

The Impact of Frugality on Green Brand Image. In the Perspective of Attitude Behavior Context Theory

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ABSTRACT

Purpose- The research study examines the role of frugality in green brand image. ABC theory is underpinned in the study to see how frugal consumers perceive the green brand image product.

Design/methodology/approach- The data of the current research study was collected from the 448 respondents which were the residents of Rawalpindi, Islamabad, and Wah Cantt.

Findings- According to the research, frugality has a negative impact on the green brand image according to price and quality. Consumers who are on a low budget sometimes equate cheaper costs with lesser quality and may doubt the worth of environmentally friendly items. Their skepticism of sustainability promises and perceptions of eco-friendly products might undermine the brand's reputation. To change these preconceptions, it is essential to communicate the value and long-term advantages of green goods effectively.

Research Practical Implications- Marketers have to make awareness about their product and make it economical so that consumers can fulfill their needs and change their perception of green brand image products.

Originality/value- There are not enough research studies that show the impact of frugality on green brand image. This study emphasized the frugality of consumers upon the green brand image. The green brand product image creates a high price perception in the consumer's mind whereas the consumer seems to find less price and high-quality products to fulfill needs and wants.

Keywords: Frugality (FL), Green Brand Image (GBI), Green Marketing (GM), Attitude Behavior Context theory (ABC Theory)

JEL Classification: M1, M12, M54, M31, O15

1 | INTRODUCTION

Consumer preferences and behavior have changed over the past few decades as a result of the movement toward environmental protection and green marketing. Due to their expectations of personal benefits from green products, consumers are interested in living an environmentally responsible lifestyle (Nguyen et al., 2019). Although consumer understanding of the need for a sustainable environment has increased, this has not resulted in a material boost in green food purchases (Hameed, Waris, & Amin ul Haq, 2019). Consumers' concerns about environmentally friendly products have contributed to the emergence of green materials. Innovations play a vital role in the higher profitability of the firms which leads to sustainability of competitive advantage (Chughtai & Khalid, 2022; Chughtai et al., 2023) through fulfillment of customer demands. According to Mubarak, Kazmi et al. (2021) green products are defined as “products that contain recycled materials, reduce waste, toxic waste, and

use less packaging” ([Mazhar et al., 2022](#)). In Li and Jung (2020) while this is going on, the creation and consumption of green goods is seen as one of the best strategies to protect and enhance the environment for future generations. Additionally, customers contribute significantly to environmental protection by purchasing and using green products described by Akturan (2020). Many customers are prepared to pay more for green products in this regard ([Chen, 2008](#); [Salehzadeh et al., 2023](#)). Researcher Huang (2014) argue that the consumer of green brand knowledge is increasing, which is a positive green brand attitude formation, and thus, the green purchase intention increased ([Esmaeili et al., 2017](#)). Studies showing the effect of frugality on the green brand image are insufficient. The focus of this study was on customer frugality in relation to green brand perception. Previous studies focus on frugality and brand attitude ([Villavicencio & Schlesinger, 2023](#)), green purchase intention ([Wang et al., 2021](#)), and green purchase behavior ([Bibi, 2022](#)). The research objective of the study is to investigate the impact of frugality and green brand image. The research question of the study is What is the impact of frugality on green brand image?

2 | LITERATURE REVIEW

2.1 | ABC Theory

In this research, we are using the Attitude Behavior Context theory for a better understanding of the consumer's mind on frugality on the green brand image of the product. ABC's Theory is based on the measurement process in which people act in accordance with the expected benefits of a particular behavior. The context here refers to the measurement of an object, consisting of beliefs, ideas, and evaluations of results ([Feldmann & Hamm, 2015](#)). As a result of the fact that conduct is also influenced by a variety of contextual circumstances, including availability, cost, and social conventions, attitudes may not always convert into expected action ([Feldmann & Hamm, 2015](#)). Ajzen describes it as an objective evaluation of an item (such as a product or brand impression) that defines or forecasts human behavior known as "attitude" ([Wang, Ma, & Bai, 2020](#)). According to ABC theory, individuals' capacity to act on their wants may be constrained by contextual (or situational) variables. This means that the context helps to simplify and prevent individual aspects of personal behavior, which may be a presidential difference between attitudes and behaviors ([Chughtai & Khalid, 2023](#); [Chughtai et al., 2022](#); [Chughtai, Syed, & Naseer, 2022](#)). This means that the context helps to simplify and prevent individual aspects of personal behavior, which may be a presidential difference between attitudes and behaviors ([Khan & Chughtai, 2022](#); [Khan et al., 2023](#); [Khan et al., 2023](#)). Context works by helping and inhibiting certain behaviors It can serve as a link between people's circumstances and their actions, but it can also reinforce the connection between attitude and behavior ([Sirieix et al., 2013](#)). Gathering product information and recognizing the goods and services given by the product may aid in the development of a consumer product attitude. It turns out that once a consumer has a good view of a product, they prefer to reject negative information in favor of positive information ([Wang, Ma, & Bai, 2020](#)). The internal-external dichotomy of social psychology is used by the ABC theory to explain eco-conscious behavior, making it distinct from other theories of psychology ([Chen et al., 2023](#)).

Using the ABC Model as a foundation, this study shows how frugality affects green brand image. In Marketing and management terms the ABC Theory is important for marketing and message strategy for the companies to attract consumers. In terms of sales, attitude is characterized as a long-term general assessment of

a good or service. Personal motivation is satisfied by attitude, which also has an impact on consumers' spending and purchasing habits. Consumers may hold either favorable or unfavorable opinions about an item or service. A consumer's perception or emotion toward a good or service defines their behavioral intention.

Previous research has explored green marketing and green purchasing such as climate change, environmental issues, and social issues in various ways, but they are few and far between, incorporating ABC theory theoretical principles to establish a full study model. This viewpoint presupposes that people's expectations are constant (Wang, Ma, & Bai, 2020). ABC theory provides an important framework for assessing how attitudes lead to certain behaviors (Goh & Balaji, 2016). If a green purchase can provide psychological benefits like warm light and self-satisfaction because they want to feel good inside so they can assist others, people will be more inclined to pay for it (Liao, Wu, & Pham, 2020).

2.2 | Frugality

According to research by Lastovika et al. published in (1999), multiple schools of thought exist about how frugality should be understood. The widespread consensus among educated people is that there are three different types of frugality: a lifestyle feature, a single value orientation, and a behavioral pattern. Three traits are typically found in frugal shoppers. First, frugal customers limit their expenditures and focus more on long-term advantages. Second, frugal buyers look to get the most use out of your assets and devise as many acquisition methods as they can. Third, as compared to ordinary customers, frugal shoppers are less affected by personal connections (Wang et al., 2021). People frequently take into account the money issue as a vital element in a transactional connection (Ye, Viswanathan, & Hann, 2016). Price is a very significant economic component that frequently plays a crucial role in determining the expenses associated with customers' purchases. Price has a huge impact on how consumers evaluate alternative products and make their ultimate buying choice (Liang et al., 2017). According to Levänen et al. in (2016) assert that there is a connection between being frugal and the characteristics of a sustainable lifestyle, indicating that these two terms are interchangeable (Velananda, Dissanayake, & Wickramasinghe, 2023).

H: *Frugality has a negative influence on green brand image.*

2.3 | Green Brand Image

Bekk et al. (2016) defined a product's green brand image as the environmental factors connected to a product or brand in the field of green business. According to Kotler, a customer's combination of thoughts, beliefs, and attitudes about a product or brand is known as their "green brand image." (Zameer, Wang, & Yasmeen, 2020). According to Chen (2008), green brand image is defined as the consumer's understanding that purchasing green products would help to create excellent environmental value (Rahmi et al., 2017). Consumers frequently envision a type based on linked memories, according to Keller (1993) and Chen (2010), and such a perspective gradually develops a picture of all items. As a result, a green brand image is a product's image in the eyes of consumers that is related to its environmental interests and commitments (Bashir et al., 2020). The green brand image is formed by several customer perceptions of companies that are committed to the environment. In (2012), Mourad, Serag, and Ahmed define that green brand image consists of a range of customer perceptions of committed companies. According to Grant's (2011) statement, a green brand's reputation is tied to both the behaviors of the business and the products that are offered to customers. As a result, the business is actively addressing the problem of environmental sustainability in its marketing approach. The green image of the brand is related to both the

behavior of the business in the customer's place as well as the product that the consumer obtains. Scale, reputation, performance, interest, and dependability are ways to gauge the green brand image.

2.4 | Conceptual Framework

Using frugality acts as an independent variable, whereas green brand image acts as a dependent variable, this model captures the likely link between the under-researched factors represented in the dimensions of green brand image and frugality.

Figure 1

Conceptual Model



3 | METHODOLOGY & DESIGN

Research methodology is the study of how scientific research is conducted. a strategy for rationally implementing different procedures to answer the research challenge methodically. Not only the results of scientific inquiry but also the process itself are better understood with the aid of methodology. The goal of research methodology is to explain and analyze methodologies, highlight their drawbacks and resources, and make clear those drawbacks and resources, as well as their presuppositions and outcomes ([Patel & Patel, 2019](#)). The Questionnaires are adapted from the research on green brand image and frugality (Appendix 1).

3.1 | Research Design

Research is an attempt to find a solution to a problem. It is a multi-step process that is both formal and informal ([Sekaran & Bougie, 2010](#)). Various processes, samples, data collection, and analysis are included in the research design. The nature of the research is also determined by the design of the study as it indicates that the research is exploring, and interpreting, the cause or is related in nature, which is necessary to determine the true purpose of the research. As mentioned by Bryman and Bell ([2011](#); [2018](#)), research design is considered an integral part of the interaction between data collection and research questions.

3.2 | Sample Size

The next step is to select the sample size. To generalize the findings and determine the degree of accuracy and precision, the representative sample has to be taken by the researcher. According to Kinnear and Taylor ([1996](#)) to ensure the precision, the largest sample should be selected. The standard error will be small, and the precision will be high. In contrast according to Sekaran ([2010](#)) too large samples which are above 500 are problematic. The population of Islamabad in 2021 is 1,163,584. Rawalpindi has a population of about 2,280,733 and the population of Wah Cantt is 434,924. The combined population of Rawalpindi and Islamabad is approximately 3.44 million inhabitants, 1.16 million in Islamabad and 2.28 million in Rawalpindi.

3.2 | Sampling Technique

The sample size is taken from Krejcie and Morgan's ([1970](#)) table which is 384. According to Krejcie and Morgan's ([1970](#)) table if the population size is more than 1 million then the sample size will be 384. Purposive sampling is a type of sampling where the researcher chooses the community members who will take part in the

study based only on their judgment. The purposive sample method may appear to be effective where only limited numbers can serve as the main data sources due to the nature of the design and the objectives and objectives of the research. This sampling technique helps the researcher to filter out non-critical responses that do not fit into the research context.

The reason for selecting purposive sampling is to increase the efficacy of the data, and to get the relevant characteristics about our research questions and the study is rare. The data is collected online through Google Forms and in a hard paper form physically data gathered.

4 | RESULTS and ANALYSIS

4.1 | PLS Structural Equation Modelling Approach

PLS is primarily developed for theoretical and data-rich research situations. The evolution of the model is ultimately an interaction between the researcher and the machine. During this process, the model learns new knowledge from the data, adding details to the theoretical framework. PLS will be satisfied by the unknown's reliability at each step ([Hair et al., 2021](#)).

PLS SEM has recently gained a lot of attention in the marketing industry, according to Hair et al. ([2019](#)) PLS-SEM usage in marketing and management information systems has reportedly increased over time, according to research by Ringle et al. from 2012 ([Hair et al., 2019](#)). It is the goal of the PLS-SEM approach to generate latent variable scores that reduce the multicollinearity of the model's ordinary least squares (OLS) regressions ([Richter et al., 2016](#)).

4.2 | Evaluation of out Model (Measurement Model)

The measurement model contains a one-way predictive relationship between each latent structure and its associated observed index. Because multiple associations are restricted, an indicator variable can only be linked to one latent structure. PLS-SEM can handle measurement models for both formation and reflection.

4.3 | Convergent Validity

Hair et al in ([2019](#)) explain the convergent validity of an evaluation to evaluate the degree of consistency between multiple indicators of the same construct. To assess convergent validity, indicator factor loadings, composite reliability (CR), and average variance extracted should be considered. According to Bagozzi and, Yi ([1988](#)), and Henseler, Ringle, and Sinkovics ([2012](#)), the value ranges from 0 to 1 ([Ab Hamid, Sami, & Sidek, 2017](#)). Cronbach's alpha values also lie between the good to excellent range which is between 0.67 to 0.632.

Table 1

Reliability Analysis

Construct	Composite reliability	Cronbach's alpha	Results
Green Brand Image	0.67	0.632	Accepted
Frugality	0.78	0.765	Accepted

4.4 | Discriminant Validity

The degree to which two notions empirically differ is referred to as discriminant validity. It also determines how much the overlapping structures differ from one another ([Hair et al., 2021](#)). Indicator cross-loadings, the Fornell & Larcker criteria, can be used to evaluate discriminant validity. According to Joseph F. Hair and Hult in 2021, while analyzing the cross-loadings, if the factor loading cut-off is greater than 0.70, the factor loading indicators on the assigned construct must be higher than all the other loadings among the other constructs ([Ab Hamid, Sami, & Sidek, 2017](#)).

Table 1

Discriminant Validity

	FL	GBI
FL	0.766	
GBI	0.299	0.633

4.5 | Evaluation of Inner Model

According to Hair et al., ([2019](#)), a model's capacity to predict endogenous constructs is used to evaluate its quality. The following factors make this assessment easier: Path coefficients, cross-validated redundancy (Q²), coefficient of determination (R²), and effect size (f²). The researcher must check the internal model for any collinearity issues before this evaluation. Internal model estimates, which are derived from sets of regression studies, may have biased values and interpretations if the constructs are highly associated ([Hair et al., 2019](#)).

4.6 | Coefficient of Determination of R²

According to Hair et al. ([2019](#)), R² is a metric that measures how well the model predicts the study. R² may also be thought of as the sum of the combined effects of the exogenous and endogenous factors. This impact has a scale from 0 to 1, with 1 denoting perfect predictability. R² is utilized in several fields, and 0.75, 0.50, and 0.25, respectively, denote a considerable, moderate, or low degree of prediction accuracy.

Table 2

Determination of R²

	R-square	R-square adjusted
GBI	0.707	0.705

4.7 | Effect of Size f²

In 2019, Hair et al. ([2019](#)) describe that researchers may also evaluate how the deletion of certain predictor constructs impacts the f² value of endogenous constructs. Cohen ([1988](#); [1988](#)) stated that values of roughly f square larger than 0.02, 0.15, and 0.35 generally reflect modest, medium, and large f effect sizes, respectively ([Purwanto & Research, 2021](#)).

Table 3*Effect of Size f^2*

	FL	GBI
FL		0.009

4.8 | Predictive Relevance (Q2)

The predictive significance of the model is evaluated using Q2 after the R^2 value has been determined. The value of Q2 (or $Q^2 \geq 0$), which ensures the accuracy and relevance of the model prediction, increases with the distance between the predicted and original values. Another guideline put out by Hair, Risher, and Ringle researchers is that Q2 values above 0.00, 0.25, and 0.50, respectively, reflect minor, medium, and significant predictive importance of the PLS path model ([Hair et al., 2019](#)).

Table 4*Predictive relevance*

	Q^2_{predict}
GBI	0.700

4.9 | Hypothesis Testing (Direct Path)

Chin ([1998](#)) marked the completion of the research phase in which it was necessary to establish the statistical significance and applicability (i.e., size) of the indicator weights. Because of the non-parametric nature of PLS-SEM, bootstrapping is used to assess statistical significance ([Hair et al., 2019](#)). Only values from constructs must be used according to fixed measurement concerns, hence bootstrap results from the PLS program must be used instead. It is important to bootstrap a sample of indirect impact data to learn about the population's distribution, which forms the basis for hypothesis testing ([Nitzl et al., 2016](#)).

According to the researchers, the significance level of the area 90% ($p < 0.1$), 99.9% ($p < 0.001$), and 95% significance level ($p < 0.05$) is subjectively determined by the researchers as an acceptable level to support the hypothesis. According to Hair et al. ([2019](#)), the critical t-values for a two-tailed test are 1.65, 1.96, and 2.58, representing a significance level of 90% ($p < 0.1$), 95% ($p < 0.05$) and 99% ($p < 0.01$).

Table 5*Predictive relevance*

Relationship	Path coefficients	T-statistics (O/STDEV)	P values	Decision
FL -> GBI	-0.068	1.995	0.046 **	Accepted

Note: Significant: ** $p < .05$, * $p < .01$, Dependent variable (GBI), Independent Variable (FL)

H: The study hypothesizes that frugality has a negative effect on green brand image. The bootstrapping result shows the negative effect of frugality on the green brand image i.e., path coefficient = -0.068, T-Value = 1.995, P-Value = 0.046.

5 | DISCUSSION & CONCLUSION

The theoretical framework of the research was supported by ABC theory which was proposed by Stern in 2000. The ABC's Theory is based on the measurement process in which people act in accordance with the expected benefits of a particular behavior ([Feldmann & Hamm, 2015](#)). As to the theory, the consumer attitude changes because of high prices, and they don't buy green products to save themselves and the environment from the consumer take into negative context does not purchase and make their final decision. In conclusion, there might be a complicated connection between frugality and a green brand image. Although both ideas are resource-conscious, tensions develop when frugal people put their immediate financial needs before the environment. To address this, eco-friendly firms must discover ways to explain the long-term worth and advantages of their products while also assuring transparency to win over thrifty customers.

5.1 | Implications of the Study

In recent times, companies have been promoting their marketing activities to increase their brand name and value. But the consumers are frugal and don't buy expensive products to fulfill their needs, rather the consumers buy alternative products which are less expensive and fulfill their needs. Companies are investing in their marketing activities by applying different tactics to promote their brand name and increase their sales. Thus, frugality is a crucial issue for Pakistani consumers in the current market. Thus, the marketer has to make products economical and fulfill consumer needs.

5.2 | Limitations

The results of the study are robust and conclusive but it has some limitations that need to be pointed out and these limitations can be overcome in future further research studies. This study was conducted by considering the green products in food and cement industry consumers of Pakistan in the region of Rawalpindi, Islamabad, and Wah Cantt and the results cannot be generalized to other product categories in Pakistan. The present study was conducted on the age group above 18 years. The study needs to be analyzed in other regions as well.

5.2 | Recommendations for Further Research

This study was conducted to analyze the impact of frugality on green brand image. The sample was chosen exclusively from the consumer market of Pakistan in the region of Rawalpindi, Islamabad, and Wah Cantt only to see the broader picture of the impact of frugality on green brand image. This study examines the effect of green brand image, and the variables are frugality which can be analyzed with other variables like green skepticism, eco innovation, green perceived risk, and green perceived values, etc. with green purchase behavior that can be analyzed in the further research studies. Better if future researchers used other moderators, i.e., social comparison, career shocks, and psychosocial safety climate.

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