefore, the results depend on the honesty and perception of the respondents.
3. Convenience sampling method was adopted, which may not fully represent the entire population.

4. The study considers only age as the demographic variable for analysis and excludes other factors such as income, education, and occupation.
5. Time and resource constraints restricted a more detailed longitudinal analysis of consumer behaviour.

Null Hypothesis

H₀₁: There is no significant difference in age with respect to awareness of the concept of green marketing practiced by companies.

H₀₂: There is no significant difference in age with respect to awareness that some consumer durable products reduce environmental impact.

H₀₃: There is no significant difference in age with respect to awareness of eco-labels such as BEE Star Rating and ISO certifications.

H₀₄: There is no significant difference in age with respect to understanding the meaning of eco-friendly and green products.

H₀₅: There is no significant difference in age with respect to awareness that certain durable products consume less electricity and water.

H₀₆: There is no significant difference in age with respect to awareness that recycled materials are used in some consumer durables.

H₀₇: There is no significant difference in age with respect to awareness of government initiatives promoting green products.

H₀₈: There is no significant difference in age with respect to noticing advertisements highlighting environmental benefits of durable products.

H₀₉: There is no significant difference in age with respect to awareness that improper disposal of durables harms the environment.

H₀₁₀: There is no significant difference in age with respect to awareness of the term "green washing."

H₀₁₁: There is no significant difference in age with respect to regularly seeking information about the environmental performance of durable products.

H₀₁₂: There is no significant difference in age with respect to ability to identify eco-friendly durable products in the market.

H₀₁₃: There is no significant difference in age with respect to awareness that green products help reduce carbon footprint.

H₀₁₄: There is no significant difference in age with respect to awareness of green marketing practices among friends and family members.

H₀₁₅: There is no significant difference in age with respect to the belief that choosing green durable products supports environmental sustainability.

TABLE NO.1.

AGE AND LEVEL OF AWARENESS		N	Mean	Std. Deviation	Std. Error			S/NS
						F	P.VALUE	
I am aware of the concept of green marketing practiced by companies.	LESS THAN 20 YEARS	80	2.94	1.246	.139	4.207	.006	S
	21-30 YEARS	340	3.42	1.201	.065			
	30-40 YEARS	156	3.24	1.235	.099			
	40 AND ABOVE YEARS	190	3.45	1.287	.093			
	Total	766	3.34	1.242	.045			
I know that some consumer durable products reduce environmental impact.	LESS THAN 20 YEARS	80	2.90	1.298	.145	4.491	.004	S
	21-30 YEARS	340	3.38	1.281	.069			
	30-40 YEARS	156	3.17	1.324	.106			
	40 AND ABOVE YEARS	190	3.46	1.328	.096			
	Total	766	3.31	1.312	.047			
I am aware of eco-labels such as BEE Star Rating and ISO certifications.	LESS THAN 20 YEARS	80	3.59	1.270	.142	3.949	.008	S
	21-30 YEARS	340	3.42	1.251	.068			
	30-40 YEARS	156	3.35	1.313	.105			
	40 AND ABOVE YEARS	190	3.32	1.307	.095			
	Total	766	3.40	1.280	.046			
I understand the meaning of eco-friendly and green products.	LESS THAN 20 YEARS	80	2.74	1.270	.142	5.093	.002	S
	21-30 YEARS	340	3.27	1.350	.073			
	30-40 YEARS	156	3.01	1.398	.112			
	40 AND ABOVE YEARS	190	3.18	1.415	.103			
	Total	766	3.14	1.376	.050			
I am aware that certain durable products consume less electricity and water.	LESS THAN 20 YEARS	80	3.15	1.406	.157	.675	.568	NS
	21-30 YEARS	340	3.72	1.161	.063			
	30-40 YEARS	156	3.58	1.250	.100			
	40 AND ABOVE YEARS	190	3.71	1.194	.087			
	Total	766	3.63	1.225	.044			
	LESS THAN 20 YEARS	80	3.54	1.321	.148	4.439	.003	

I know that recycled materials are used in some consumer durables.	21-30 YEARS	340	3.47	1.263	.068			
	30-40 YEARS	156	3.33	1.350	.108			
	40 AND ABOVE YEARS	190	3.51	1.394	.101			
	Total	766	3.46	1.320	.048			
I am aware of government initiatives promoting green products.	LESS THAN 20 YEARS	80	3.41	1.447	.162	1.357	.255	NS
	21-30 YEARS	340	3.55	1.308	.071			
	30-40 YEARS	156	3.49	1.288	.103			
	40 AND ABOVE YEARS	190	3.72	1.362	.099			
	Total	766	3.56	1.334	.048			
I notice advertisements highlighting environmental benefits of durables.	LESS THAN 20 YEARS	80	3.46	1.449	.162	2.316	.014	S
	21-30 YEARS	340	3.54	1.283	.070			
	30-40 YEARS	156	3.51	1.267	.101			
	40 AND ABOVE YEARS	190	3.62	1.390	.101			
	Total	766	3.55	1.323	.048			
I know that improper disposal of durables harms the environment.	LESS THAN 20 YEARS	80	3.05	1.517	.170	6.021	.000	S
	21-30 YEARS	340	3.56	1.217	.066			
	30-40 YEARS	156	3.38	1.205	.096			
	40 AND ABOVE YEARS	190	3.72	1.223	.089			
	Total	766	3.51	1.263	.046			
I am aware of the term "greenwashing."	LESS THAN 20 YEARS	80	3.04	1.436	.161	7.199	.000	S
	21-30 YEARS	340	3.55	1.315	.071			
	30-40 YEARS	156	3.47	1.287	.103			
	40 AND ABOVE YEARS	190	3.83	1.257	.091			
	Total	766	3.55	1.324	.048			
I regularly seek information about environmental performance of durables.	LESS THAN 20 YEARS	80	3.59	1.198	.134	1.892	.129	NS
	21-30 YEARS	340	3.31	1.390	.075			
	30-40 YEARS	156	3.56	1.271	.102			
	40 AND ABOVE YEARS	190	3.33	1.365	.099			
	Total	766	3.40	1.344	.049			
I can easily identify eco-friendly durable	LESS THAN 20 YEARS	80	3.28	1.340	.150	.615	.606	NS
	21-30 YEARS	340	3.24	1.299	.070			

products in the market.	30-40 YEARS	156	3.30	1.346	.108			
	40 AND ABOVE YEARS	190	3.12	1.334	.097			
	Total	766	3.23	1.320	.048			
I am aware that green products help reduce carbon footprint.	LESS THAN 20 YEARS	80	3.64	1.305	.146	2.394	.067	NS
	21-30 YEARS	340	3.36	1.366	.074			
	30-40 YEARS	156	3.28	1.398	.112			
	40 AND ABOVE YEARS	190	3.16	1.395	.101			
	Total	766	3.32	1.377	.050			
My friends and family are aware of green marketing practices.	LESS THAN 20 YEARS	80	3.06	1.453	.162	3.467	.022	S
	21-30 YEARS	340	3.28	1.290	.070			
	30-40 YEARS	156	3.30	1.215	.097			
	40 AND ABOVE YEARS	190	3.09	1.267	.092			
	Total	766	3.21	1.289	.047			
Choosing green durables supports environmental sustainability	LESS THAN 20 YEARS	80	3.15	1.379	.154	.474	.700	NS
	21-30 YEARS	340	3.31	1.340	.073			
	30-40 YEARS	156	3.29	1.301	.104			
	40 AND ABOVE YEARS	190	3.21	1.300	.094			
	Total	766	3.27	1.325	.048			

X. FINDINGS OF THE STUDY

The present study examined the influence of age on consumers' level of awareness and experience towards green marketing practices related to selected consumer durable products using ANOVA. The findings clearly indicate that age plays an important role in shaping certain dimensions of green awareness and perception among consumers, while it does not significantly affect some other aspects. The analysis reveals that there is a statistically significant difference among different age groups with regard to awareness of the concept of green marketing practiced by companies, knowledge that certain consumer durable products help in reducing environmental impact, awareness of eco-labels such as BEE Star Rating and ISO certifications, and understanding of the meaning of eco-friendly and green products. These results suggest that consumers belonging to different age categories perceive and comprehend the idea of green marketing

and environmentally friendly products at varying levels.

Further, significant differences among age groups are also observed in awareness about the use of recycled materials in consumer durables, noticing advertisements that highlight environmental benefits, awareness that improper disposal of durables harms the environment, familiarity with the term "greenwashing," and perception regarding friends' and family members' awareness of green marketing practices. This indicates that exposure to information sources such as advertisements, social circles, and environmental communication varies across age groups, thereby influencing their awareness and experience differently. In particular, middle and higher age groups appear to be relatively more informed about issues such as greenwashing and environmental consequences of improper disposal when compared with younger age groups, highlighting

the role of life experience and prolonged market exposure in shaping green awareness.

On the other hand, the study finds no significant difference among age groups in certain aspects such as awareness that durable products consume less electricity and water, awareness of government initiatives promoting green products, regular seeking of information about the environmental performance of durables, ability to identify eco-friendly products in the market, awareness that green products help reduce carbon footprint, and belief that choosing green durables supports environmental sustainability. These results imply that some core environmental perceptions and general beliefs are shared uniformly across age categories, possibly due to widespread media coverage, educational campaigns, and the growing public discourse on sustainability and climate change. Such uniformity reflects a broad societal acceptance of the importance of green products, irrespective of age differences.

Overall, the findings of the study demonstrate that age has a partial but meaningful influence on consumers' awareness and experience towards green marketing of selected consumer durable products. While significant variations exist in knowledge-oriented and exposure-related factors, certain attitudinal and belief-based aspects remain consistent across age groups. This suggests that marketers and policymakers should adopt age-specific communication strategies to enhance awareness about technical aspects such as eco-labels, recycled materials, and green washing, while continuing to reinforce common sustainability messages across all age segments. In conclusion, the results underscore the need for targeted green marketing and educational initiatives that address the varying levels of awareness among different age groups, thereby promoting informed and environmentally responsible consumer behaviour in the market for consumer durable products.

XI. SUGGESTIONS OF THE STUDY

The findings of the study indicate that age significantly influences consumers' awareness and experience in several aspects of green marketing related to selected consumer durable products, such as awareness of green marketing concepts, eco-labels, greenwashing, environmental impact, recycled materials, and improper disposal of durables. Hence,

marketers and policymakers should design age-specific awareness programmes and communication strategies. Younger consumers require more structured educational campaigns focusing on the meaning of eco-friendly products, eco-labels (BEE Star Rating and ISO certifications), and the dangers of greenwashing. These can be effectively delivered through digital platforms, social media, and interactive campaigns that appeal to younger age groups.

Since significant differences were observed in noticing green advertisements and understanding environmental consequences, companies should enhance the clarity and credibility of green advertisements by providing transparent and easily understandable information. Special emphasis should be placed on explaining technical aspects such as recycled materials usage and environmental impact reduction in simple language. Government agencies and educational institutions may also collaborate with manufacturers to conduct workshops, exhibitions, and awareness drives on green consumer durables, particularly targeting age groups that show comparatively lower awareness levels.

The study also reveals no significant age-wise difference in awareness regarding energy and water efficiency, government initiatives, carbon footprint reduction, and belief in environmental sustainability. This uniformity should be strengthened through continuous public awareness campaigns that reinforce these common beliefs across all age groups. Furthermore, as many consumers are not actively seeking information about environmental performance or easily identifying eco-friendly products, companies should improve eco-labelling visibility, in-store guidance, and digital information tools to support informed purchase decisions. Overall, a combination of targeted education, transparent marketing communication, and supportive government policies can significantly enhance consumer awareness and encourage responsible consumption of green consumer durable products.

XII. CONCLUSION

The present study examined the influence of age on consumers' level of awareness and experience towards green marketing practices related to selected consumer durable products using ANOVA. The results reveal that age has a significant impact on several dimensions

of green awareness, including awareness of green marketing practices, reduction of environmental impact, eco-labels, understanding of eco-friendly products, use of recycled materials, exposure to green advertisements, awareness of improper disposal effects, knowledge of greenwashing, and awareness among friends and family members. These findings indicate that consumers belonging to different age groups vary in their exposure to environmental information and in their understanding of green marketing concepts.

However, the study also shows that age does not significantly influence certain aspects such as awareness of energy and water efficiency, government initiatives promoting green products, information-seeking behaviour, ability to identify eco-friendly products, awareness of carbon footprint reduction, and belief that choosing green durables supports environmental sustainability. This suggests that some environmental attitudes and general sustainability beliefs are widely shared across age groups, reflecting the growing societal concern for environmental protection.

Overall, the findings confirm that age plays a partial but meaningful role in shaping consumers' awareness and experience towards green marketing of selected consumer durable products. While differences exist in knowledge-oriented and exposure-related dimensions, common environmental values prevail across all age categories. The study highlights the need for age-specific marketing strategies and educational interventions to bridge awareness gaps and to promote informed and responsible consumption of green consumer durable products. In conclusion, strengthening consumer awareness through targeted communication and transparent green marketing practices will contribute significantly towards sustainable consumption and long-term environmental protection.

REFERENCE

- [1] Huang, Q., & Yue, W. (2025). *Literature Review on the Impact of Green Marketing on Customers' Green Purchasing Behavior*, *Scientific Journal of Economics and Management Research Impact of green advertisement and environmental knowledge on intention of consumers to buy green products*, BMC Psychology (2025).
- [2] Apostolopoulos, N., Makris, I., Deirmentzoglou, G. A., & Apostolopoulos, S. (2025). *The Impact of Greenwashing Awareness and Green Perceived Benefits on Green Purchase Propensity, Sustainability*, MDPI.
- [3] Peattie, K., & Crane, A. (2005). Marketing and the environment: A review of green marketing research. *Journal of Business Ethics*, 63(4), 357–370. → This study provides a conceptual foundation for green marketing and consumer awareness.
- [4] Ottman, J. A., Stafford, E. R., & Hartman, C. L. (2006). Avoiding green marketing myopia: Ways to improve consumer appeal for environmentally preferable products. *Environment*, 48(5), 22–36. Highlights consumer perception, eco-labels, and environmental benefits in green marketing.
- [5] D'Souza, C., Taghian, M., & Khosla, R. (2007). Examination of environmental beliefs and its impact on the influence of price, quality and demographic characteristics with respect to green purchase intention. *Journal of Targeting, Measurement and Analysis for Marketing*, 15(2), 69–78. → Explains how demographic variables (including age) influence green awareness and purchase intention.
- [6] Rex, E., & Baumann, H. (2007). Beyond ecolabels: What green marketing can learn from conventional marketing. *Journal of Cleaner Production*, 15(6), 567–576. → Discusses the role of eco-labels and consumer understanding in green product identification.
- [7] Joshi, Y., & Rahman, Z. (2015). Factors affecting green purchase behaviour and future research directions. *International Strategic Management Review*, 3(1–2), 128–143. → Reviews determinants of green awareness, attitudes, and sustainable consumption behaviour.