

Embracing Green Consumerism: A Commitment to Sustainability and Eco-Conscious FMCG Products

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Abstract

In recent decades, we have witnessed a significant shift in consumer behavior, primarily driven by the rise of green marketing and the growing movement toward green consumerism. The fast-moving consumer goods (FMCG) industry, while experiencing rapid growth, also faces substantial environmental challenges, such as the excessive waste generated by plastic containers and bottles used for fresh juice. In response, brands are increasingly prioritizing sustainable practices and aligning their strategies with the evolving demands of consumers who are more environmentally conscious than ever. This research adopts a descriptive and exploratory approach, gathering insights from both urban and rural households through a carefully designed questionnaire. By employing Exploratory Factor Analysis (EFA) to evaluate demographic and non-metric variables, we can uncover valuable insights without being constrained by a rigid hypothesis framework. The observation of this research is crucial for a diverse range of stakeholders, including green marketing companies, environmental advocates, agricultural scientists, and researchers.

Through our work, we highlight key correlations that drive sustainable practices, influence the demand for eco-friendly products, and reflect the evolving nature of consumer behavior. By leveraging these insights, we can catalyze meaningful change and pave the way for a more sustainable future.

Keywords

FMCG, Green Consumerism, Green Marketing, Sustainability.

1. Introduction

The Fast-Moving Consumer Goods (FMCG) sector is a vital component of the global economy, fulfilling the daily needs of consumers with an extensive range of products. From delicious food and refreshing beverages to personal care essentials and household necessities, FMCG not only enhances our quality of life but also drives economic growth and innovation.. Despite its critical importance, this sector also has a substantial environmental impact, being a significant contributor to greenhouse gas (GHG) emissions. The total emissions attributed to the FMCG sector are staggering, reaching approximately 2.9 billion metric tons each year (Agarwal and Ansari,2022) . Alarminglly, food production alone within this sector accounts for around 26% of the global GHG emissions, underscoring its influence on climate change. As the focus on sustainability intensifies, driven by both regulatory frameworks and consumer awareness, FMCG companies find themselves under mounting pressure to mitigate their environmental footprint.

Today's consumers are increasingly environmentally conscious, with research indicating that a remarkable 78% prioritize sustainability when making purchasing decisions. In recognition of this shifting consumer landscape, several leading FMCG companies have set ambitious targets aimed at achieving net-zero emissions (Jain and Hudnurkar, 2022) . For instance, ITC Limited is striving for net-zero by 2039, while Hindustan Unilever Limited (HUL) and Nestlé India have set their sights on 2050. These commitments highlight the urgent necessity for effective sustainability strategies, with carbon credits and emissions offsetting emerging as critical tools in the quest to minimize environmental impact and attain sustainability goals (World Economic Forum, Report, 2022).In this research, we focus on the fast-moving consumer goods (FMCG) industry in India. FMCG companies are taking initiatives to adopt green marketing concepts and promote their environmentally friendly and sustainable products. Other efforts to benefit the environment include conserving renewable resources during production and implementing processes such as installing solar energy and biogas plants, as well as using rainwater harvesting methods.

Additionally, recycling waste produced during manufacturing and reusing plastic waste are significant contributions toward sustainability. Green” initiatives have a profound impact on every person on Earth, including customers, stockholders, and employees who all gain from a company's operations. This awareness has prompted many CEOs to act and transform their businesses and products to be more sustainable. They understand the significant benefits of positioning their companies as leaders, innovators, and responsible guardians of both society and the environment. Businesses are actively enhancing their internal and external communications to reflect their commitment to sustainability. They are publishing detailed sustainability reports and investing in high-budget advertising and online campaigns to attract conscious consumers who prefer to support organizations that prioritize environmental responsibility. It's no surprise that commercials from influential companies, spending millions to showcase their dedication to sustainability and promote groundbreaking new products, are regular features in trusted publications like Fortune or Business Week and on major television news outlets. By embracing these green initiatives, companies not only contribute to a healthier planet but also connect with a growing audience that values corporate responsibility (Reddy et al. 2023). Green marketing practices have been steadily gaining traction in the twenty-first century, spurred by the rapid pace of technological advancement and growing environmental awareness among consumers. Numerous studies have been conducted to explore consumer responses to green products, shedding light on purchasing motivations and preferences. Conversely, a distinct body of research has focused on quantifying the impact of green marketing strategies within the fast-moving consumer goods (FMCG) sector, which is particularly noteworthy due to its significant influence on everyday purchasing habits.

This study seeks to establish a robust model that effectively links green marketing practices to competitive advantage. By carefully examining how these practices influence the performance and market positioning of FMCG companies, we aim to showcase the critical role of sustainability in driving business success. The findings indicate that, while green marketing practices are gaining momentum in the FMCG sector, the overall correlation between the independent variables (green marketing practices) and the dependent variable (competitive advantage) appears to be statistically insignificant.

This discrepancy suggests that, despite the rising interest in environmentally friendly products and marketing approaches, the direct impact of such initiatives on competitive advantage may not yet be fully realized within this industry. This dynamic is likely influenced by a combination of rapid development and shifting consumer preferences, which require companies to continuously adapt their green marketing strategies. Therefore, while many researchers have explored how consumers engage with green products, there remains a need for further examination of the tangible effects of green marketing initiatives, specifically in the FMCG landscape.

1.1 Research Questions

RQ 1: To what extent are consumers aware of eco-friendly products when making purchasing decisions?

RQ2: How do demographic characteristics influence consumer buying behavior?

RQ3: In what ways does consumer buying behavior impact the sustainability and added value of green products?

RQ4: How do purchasing decisions affect the sales of eco-friendly fast-moving consumer goods (FMCG)?

1.2 Objective of the research

1. To gauge consumer awareness about the benefits of choosing eco-friendly products in their purchases.
2. To explore how demographic factors significantly shape buying behaviors toward sustainable choices.
3. To investigate consumers' motivations and their commitment to sustainability and the added value of green products.
4. To analyze how consumer decision-making processes drive the demand for eco-friendly fast-moving consumer goods (FMCG).

Hypothesis Development:

H0.1: There is no relationship between consumers' awareness of eco-friendly products when making purchasing decisions.

H1.1: There is a relationship between consumers' awareness of eco-friendly products when making purchasing decisions.

H0.2: There is no effect of demographic characteristics in influencing the buying behaviour.

H1.2: There is no effect of demographic characteristics in influencing the buying behaviour.

2. Review of Literature

This review of the Literature discusses the various aspects of green marketing in the context of FMCG green products. This article explains the role of consumer behaviour in buying and the usage of green products. The literature is retrieved from various peer-reviewed journals and published articles. The literature explains the concept of green marketing in the context of the global scenario (Jain and. Hudnurkar , 2022)

Green Marketing is an emerging concept that addresses environmental and social issues to develop a new trend of green products. Products that are manufactured using renewable resources and are sustainable are termed green products. Products that are manufactured from natural ingredients, are recycled in nature, and are free from chemical and toxic substances are also classified as green products. **Green products** are environmentally friendly and safe for consumption (Sharma and Mahlawat,2021).

Green Consumerism is a crucial aspect of sustainability where consumers can focus on green products that are eco-friendly and energy-efficient, ultimately protecting and conserving natural resources (Akenji, 2014). Green consumerism refers to the reuse, recycling, and reduction of materials into more energy-efficient and environment-friendly forms. The main functions performed through green consumerism are to practice sustainable consumption, use energy-saving appliances, and support organic products to reduce carbon footprints (Martinez et al. 2020). Green consumerism is associated with market-represented eco-labeled and energy-efficient products. In the case of FMCG companies, they portrayed eco-labeled products as motivation for their consumers and stakeholders.

Green consumerism emphasizes eco-friendly products because they are free from chemicals and toxic substances. Their choice and preferences are based on the availability, durability, and sustainability of products and services (Rana and Paul, 2017).

Green Consciousness is the intensity at which consumers can be aware of environmental-related issues about the consumption of products and services. Consumers are inclined towards resolving the issues and mitigating the risks. Much research has been conducted on the area of green consciousness in the last few years to raise consumer intention towards green products. The understanding of purchasing eco-friendly products among consumers pushes forward Green Consciousness (Kumar and Ghodeswar, 2015). Consumers are more sensitized, aware, and alert to the usage of eco-friendly products in European and Asian countries. To promote sustainability the information related to environment-friendly aspects of products and their performance is termed as **Green Awareness**. To purchase the right kind of product, awareness among consumers is mandatory. Green consciousness and green awareness develop a positive attitude among consumers for purchasing green products (Sharma, 2021). There is a gap between green consciousness and awareness related to purchase intention, whether it is positively or negatively influenced (Sharma and Kushwaha, 2019). Education is a predictor in research that shows a positive contribution to the development of green awareness and consciousness among consumers influences green attitude (Maruyama et al., 2019). **Green Attitude** is a cognitive action and an important factor in any individual that influences their intention to purchase green products (Reddy, et al., 2023). Apart from individual factors, there are several characteristics involved in the purchasing and decision-making process of green products (Tandon and Sethi, 2017). Consumers' attitude is positively and negatively influenced by the purchasing and usage of green products, determining their quality and value-addition in them (Biswas & Roy, 2016). Environmental issues are also contributing as an important factor to purchasing green products and the buying pattern of an individual involves values, beliefs, and experiences about products (Nguyen et al., 2017) This tendency among consumers develops a gap in their attitude and actual purchase behavior.

4. Methodology

This study leverages both primary and secondary data sources to provide a comprehensive exploration of sustainability in Fast-Moving Consumer Goods (FMCG). Our primary data collection involves engaging households in North India through a carefully designed semi-structured questionnaire utilizing a point rating scale. The questionnaire comprises twenty targeted statements that align with the core objectives of our research. With a sample size of 250 participants, we employ simple random sampling to ensure the reliability of our data. Furthermore, the analysis utilizes explorative factor analysis via SPSS, allowing us to draw insightful conclusions that contribute to the understanding of sustainable practices in FMCG products.

5. Analysis and Interpretation

Factor Analysis is a data reduction technique to determine the number of factors for extraction and rotation. It has underlying latent variables that are reflected in the observed variable. Factor analysis requires a large sample size. This study considered a good sample size of two hundred fifty. The following steps are involved in this technique as follows:

1. Measure sampling adequacy by KMO and Bartlett's Test: In the given output table (Table 1), the KMO value of the sample is .669 suggested minimum consumer awareness towards eco-friendly and sustainability.. Which indicates its range is between 0 and 1, and the sampling adequacy is mediocre. Hence, it shows the correlation among variables. Bartlett's test of Sphericity is used to test the null hypothesis where the correlation matrix is an identity matrix. The value of significance less than .001 implies that we reject the null hypothesis. This test is permissible to conduct factor analysis with the given output.

Table 1. KMO and Bartlett's Test of Sphericity

KMO and Bartlett's Test		
Kaiser–Meyer–Olkin Measure of Sampling Adequacy.		.669
Bartlett's Test of Sphericity	Approx. Chi-Square	672.601
	df	190
	Sig.	<.001

In the provided output table (Table 2), the extraction communalities represent the variance estimates for each variable in the final 20 items. A high value indicates a good fit with the factor solution, suggesting that the item should be retained in the analysis. Values above 0.6 (such as items Q2, Q1, Q3, Q10, Q11, Q12, Q13, and Q20) indicate strong correlations with the extracted factors, implying that these items are well represented by the factor structure. Values between 0.5 and 0.6 (such as items Q4, Q5, Q6, Q16, Q17, Q18, and Q19) indicate moderate representation, though with slightly less strength. Values below 0.5 (such as items Q7, Q14, and Q15) suggest weaker correlations with the extracted factors, indicating these items do not closely align with the factor structure. In the provided output table (Table 3), the first Eigenvalue was 14.863, which accounts for 9.422% of the variance in the original data. The second Eigenvalue was 9.993, associated with the second factor, which explains 18.873% of the variance in the original data. The subsequent Eigenvalues of 8.117, 6.761, and 5.632 correspond to a total variance of 56.078% in the original dataset. Therefore, the cumulative percentage of the total variance explained by the extracted factors is 56.078%, significantly reducing the complexity of the dataset while incorporating these components, albeit with some loss of information.

The following output includes a table of communality values, which shows how much variance in the variables is explained by the extracted factors. A communality value greater than 0.5 is required for the variables to be considered in further analysis; otherwise, these variables should be excluded from subsequent steps of the factor analysis. For instance, the variance in “Green consumerism” is explained by over 90%, while the variance in “consumer consciousness” is explained by 71.5% (refer to Table 2). The next item in the output is a table of communality values, which indicates how much variance in the variables is accounted for by the extracted factors. A communality value of more than 0.5 is required for consideration in further analysis; otherwise, those variables should be excluded from subsequent steps of the factor analysis. For example, over 90% of the variance in “Green consumerism” is accounted for, while 71.5% of the variance in “consumer consciousness” is also accounted for (see Table 2). In simpler terms, variables with a communality value greater than 0.5 are deemed significant and should be retained for further analysis. Those below this threshold should be excluded. The factors identified in this analysis are essential for explaining the observed variances in the data, as further illustrated in Table 2.

Table 2. Communalities

Communalities		
	Initial	Extraction
Q1	1.000	.715
Q2	1.000	.680
Q2	1.000	.621
Q4	1.000	.531
Q5	1.000	.438
Q6	1.000	.581
Q7	1.000	.290
Q8	1.000	.537
Q9	1.000	.503
Q10	1.000	.601
Q11	1.000	.642
Q12	1.000	.651
Q13	1.000	.666
Q14	1.000	.474
Q15	1.000	.434
Q16	1.000	.587
Q17	1.000	.569
Q18	1.000	.518
Q19	1.000	.519
Q20	1.000	.659
Extraction Method: Principal Component Analysis.		

Table 3. Total Variance explained

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.973	14.863	14.863	2.973	14.863	14.863	1.884	9.422	9.422
2	1.999	9.993	24.856	1.999	9.993	24.856	1.873	9.363	18.785
3	1.623	8.117	32.973	1.623	8.117	32.973	1.815	9.077	27.862
4	1.352	6.761	39.734	1.352	6.761	39.734	1.712	8.558	36.420
5	1.126	5.632	45.366	1.126	5.632	45.366	1.595	7.973	44.394
6	1.098	5.490	50.856	1.098	5.490	50.856	1.201	6.007	50.400
7	1.044	5.222	56.078	1.044	5.222	56.078	1.136	5.678	56.078
8	.958	4.792	60.871						
9	.918	4.589	65.460						
10	.884	4.419	69.879						
11	.860	4.302	74.181						
12	.761	3.804	77.985						
13	.713	3.567	81.551						
14	.703	3.516	85.067						
15	.630	3.151	88.218						
16	.542	2.711	90.929						
17	.507	2.536	93.465						
18	.500	2.499	95.964						
19	.435	2.177	98.140						
20	.372	1.860	100.000						
Extraction Method: Principal Component Analysis.									



Figure 1. Scree Plot

A scree plot displays the eigenvalues on the y-axis and the factors on the x-axis. This graph is useful for deciding how many factors to keep in the analysis. The key point of interest is where the curve begins to flatten out. In this case, the flattening occurs between factors 3 and 4. Additionally, it can be observed that from factor 4 onward, the eigenvalues drop below 1. Therefore, only three factors should be retained. This result is supported by the scree plot shown in Figure 1, which bends at the fifth component.

Table 4. Component Matrix

Component Matrix ^a							
	Component						
	1	2	3	4	5	6	7
Q19	.649	-.255	.054	.062	-.036	.121	.102
Q18	.614	-.219	-.026	.128	-.044	.191	-.194
Q13	.592	-.038	-.085	-.533	.045	-.014	-.140
Q14	.462	.051	-.096	-.240	.264	-.341	.073
Q15	.414	-.041	-.054	.328	-.079	-.014	.380
Q7	.382	.047	-.122	.256	.082	.079	-.223
Q6	.187	.688	-.059	.140	-.170	-.103	.096
Q2	.195	.625	-.328	.004	-.051	-.248	.143
Q16	.330	-.564	-.276	.082	-.083	-.155	.215
Q5	.269	.543	-.153	.151	.064	-.031	.138
Q1	.309	.037	.783	.002	-.014	-.071	-.025
Q2	.364	.008	.659	.043	.061	-.296	.139
Q17	.263	-.389	-.444	.275	.139	-.126	.204
Q12	.546	-.022	-.010	-.582	.070	.045	.081
Q9	.300	-.147	.103	.505	.094	-.152	-.306
Q11	-.146	-.045	-.082	-.090	.652	.404	.122
Q20	.161	.300	-.091	.123	.577	-.168	-.397
Q8	.380	.166	.052	.178	-.132	.493	-.264
Q4	.386	.314	-.050	-.052	-.174	.465	.175
Q10	-.117	.081	.316	.195	.390	.204	.498

Extraction Method: Principal Component Analysis.
a. 7 components extracted.

Table 4 effectively illustrates the loadings of eight items across three extracted factors. These loadings serve as indicators of how strongly each item contributes to its respective variable, with higher absolute values reflecting a more significant influence. We have thoughtfully categorized the eight items into three key variables based on the most impactful items, demonstrating similar responses across components 1, 2, and 3. To maintain clarity for our readers, we have opted to suppress loadings below 0.5, which are highlighted in the table, allowing for a more streamlined interpretation of the data.

Moreover, **Table 4** sheds light on the important presence of cross-loading, indicating that certain factors impact multiple components. This phenomenon is particularly notable for factors such as product cost, popularity, prestige, and quality. Addressing these cross-loadings presents a valuable opportunity for us to enhance the reliability of our results. One constructive approach is to implement rotation on the factor loadings. This technique enables us to explore the rotated component matrix, providing clearer insights into the components and significantly improving the overall accuracy and effectiveness of our analysis.

In addition, **Table 4** offers meaningful insights into the intricate relationships among the variables, highlighting that specific factors—such as consumer choice and preferences, affordability, and the appeal of eco-friendly products—simultaneously influence multiple components. By proactively addressing these cross-loadings, we can strengthen the reliability and validity of our analysis, leading to more robust conclusions.

To rectify this issue and achieve more accurate results, one effective strategy is to redistribute the factor loadings through a process known as rotation. Rotation can help clarify the relationships among the components by simplifying the structure of the data. By examining the rotated component matrix, we can better identify which components are more closely associated with specific factors. Implementing this rotation technique is expected to significantly improve the overall accuracy and effectiveness of our analysis, leading to more insightful conclusions.

Table 4 illustrates the loadings for eight items organized under three distinct variables. Each loading represents the extracted values of the items in relation to the identified factors. It is important to note that the higher the absolute value of a loading, the more significant that factor's contribution is to the variable in question. In this analysis, we have divided the eight items into three variables based on their relevance and the similarity of responses across components 1, 2, and 3.

To facilitate ease of interpretation, we have suppressed all loadings that fall below the threshold of 0.5. This decision helps to clarify the visual presentation of the data by leaving gap areas in the table that denote these lesser contributing factors.

Table 5.

Rotated Component Matrix^a							
	Component						
	1	2	3	4	5	6	7
Q2	.754	.130	-.002	-.128	-.078	.064	-.096
Q6	.730	-.049	-.123	.083	.114	.007	-.104
Q5	.629	.045	.027	.008	.132	.119	.092
Q13	.000	.780	.036	.031	.191	.051	-.129
Q12	.031	.777	.049	.093	.139	-.120	.034
Q14	.206	.541	.213	.131	-.155	.228	.013
Q17	-.042	.035	.700	-.219	-.039	.157	.044
Q16	-.218	.170	.696	-.063	-.029	-.057	-.133
Q15	.254	-.036	.538	.189	.181	-.079	.066
Q19	-.056	.305	.454	.246	.395	.008	-.007
Q1	-.074	.088	-.148	.810	.152	.018	-.003
Q2	.040	.133	.068	.806	-.049	.061	.008
Q8	.079	.001	-.070	.027	.719	.090	-.023
Q4	.337	.175	.001	-.014	.547	-.261	.136
Q18	-.107	.239	.328	.110	.526	.194	-.122
Q7	.109	.043	.180	-.006	.349	.345	-.057
Q20	.198	.132	-.153	-.033	-.020	.743	.159
Q9	-.068	-.192	.274	.243	.205	.508	-.166
Q11	-.167	.089	-.085	-.233	.021	.143	.724
Q10	.073	-.211	.055	.282	-.065	-.112	.672

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization. ^a

a. Rotation converged in 12 iterations.

Rotated Component Matrix

Furthermore, as explicitly depicted in **Table 4**, the prevalence of cross-loading means that one factor may be measuring more than one component. This phenomenon is particularly pronounced in **Table 4**, where factors related to the cost of the product, the popularity of the product, the prestige associated with the product, and its overall quality show significant overlap. To derive more accurate and relevant results from our analysis, it is essential to mitigate these cross-loadings. The recommended solution involves redistributing the factor loadings through rotation, allowing for a more nuanced examination of the rotated component matrix. This approach will enable us to effectively identify and isolate the specific components associated with each factor, thereby enhancing the overall interpretability of our result.

The concept of rotation in factor analysis serves the purpose of simplifying the interpretation of the relationships among variables by reducing the number of factors on which those variables exhibit significant loadings. It is crucial to note that rotation does not alter the underlying data; rather, it reorganizes how we visualize and comprehend the analysis.

In some instances, a variable may show substantial loadings on two or more components. Consequently, it becomes necessary to evaluate the factor loading values carefully. If a variable has a loading value below the threshold of 0.5—or an adjusted limit, such as 0.6 as per the research requirements—it can be considered for inclusion in further analysis. However, when a variable demonstrates a loading greater than 0.5 (or 0.6) on multiple components, this indicates that the variable is relevant to more than one factor, thereby diminishing its effectiveness in accurately measuring a specific category within the analysis.

For instance, as illustrated in Table 5, the variables "experience with the green product" and "Eco-friendly products" show significant loadings on multiple components. Therefore, these variables are considered insufficient for further exploration in this context. Consequently, subsequent analyses, such as impact analysis or other statistical evaluations, will be conducted using all variables except for "Green Consumerism" and "Brand Awareness," as noted in Table 5. This approach ensures a more focused and meaningful interpretation of the data. In the output table (**Table 5**), the rotated component matrix displays the rotated factor loadings. The factors are fairly desirable, with at least three variables per factor having loadings above 0.17; however, each factor comprises many complex variables. The three items (Q2, Q5, and Q6) loaded onto Factor 1, which is labeled as "Eco-Friendly Products." The three items (Q12, Q13, and Q14) loaded onto Factor 2, labeled "Purchase Decision." Factor 3 includes three items (Q15, Q16, and Q17), labeled "Affordability." Factor 4 consists of two items (Q1 and Q2) labeled "Sustainability." Factor 5 includes three items (Q4, Q8, and Q18), labeled "Awareness." Factor 6 consists of two items (Q9 and Q20), labeled "Choice and Preferences," while Factor 7 is made up of two items (Q10 and Q11), labeled "Brands."

Table 6. Component Transformation Matri

Component Transformation Matrix							
Component	1	2	3	4	5	6	7
1	.238	.570	.453	.325	.506	.198	-.113
2	.849	-.039	-.512	.017	.081	.068	.069
3	-.239	-.115	-.349	.886	.046	-.093	.106
4	.159	-.783	.412	.127	.223	.354	.021
5	-.085	.197	-.015	-.017	-.226	.597	.738
6	-.201	-.089	-.194	-.265	.749	-.284	.450
7	.305	-.022	.451	.149	-.271	-.620	.473
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.							

The matrix shows how the components are transformed in relation to each other after applying varimax rotation, which is an orthogonal rotation method that enhances interpretability by maximizing the variance of squared loadings for each component, making the factors easier to understand. Each cell in the matrix reflects the correlation between the original unrotated component and the rotated component. Component two is the original extraction, which correlates highly with itself after rotation (.849), which suggests that varimax rotation did not dramatically change the orientation of component 2. Conversely, component 4 shows a correlation of -.783 with component 2 after rotation, indicating a shift in orientation when these two components become less aligned or more distinct. Overall, the rotation was largely successful in achieving independent components, with some minor correlations remaining between pairs of components.

The three-dimensional structure in rotated space is an innovative design featuring three distinct compartments: components 1, 2, and 3. Each compartment plays a crucial role in enhancing the structure's functionality and efficiency (Figure 2).

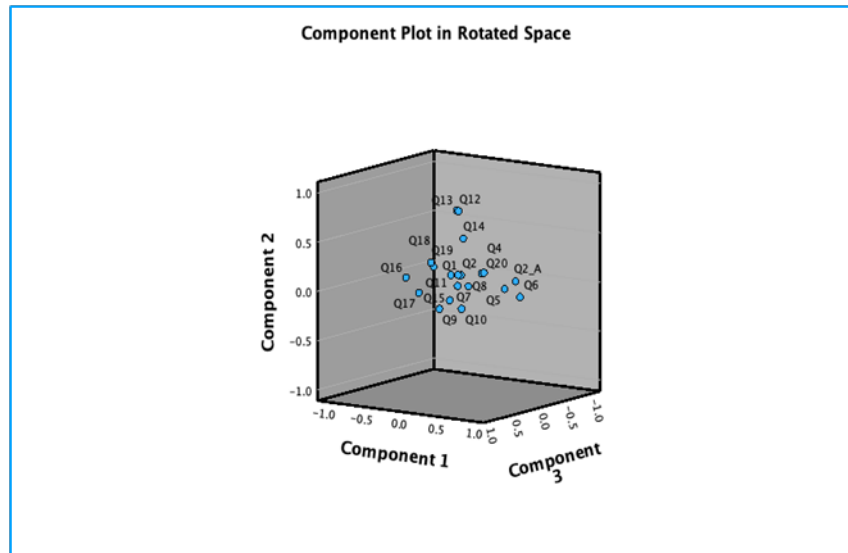


Figure 2. SPSS Output for Factor Plot for Three Factors Illustrated in Two-Dimensional Space

6. Conclusion and Findings

This research comprehensively analyzes the environmental implications associated with fast-moving consumer goods (FMCG). The findings reveal a significant shift in consumer behavior, with individuals becoming increasingly conscientious and deliberate in purchasing decisions. As awareness of environmental issues rises, there is a clear trend toward products that satisfy everyday needs and offer added value, such as eco-friendliness or sustainable packaging. The study specifically focused on households and consumers in northern India, capturing diverse perspectives that include both males and females. By concentrating on this region, the research underscores the importance of cultural and socio-economic factors in shaping consumer preferences, ultimately highlighting a growing demand for products that reflect more sustainable and responsible consumption practices. Data of the findings reveals the male respondents 52.8% and 47.2 % of the female respondents are aware of eco-friendly products. Most of the population is from the younger population. This research provides an in-depth analysis of the environmental ramifications associated with fast-moving consumer goods (FMCG), a sector that plays a vital role in daily consumer life. Our findings reveal a substantial transformation in consumer behavior, as individuals increasingly prioritize mindfulness and intentionality in their purchasing decisions. As awareness of pressing environmental issues and sustainability grows, there is a noteworthy shift in preference toward products that not only fulfill routine needs but also offer enhanced benefits, such as eco-friendliness, sustainable packaging, and ethically sourced materials.

The study specifically examines households and consumers in northern India, capturing a broad spectrum of perspectives that encompass both male and female respondents. By focusing on this particular geographic region, the research emphasizes the critical influence of cultural, societal, and economic factors in shaping consumer preferences. This nuanced understanding ultimately highlights a significant and growing demand for products that embody sustainable and responsible consumption practices, reflecting evolving social values.

Data gathered from the study shows that 52.8% of male respondents and 47.2% of female respondents are aware of eco-friendly product options, indicating a moderate level of awareness among consumers. Furthermore, a majority of the surveyed individuals belong to the younger demographic, who are notably inclined toward adopting eco-friendly lifestyles and products. Urban consumers demonstrate a particularly strong awareness of green products, with an impressive 81.3% acknowledging their existence in the market. The average monthly household expenditure on these eco-friendly items is around 37%, showcasing a willingness to invest in sustainability.

Interestingly, families structured as nuclear tend to possess higher disposable incomes, enabling them to shift their preferences and choices toward eco-friendly alternatives more easily. In contrast, the lower and middle classes often find themselves gravitating toward conventional FMCG products, as affordability remains a significant constraint. The findings also underscore the crucial role of education in enhancing green consumerism, suggesting that informed consumers are more likely to seek out and support environmentally friendly products. This presents a valuable opportunity for brands to engage with an increasingly aware and responsible market segment that values sustainability in their purchasing decisions. The young generation that drifts towards eco-friendly products. Monthly household expenditure is 37% , and most consumers are aware of green products in urban India, with a percentage of 81.3 %. Nuclear family have high disposable and shift their choice and preference towards eco-friendly products. In the country, the lower and middle classes of society often prefer ordinary FMCG products. Education plays a vital role in green consumerism. Add nuclear family have less members take frequently take decisions as compared to joint family members focussed on trends.

7. Managerial Implications

India represents an emerging market for FMCG products, offering significant contributions to companies, consumers, market researchers, and society at large. It is essential to explore consumers' psychographic segmentation and demographic characteristics.

Green consumers tend to be more influenced by personal or familial benefits of a product rather than its environmental benefits. Additionally, consumer segments with a strong inclination to purchase green products often express skepticism towards much of the 'green' advertising, with this distrust being more pronounced among younger consumers compared to their older counterparts. Marketers should explore alternative strategies for effectively reaching those predisposed to purchasing green products.

Consumers who hold neither a strongly positive nor a strong negative attitude towards green products are more likely to be swayed by messages highlighting non-green benefits rather than those focused on green attributes. Future research should delve deeper into the inconsistencies between attitudes and behaviors, particularly in the context of conflicts arising from internal factors (such as personal beliefs or lifestyle choices) and external influences (like social conformity pressures). Additionally, a comparative analysis of various public and private environmental programs is warranted, especially those involving moral persuasion versus financial incentives or disincentives.

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Data Availability

Human participants played a crucial role in the data analysis for this research paper. We have ensured that participants provided their consent, highlighting our commitment to ethical standards. Below, you will find the link to the data that supports our findings:

<https://docs.google.com/spreadsheets/d/16WkKCYtbTEw9r3zwtvydD1wByooF78IFvsgoopfnfV8/edit?usp=sharing>.

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