



ISSN Print: 2664-844X
 ISSN Online: 2664-8458
 NAAS Rating (2026): 4.97
 IJAFS 2026; 8(9): 742-745
www.agriculturaljournals.com
 Received: 10-06-2026
 Accepted: 08-08-2026
 Published: 24-09-2026

Govardhan Tatyaba Pingale
 MBA Scholar, Division of
 Agribusiness Management, Dr.
 Sharadchandra Pawar College
 of MBA (Agri.), Baramati, Pune,
 Maharashtra, India

AA Gadhave
 Research Guide, Division of
 Agribusiness Management, Dr.
 Sharadchandra Pawar College
 of MBA (Agri.), Baramati, Pune,
 Maharashtra, India

MS Pisal
 Assistant Professor,
 Department of Agricultural
 Economics, Dr. Sharadchandra
 Pawar College of MBA (Agri.),
 Baramati, Pune, Maharashtra,
 India

PS Deokate
 Assistant Professor,
 Department of Agricultural
 Economics, Dr. Sharadchandra
 Pawar College of MBA (Agri.),
 Baramati, Pune, Maharashtra,
 India

PA Shitole
 Assistant Professor,
 Department of Agricultural
 Statistics, Dr. Sharadchandra
 Pawar College of MBA (Agri.),
 Baramati, Pune, Maharashtra,
 India

**Corresponding Author:
 Govardhan Tatyaba
 Pingale**

MBA Scholar, Division of
 Agribusiness Management,
 Dr. Sharadchandra Pawar
 College of MBA (Agri.),
 Baramati, Pune,
 Maharashtra, India

Psychological drivers and subliminal cues in modern marketing: Strategic applications for brand recognition, sales growth, and sustainability of agribusiness startups

Govardhan Tatyaba Pingale¹, AA Gadhave², MS Pisal³, PS Deokate⁴, PA Shitole⁵

DOI: <https://www.doi.org/10.33545/2664844X.2026.v8.i9j.1948>

ABSTRACT

The present study examined the impact of psychological drivers and subliminal/subtle marketing cues on consumer trust, brand recognition, and sales growth in agribusiness startups using primary data collected from 95 respondents through a structured questionnaire. Modern marketing has increasingly shifted towards a consumer-centred approach, where understanding consumers' thoughts, emotions, perceptions, and decision-making processes is critical. The study identifies the psychological factors influencing consumer trust, evaluates the role of visual marketing cues in brand recognition, analyzes the combined impact on sales growth, and proposes sustainable marketing strategies. Descriptive statistics, correlation, and multiple regression analysis were utilized for data analysis. The results demonstrated that authenticity and transparency were the most influential psychological drivers (mean = 1.69), surpassing personal values, emotional storytelling, and discounts. Among visual and sensory elements, logos and color schemes were the strongest predictors of brand recall (mean = 2.01). Furthermore, an integrated regression analysis revealed that psychological drivers and subtle cues jointly explain 78.62 per cent of the variation in sales performance ($R^2 = 0.7861$, $p < 0.001$). The study concluded that agribusiness startups must transition from traditional price-based promotions to consumer-oriented strategies grounded in trust, emotional connection, and consistent visual branding to achieve sustainable growth and long-term competitiveness. These insights are highly relevant for the emerging agricultural entrepreneurship ecosystem, where differentiation depends heavily on psychological value rather than mere commodity pricing.

Keywords: Consumer psychology, Agribusiness startups, Subliminal cues, Brand recognition, Sustainable marketing, Emotional storytelling, Regression analysis

1. Introduction

Modern marketing has increasingly shifted from a product-centred approach towards a consumer-centred approach, in which understanding consumers' thoughts, emotions, perceptions, motivations, and decision-making processes has become critically important for business success (Kotler & Keller, 2016). Consumer behaviour is influenced not only by functional characteristics such as price and quality but also by intrinsic psychological factors such as trust, emotions, values, perceptions, and previous experiences (Solomon, 2018). These psychological factors play an important role in shaping consumers' responses towards products and brands, heavily dictating brand consideration, choice, and post-purchase behavior.

The importance of consumer psychology and marketing cues is particularly relevant to the agribusiness sector. Agribusiness startups today operate in increasingly competitive, digitally mediated markets involving agricultural inputs, food products, processed foods, health-oriented natural products, farm technologies, and direct-to-consumer businesses. In this competitive landscape, agricultural and food products are often evaluated through extrinsic cues related to quality, safety, authenticity, health, sustainability, and trust, largely because the intrinsic attributes are often credence characteristics that cannot be verified prior to consumption (Grunert, 2005) [1]. Agribusiness startups, therefore, require highly effective marketing strategies to communicate product value, establish consumer trust, differentiate their brands, and develop sustainable market relationships (FAO, 2017).

In modern marketing, subliminal and subtle cues refer to stimuli presented below or around the threshold of conscious awareness that may influence subsequent psychological responses or behaviour under certain conditions. Marketing communication uses subtle visual and sensory elements such as colours, typography, logos, packaging, imagery, music, voice tone, and product presentation to influence consumer attention, perception, memory, and emotional responses. Research on subliminal priming suggests that exposure to certain subtle stimuli can influence subsequent judgments and behavioural responses, although such effects depend strongly on the context and conditions in which the stimuli are presented (Huang & Murnighan, 2010).

The development of agricultural entrepreneurship and startup ecosystems in India has created new opportunities for innovation, value addition, market linkages, and direct marketing of agricultural products. The Indian Council of Agricultural Research (ICAR) has supported various initiatives related to agri-startups, incubation, and market linkages, highlighting the increasing importance of entrepreneurship in the agricultural sector. For agribusiness startups, effective branding can help differentiate products from competing offerings and communicate attributes such as quality, authenticity, health, sustainability, and trustworthiness.

However, comparatively limited attention has been given to the combined application of psychological drivers and subliminal/subtle cues specifically within the context of agribusiness marketing. Therefore, the present study focuses on examining psychological drivers influencing consumer trust and adoption, evaluating the role of subliminal cues in brand recognition, analysing their relationship with sales growth, and proposing a sustainable marketing strategy for improving competitiveness and developing long-term brand loyalty among agribusiness startups.

1.1 Objectives of the study

1. To study the psychological drivers influencing consumer trust and adoption of agribusiness products.
2. To evaluate the role of subliminal and subtle marketing cues in influencing brand recognition.
3. To analyse the impact of psychological drivers and marketing cues on sales growth of agribusiness startups.
4. To develop sustainable and consumer-oriented marketing strategies for agribusiness startups based on psychological insights and marketing cues.

2. Literature review

The theoretical foundation of this study is grounded in interdisciplinary research spanning consumer psychology, sensory marketing, and agribusiness management.

2.1 Psychological drivers and consumer trust

Erдем *et al.* (2004) [2] examined the role of brand credibility in consumer consideration and choice across different product categories. Brand credibility was considered in terms of trustworthiness and expertise. The study found that credible brands were more likely to be included in consumers' consideration sets, which is particularly critical in situations involving greater uncertainty and perceived consumption risk. In agribusiness, consumers frequently face uncertainty regarding food quality, safety, and production claims, making credibility a paramount driver.

Furthermore, Yeh *et al.* (2020) [3] demonstrated that trust is an essential consideration when consumers evaluate attributes that cannot be directly verified. Parwez *et al.* (2022) [4] examined antecedents of behavioural intention towards organic food in India, finding that trust had a positive and significant influence on purchase intention through attitude towards organic food. This connects trust directly with the psychological process underlying consumer intention in the Indian market.

2.2 Role of subliminal and subtle marketing cues

Trappey (1996) [5] conducted a meta-analysis of research on subliminal advertising and consumer choice, finding a small overall effect, which suggests that claims about subliminal messages directly controlling consumer behaviour should be treated cautiously. However, subtle and symbolic cues significantly alter perception. Machiels *et al.* (2016) [6] indicated that packaging characteristics such as shape, size, colour, and imagery communicate symbolic meanings and influence consumers' perceptions of a product.

Recent research by Rehman *et al.* (2024) [7] indicated that symbolic and visual packaging elements can positively influence brand image, perceived brand quality, and purchase intention. Timpe Callebaut *et*

al. (2026), in a meta-analysis covering visual packaging elements, provided comprehensive evidence that colour, material, logos, and text design heavily dictate product inferences and behavioural responses, establishing the role of visual design in decision-making.

2.3 Sustainable marketing and sales growth

Sustainability has particular importance in agribusiness. Magnier and Schoormans (2015) examined consumer responses to environmentally friendly packaging and found that visual design and environmental attitudes intertwine to affect consumer evaluations. More recently, Macready *et al.* (2025) [8] found that trust moderated the relationship between consumer motivations for sustainable living and their actual intention to make sustainable food choices. This indicates that sustainable marketing strategies must be supported by credible information and robust trust-building mechanisms to realize sales growth.

3. Data and Methodology

3.1 Research design and study area

The present study adopts a descriptive and analytical research design based on primary data to examine the impact of psychological drivers and subliminal/subtle marketing cues on consumer behaviour towards agribusiness products. The descriptive component profiles the respondents and gauges their baseline perceptions. The analytical approach utilizes statistical modeling to examine the relationships between these psychological drivers, marketing cues, brand recognition, and sales-related outcomes. The study area was selected purposively to cover consumers and stakeholders who have consistent exposure to modern marketing channels, social media, digital advertising, and e-commerce platforms.

3.2 Sampling design and sample size

Due to the broad nature of the consumer population, a combination of convenience sampling and purposive sampling techniques was utilized. Convenience sampling ensured access to respondents willing to participate, while purposive sampling ensured that respondents possessed relevant experience with modern marketing and agribusiness products. A total valid sample of 95 respondents was achieved and considered for the final data analysis.

3.3 Data sources and measurement variables

Primary data was collected directly from the 95 sampled respondents via a highly structured questionnaire. The questionnaire was divided into specific sections targeting respondent demographics, consumer perceptions, brand awareness, psychological drivers, subliminal/subtle marketing cues, brand loyalty, and sustainability indicators. Most constructs were measured using a five-point Likert scale (ranging from 1 = Strongly Disagree to 5 = Strongly Agree).

3.4 Analytical tools

The collected primary data were systematically classified, tabulated, and analysed. Descriptive statistics, including frequency, percentage, arithmetic mean, and standard deviation, were used to summarize the data and rank the severity or importance of various drivers and cues. A lower mean score on the Likert scale encoding (where lower values correspond to higher agreement ranks) indicated stronger agreement. For analytical purposes, multiple regression analysis was applied to examine the influence of the independent variables (psychological drivers and marketing cues) on the dependent variables (brand recognition and sales performance). Hypothesis testing was evaluated at the 5% level of significance ($p < 0.05$).

4. Results and Discussion

4.1 Demographic profile of respondents

The demographic profile of the respondents ($n = 95$) provides critical context regarding the consumer base engaging with agribusiness startups. The age distribution indicated a predominantly young sample, with 73.68 per cent of respondents belonging to the 21-30 years age group, while 10.53 per cent were below 20 years, and 10.53 per cent

were between 31-40 years. Male respondents accounted for 74.74 per cent of the sample, whereas females constituted 25.26 per cent. Occupationally, students formed the largest group (46.32%), followed by consumers (30.53%), farmers (14.74%), and entrepreneurs (8.42%).

Regarding brand awareness, 77.89 per cent of the respondents confirmed their awareness of agribusiness startup brands, indicating substantial market visibility. Furthermore, a combined 76.84 per cent of respondents purchased agribusiness or organic products either regularly (25.26%) or occasionally (51.58%). Brand image was identified as the primary factor influencing purchase decisions (28.42%), followed by price (22.11%), recommendations (21.05%), product packaging (16.84%), and emotions/values (11.58%). These demographic baseline metrics validate the sample's engagement with the research context.

4.2 Psychological drivers influencing consumer trust

Understanding the psychological mechanisms that drive consumer trust and product adoption is paramount. Four major psychological drivers were analyzed: Authenticity & Transparency, Personal Values, Emotional Storytelling, and Discounts & Offers. Table 1 presents the mean scores, standard deviations, and relative rankings of these drivers.

Psychological Driver	Mean	SD	Rank
Authenticity & Transparency	1.6947	0.6696	1
Personal Values	1.7368	0.7609	2
Emotional Storytelling	2.0632	0.7829	3
Discounts & Offers	2.3684	0.8879	4

As demonstrated in Table 1, Authenticity & Transparency emerged as the most influential psychological driver, recording the lowest mean score of 1.6947, followed closely by Personal Values (1.7368). Discounts & Offers recorded the highest mean (2.3684), relegating it to the fourth rank. This suggests that contemporary consumers prioritize trust, authenticity, and alignment with their personal environmental/health values over traditional price-based incentives. To validate this, a regression analysis was performed with overall psychological drivers as the independent variable. The results yielded a Multiple R of 0.93379 and an R^2 of 0.87197, explaining 87.20 per

Predictor Variable	Coefficient (β)	p-value
Overall Psychological Driver Impact	0.12377	0.026985
Overall Subliminal/Subtle Cues	0.49974	7.53E-22

The integrated regression model demonstrated a robust relationship with a Multiple R of 0.88667 and an R^2 of 0.78618. This denotes that 78.62 per cent of the variation in sales performance is explained by this integrated model. The overall F -value was 169.13 ($p = 1.52E-31$). As detailed in Table 3, both predictors were statistically significant ($p < 0.05$). Notably, the coefficient for subliminal/subtle cues ($\beta = 0.49974$) indicated a larger independent magnitude of effect in this specific integrated model compared to psychological drivers ($\beta = 0.12377$). These results robustly accept the alternative hypothesis (H1) and assert that cohesive aesthetic, sensory marketing supported by core psychological alignment translates directly to measurable sales performance metrics.

4.5 Case study application: Shabari Naturals

The theoretical framework finds practical execution in the case of 'Shabari Naturals', a Maharashtra-based brand operating in traditional foods, millets, honey, and forest products. The brand actively posi-

cent of the variation in the dependent variable (consumer adoption). The F -value was 633.37 with a highly significant p -value (2.73E-43). The regression coefficient ($\beta = 0.8193$) confirms a very strong positive influence. Consequently, the null hypothesis is rejected, solidifying that psychological drivers significantly influence consumer trust and adoption.

4.3 Role of subliminal and subtle marketing cues

Subtle and visual marketing cues communicate product-related meanings that influence perception and memory. The study assessed four cues: Logo/Colour Scheme, Hidden Messages/Emotional Appeal, Colours/Fonts/Visuals, and Subtle Background Music/Voice Tone. Table 2 details their mean rankings.

Subliminal / Subtle Cue	Mean	SD	Rank
Logo / Colour Scheme	2.0105	0.9200	1
Hidden Messages / Emotional Appeal	2.0842	0.9100	2
Colours, Fonts & Visuals	2.1158	0.9700	3
Subtle Background Music / Voice Tone	2.1684	0.9200	4

Logo and colour schemes ranked first (Mean = 2.0105), indicating they possess the strongest influence on consumer recall among the tested variables. When subjected to multiple regression analysis to test their influence on brand recognition, the overall model was highly significant ($R^2 = 0.76579$, $F = 73.57$, $p = 1.52E-27$). Individual coefficients revealed that colours, fonts, and visuals ($\beta = 0.5596$, $p < 0.001$), background music and voice tone ($\beta = 0.5639$, $p < 0.005$), and logo/colour scheme ($\beta = 0.5593$, $p < 0.001$) all possessed significant independent predictive power. Interestingly, hidden messages/emotional appeal were not statistically significant independently ($p = 0.576$). This indicates that observable, coherent visual and sensory elements reliably predict brand recall better than obscured, strictly subliminal messaging.

4.4 Integrated impact on sales growth

To evaluate the cumulative impact on the commercial viability of agribusiness startups, an integrated regression model mapped overall psychological driver impact and overall subliminal/subtle cue impact against sales performance (incorporating repurchase intention, recommendation behaviour, and sustainability perception).

tions itself around authenticity, sustainability, traditional knowledge, and tribal community empowerment.

Application of the Framework:

Authenticity & Transparency: By detailing the origin of products and highlighting rural and tribal involvement, the brand creates traceable authenticity, which directly builds consumer trust.

Personal Values & Storytelling: Shabari Naturals connects health, sustainability, and local livelihoods through stories regarding the journey of products from forests to consumers. This transitions the product from a functional commodity to an emotional purchase.

Visual Identity & Subtle Cues: The brand employs traditional art forms, nature-oriented colour palettes (greens, earthy tones), and tribal motifs on their packaging. This semiotic alignment enhances subconscious brand recognition and recall.

This case exemplifies the proposed sequential strategic pathway: Psychological Drivers & Subtle Cues $\rightarrow$ Trust & Emotional Connection $\rightarrow$ Brand Recognition $\rightarrow$ Repurchase & Sales Growth $\rightarrow$ Sustainable Brand Value.

5. Conclusion and policy implications

The empirical findings of this study establish that psychological drivers and subtle marketing cues fundamentally dictate the modern marketing efficacy of agribusiness startups. In an increasingly saturated digital market, consumer decisions transcend the traditional functional evaluation of product quality and price. Instead, choices are deeply intertwined with trust, authenticity, emotional engagement, and visual brand identity.

Authenticity and transparency ranked as the foremost psychological drivers. Consequently, agribusiness startups must prioritize building credibility through honest, transparent supply chain communication and ethical sourcing claims. In parallel, consistent visual and sensory marketing elements—most notably logos, colour schemes, and cohesive typography—serve as critical mechanisms for strengthening brand recognition and recall. The study invalidates the reliance on strictly 'hidden' subliminal messages, advocating instead for coherent, observable sensory marketing.

With the integrated regression model explaining over 78 per cent of the variation in sales performance, it is evident that these psychological and sensory dimensions directly facilitate commercial growth. For sustainable business development, it is recommended that agribusiness enterprises integrate value-based promotion, emotional storytelling, and aesthetic consistency. Policymakers, incubators, and agricultural extension agencies supporting agri-entrepreneurship should incorporate capacity-building programs focused on digital branding, consumer psychology, and packaging semiotics to ensure these startups maintain long-term market competitiveness.

Acknowledgement

The authors sincerely express their gratitude to all the respondents who provided valuable information, insights and cooperation during the course of this research. We are thankful to the faculty members and research guide of the Division of Agribusiness Management, Dr. Sharadchandra Pawar College of MBA (Agri.), Baramati, for their valuable guidance, constructive suggestions and continuous support throughout the study. We also acknowledge Mahatma Phule Krishi Vidyapeeth, Rahuri, for providing the academic platform for undertaking this research.

Conflict of interest statement

We wish to confirm that there is no conflict of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

References

1. Grunert KG. Food quality and safety: Consumer perception and demand. *European Review of Agricultural Economics*. 2005;32(3):369-391.

2. Erdem T, Swait J. Brand credibility, brand consideration, and choice. *Journal of Consumer Research*. 2004;31(1):191-198.
3. Yeh CH, Hartmann M, Langen N. The role of trust in explaining food choice: Combining choice experiment and attribute best-worst scaling. *Foods*. 2020;9(1):45.
4. Parwez M, Ansari Z, Mullick NH. Examining the antecedents of behavioral intention toward organic food in India. *Sustainability and Climate Change*. 2022;15(6):422-435.
5. Trappey C. A meta-analysis of consumer choice and subliminal advertising. *Psychology & Marketing*. 1996;13(5):517-530.
6. Machiels CJA, Karnaal N. See how tasty it is? Effects of symbolic cues on product evaluation and taste. *Food Quality and Preference*. 2016;52:195-202.
7. Rehman AU, Elahi YA. How semiotic product packaging, brand image, perceived brand quality influence brand loyalty and purchase intention. *Asia Pacific Journal of Marketing and Logistics*. 2024;36(11):3043-3060.
8. Macready AL, *et al*. Why trust is crucial: The moderating role of trust in the relationship between motivation and intention to buy healthy, sustainable and novel foods. *Food Quality and Preference*. 2025;126:105386.
9. Aertsens J, Verbeke W, Mondelaers K, Van Huylenbroeck G. Personal determinants of organic food consumption: A review. *British Food Journal*. 2009;111(10):1140-1167.
10. Kotler P, Kartajaya H, Setiawan I. *Marketing 5.0: Technology for Humanity*. John Wiley & Sons; 2021.
11. Lobb AE, Mazzocchi M, Traill WB. Modelling risk perception and trust in food safety information within the theory of planned behaviour. *Food Quality and Preference*. 2007;18(2):384-395.

How to cite this article: Pingale GT, Gadhave A, Pisal M, Deokate P, Shitole P. Psychological drivers and subliminal cues in modern marketing: Strategic applications for brand recognition, sales growth, and sustainability of agribusiness startups. *International Journal of Agriculture and Food Science*. 2026;8(9):742-745. doi: <https://www.doi.org/10.33545/2664844X.2026.v8.i9j.1948>