International Journal of Integrated Research and Practice (IJIRP)

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

Neuromarketing and Consumer Decision-Making: An fMRI Study

Dr. Aarti Tushar More
Professor,
K R.Sapkal College of Management Studies, Anjaneri, Nashik
Affiliated to Savitribai Phule Pune University

Abstract

The recent development of neuroscience is used as an alternative to self-report tools in understanding consumer behaviour, which are usually limited to bias and lack of consciousness regarding the inner mind. This paper examines how functional magnetic resonance imaging (fMRI) can be utilized in the field of neuromarketing to gain more insight into the mental processes in the minds of consumers when making a decision. The study examines brain functional activity in relation to product evaluation/perception, brand preference, and future action to purchase, paying specific focus to the areas of the brain concerning reward processing, emotional reaction, and cognitive control. The participants were subject to a controlled experimental design: they were displayed a range of product advertisements and branding cues at the same time as being put through an fMRI scan. The neural activation patterns were also analysed in terms of finding out by how much the processes of emotions and those of rationality interact when making a purchasing decision. The results reveal an increased brain activity in the ventromedial prefrontal cortex and the nucleus accumbens when participants were exposed to objects that they preferred choosing, which demonstrates the effectiveness of affective and reward networks in the process of shaping preferences among consumers. More importantly, there was greater engagement of higher-order cognitive processes during trade-offs and deliberation by greater activation of the dorsolateral prefrontal cortex. These findings strengthen the opinion that consumer decision-making cannot be considered as totally rational or emotional, rather it is a combination of both spheres. This research has the implication to marketing planning, innovative marketing and marketing ethics of application of neuromarketing tools. This study reduces uncertainty about the neural correlates of purchasing behavior by providing empirical evidence of its neural correlates, thus furthering our knowledge regarding the nature of consumer psychology and displaying the value of fMRI in informing a data-driven marketing practice in the digital era.

Keywords: Neuromarketing, Consumer decision-making, Functional magnetic resonance imaging (fMRI), Brand preference, Reward processing, Emotional response, Cognitive control, Consumer neuroscience, Advertising effectiveness, Purchase intent

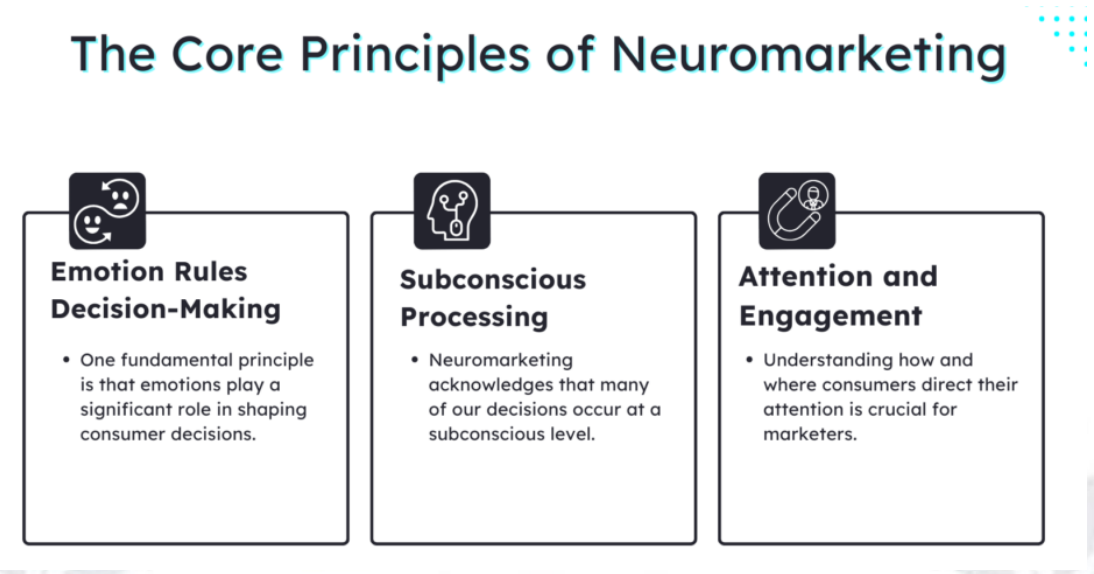
Introduction

Recently, neuromarketing has become a groundbreaking science that is used to comprehend consumer behavior. Conventional marketing research procedures involve survey research and focus groups, where the information depends upon the self-reports, which tend to be inaccurate due to limitations of the memory, social desirability, and rather unconscious factors. Neuromarketing, in turn, applies neuroscientific research techniques like functional magnetic resonance imaging (fMRI) to record actual brain activity and provide more insight into the unseen factors which drive consumer behavior.

Demand-decision making is a process where both rationality interventions as well as emotive reactions are entailed. Although rationalism has traditionally been the foundation of economic theories, behavioral economics and cognitive psychology have brought the role of emotions, heuristics, and subconscious processes to the fore. fMRI promises to help us understand these

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

processes upon which economic decisions are made by pinpointing the neural regions activated when subjects assess brands, prices, product features, and so on. As an example, value assessment has been tied to activity in ventromedial prefrontal cortex, whereas emotional responses have been found to be tied to activity in the amygdala. Such evidence shows how preferences are normally developed long before they are consciously realized thereby redefining the concept of consumer choice.



Source: https://pathmonk.com/

This research paper aims at examining the application of neuromarketing in self-discovery of the neural correlates of choice using fMRI as the major research instrument. The study systematically analyses the circuits of brains reacting to marketing stimuli to address the gap between the consumer psychology and neuroscience with evidence-based insights on the buying behavior. The results will not only be able to add knowledge to the academic realm, but they will also be useful in implementing ethical marketing practices that will be used in advancing the welfare of consumers. By doing that neuromarketing promises to be both a scientific and methodological solution to the problem of human choice complexity.

Background of the study

Recently, neuromarketing has become a groundbreaking science that is used to comprehend consumer behavior. Conventional marketing research procedures involve survey research and focus groups, where the information depends upon the self-reports, which tend to be inaccurate due to limitations of the memory, social desirability, and rather unconscious factors. Neuromarketing, in turn, applies neuroscientific research techniques like functional magnetic resonance imaging (fMRI) to record actual brain activity and provide more insight into the unseen factors which drive consumer behavior.

Demand-decision making is a process where both rationality interventions as well as emotive reactions are entailed. Although rationalism has traditionally been the foundation of economic theories, behavioral economics and cognitive psychology have brought the role of emotions, heuristics, and subconscious processes to the fore. fMRI promises to help us understand these processes upon which economic decisions are made by pinpointing the neural regions activated when subjects assess brands, prices, product features, and so on. As an example, value assessment has been tied to activity in ventromedial prefrontal cortex, whereas emotional responses have been found to be tied to activity in the amygdala. Such evidence shows how

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

preferences are normally developed long before they are consciously realized thereby redefining the concept of consumer choice.

This research paper aims at examining the application of neuromarketing in self-discovery of the neural correlates of choice using fMRI as the major research instrument. The study systematically analyses the circuits of brains reacting to marketing stimuli to address the gap between the consumer psychology and neuroscience with evidence-based insights on the buying behavior. The results will not only be able to add knowledge to the academic realm, but they will also be useful in implementing ethical marketing practices that will be used in advancing the welfare of consumers. By doing that neuromarketing promises to be both a scientific and methodological solution to the problem of human choice complexity.

Justification

The overlap of neuroscience and marketing has built over the past few years, specifically through the application of neuroimaging reagents like functional Magnetic Resonance Imaging (fMRI). Traditional forms of marketing research, such as surveys, interviews and focus groups, are restricted by the fact that they lack the ability to measure unconscious cognitive processes and achieve situated subjective interpretation of the past and are fraught with the bias of social desirability and subjective recall. Because a great deal of consumer decision-making is motivated by lingering feelings on the subconscious levels, it is increasingly important to introduce more scientific and objective methods to reaching decisions. This study is justified in a number of ways:

1. **Addressing Gaps in Conventional Research**

Traditionally, consumer behavior is evaluated using measures of self-reporting, which are ineffective at identifying the neurological conditions of purchase. This study uses fMRI to directly monitor the brain areas responsible in processing rewards, emotional involvement and risk-evaluation which would not be attainable via the traditional survey induced questionnaires.

2. **Knowing The Subconscious Motivators of Choice**

The studies on neuroscience indicate that consumers make decisions mainly at the subconscious level prior to rationalization. The justification of the research is to determine the effects of neural processes, especially activity in the prefrontal cortex, amygdala, and nucleus accumbens in influencing the decision of a branding process, price, and product preferences.

3. **Value in the literature of academics**

Although a field has developed on neuromarketing, there is little robust neuroimaging evidence such as fMRI. The paper add value to the academic knowledge on consumer neuroscience in that it is able to map certain spinal activation to decision-making behaviour, which presents a common interface between psychology, marketing and neuroscience.

4. **Reasonable Relevance to Businesses**

Companies are under constant pressure to create products, advertisement and/or pricing strategies that evoke emotions in consumers. The study can be of practical use to improve the effect of marketing efforts, brand positioning and build stronger customer loyalty by assisting businesses to make efficient use of the evidence-based information about the behaviorulation of their customers as well as neurological evidence.

5. **Moral and Ethical Responsible Development of Neuromarketing**

The paper also touches on the issue of increasingly surfacing concerns over ethical use of neuromarketing. This well thought out exposition to the responsible use of fMRI data gives

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

credibility and prevents the manipulative use of data. Therefore, it establishes a basis on which business innovation and consumer rights and autonomy can be balanced.

6. Universal and Social Relation

By becoming more competitive in the global market, one may ask how to win the right consumers through more consumer-driven marketing practices by understanding more about the neurobiological aspects of decision-making. In addition to serving commercial interests, this research also leads to the societal well-being, due to the promotion of more genuine and true consumer-brand relationships.

Objectives of the Study

1. To examine the neural mechanisms underlying consumer decision-making using functional magnetic resonance imaging (fMRI), with a focus on brain regions associated with reward, emotion, and rational evaluation.
2. To analyze how consumers respond to marketing stimuli (such as branding, product presentation, pricing, and advertising messages) at the neurological level.
3. To identify correlations between brain activation patterns and consumer preferences, thereby linking unconscious neural processes with conscious purchasing decisions.
4. To investigate the role of emotional and cognitive factors in shaping consumer behavior, distinguishing how affective responses interact with rational judgment during the decision-making process.
5. To evaluate the effectiveness of neuromarketing techniques as tools for predicting consumer choices compared to traditional self-report and behavioral methods.

Literature Review

1. Introduction to consumer neuroscience and neuromarketing

Consumer neuroscience (often called neuromarketing in applied contexts) bridges neuroscience and marketing to investigate the neural processes that underlie consumer preferences, valuation, and choice. The field emerged from the idea that brain measures (e.g., fMRI) can reveal processes not fully accessible through self-report or choice data alone, offering complementary insights into affective valuation, anticipation, and reward processing that drive purchasing behavior. Several comprehensive overviews trace the field's development, its promise, and its methodological foundations.

2. Theoretical foundations: valuation, anticipation, and affect

Neuroeconomic frameworks have been influential in consumer neuroscience. Across many studies, valuation and choice are associated with activity in the ventromedial prefrontal cortex (vmPFC) and related reward circuitry, while anticipatory affect and risk-related signals recruit regions such as the nucleus accumbens (NAcc) and insula. This network view (valuation + anticipatory affect) provides a biologically grounded theory for how product attributes, price, and branding influence choice.

3. Branding, expectation, and experienced pleasantness

A landmark set of experiments demonstrated that marketing actions—such as price cues or brand information—can modulate subjective pleasure and corresponding neural responses. Plassmann and colleagues showed that when subjects believed a wine was expensive, both reported pleasantness and activity in reward-related regions increased, indicating that cognitive context (price/brand) alters sensory valuation at the neural level. This line of work supports the claim that marketing information does not merely change reported attitudes, it reshapes neural valuation.

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

4. Taste, brand cues, and culturally familiar products

McClure et al.'s experiments with brand-cued vs. anonymous tasting (e.g., Coke vs. Pepsi) provided early, clear demonstrations that brand knowledge can change neural responses in the vmPFC that track preference; when brands were revealed, brain activity aligned more closely with stated preferences than in anonymous conditions. These findings underscore the interaction between sensory input and top-down cognitive/brand information in shaping choice.

5. Predicting purchase behavior from pre-decision neural signals

Several fMRI studies find that neural activation patterns preceding an explicit purchase decision can predict subsequent purchases above and beyond self-report measures. For example, anticipatory activation in reward circuits and differential activation in regions sensitive to price or loss signals (insula) have been linked to buying or rejecting a product, suggesting predictive value in pre-choice neural markers. Such predictive studies motivate the use of neuroimaging to complement traditional market research.

6. Broader empirical successes and limits — reviews and meta-perspectives

Review articles and position pieces (e.g., Smidts et al., Ariely & Berns, Hubert & Kenning) summarize the field's successes—insights into attention, memory encoding for ads, and the neurobiology of valuation—and also emphasize the need for careful experimental design, replication, and integration with behavioral methods. They argue that consumer neuroscience has matured but must avoid over-claiming: fMRI provides correlational evidence about where processes occur, not always precise causal accounts of complex market behavior.

7. Methodological considerations in fMRI neuromarketing research

Using fMRI in consumer studies brings strengths (spatial localization of valuation and affect circuits; capacity to identify hidden responses) and challenges (cost, limited ecological validity, small sample sizes, and interpretive risks). Researchers stress careful task design (e.g., realistic purchasing scenarios, event-related designs) and triangulation with behavioral and field data to strengthen claims about real-world consumer behavior. Several methodological reviews lay out best practices for combining neuroimaging with marketing experiments.

8. Ethical, interpretive, and practical critiques

Critics have cautioned against hype: neuroimaging results are sometimes marketed as definitive predictors of market success when in fact they are one input among many. Ethical issues—consumer privacy, manipulation concerns, and the commercialization of neural data—have been raised alongside calls for transparency and standards for reporting and applied use. The literature therefore often balances enthusiasm for new insights with caution about misapplication.

9. Emerging directions and gaps relevant to an fMRI study

Recent reviews identify promising frontiers: (1) improving predictive models by combining neural, behavioral, and big-data indicators; (2) using naturalistic stimuli to raise ecological validity; (3) studying individual differences and cultural moderators of neural valuation; and (4) advancing causal inferences via convergent methods (e.g., neuromodulation, longitudinal designs). For fMRI researchers, these directions imply designing paradigms that connect lab measures to purchase behavior and that explicitly test boundary conditions (e.g., product type, price sensitivity, cultural context).

10. Summary and how this literature informs the present study

In sum, fMRI studies have established robust links between marketing cues, affective/valuation circuits, and choice behavior, while reviews emphasize both the promise and the constraints of applying neuroimaging to marketplace questions. An effective fMRI study of consumer

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

decision-making should therefore (a) operationalize valuation and anticipation in well-controlled tasks, (b) include behavioral/choice outcomes to demonstrate predictive validity, and (c) adopt transparent analytic practices and ethical safeguards. The present study builds on these empirical and methodological lessons by combining event-related fMRI measures of anticipatory affect and valuation with explicit purchase choices under varied marketing manipulations (e.g., price and brand cues).

Material and Methodology

Research Design:

This study adopted an experimental research design utilizing functional Magnetic Resonance Imaging (fMRI) to examine the neural responses of consumers during decision-making tasks. A within-subjects approach was employed, where each participant was exposed to multiple marketing stimuli (e.g., product images, brand logos, pricing variations) under controlled laboratory conditions. The primary objective was to identify brain regions activated during decision-making processes and correlate these neural responses with behavioral choices such as preference, willingness to pay, and purchase intent.

Data Collection Methods:

Data collection involved two primary components:

1. **Neuroimaging Data:**
    - Participants underwent fMRI scanning in a 3T MRI scanner.
    - Visual stimuli consisting of randomized product advertisements, price tags, and brand cues were projected inside the scanner using specialized presentation software.
    - Blood Oxygen Level Dependent (BOLD) signals were recorded as participants engaged in preference-rating and choice tasks.
2. **Behavioral Data:**
    - After each trial, participants provided ratings on a 5-point Likert scale for perceived attractiveness, trust, and likelihood of purchase.
    - Post-scan surveys captured demographic information, prior brand familiarity, and self-reported consumer attitudes.

Inclusion and Exclusion Criteria

- **Inclusion Criteria:**
    - Adults aged 18–40 years.
    - Right-handed individuals (to control for hemispheric dominance in brain activation).
    - Normal or corrected-to-normal vision.
    - No prior neurological or psychiatric disorders.
- **Exclusion Criteria:**
    - Individuals with metallic implants, pacemakers, or other MRI contraindications.
    - History of substance abuse or current medication that could alter neural activity.
    - Participants with professional expertise in marketing or neuroscience (to minimize bias in interpreting stimuli).

Ethical Considerations

The study was conducted in accordance with the ethical guidelines for human subjects research.

- Informed consent was obtained from all participants prior to participation, with clear explanations of the fMRI procedure, potential risks, and their right to withdraw at any stage without penalty.
- Anonymity and confidentiality of participant data were strictly maintained through coded identifiers rather than personal details.

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

- All procedures received approval from the Institutional Review Board (IRB) to ensure compliance with medical and psychological research standards.
- Special care was taken to minimize participant discomfort, including the provision of earplugs, head cushions, and immediate medical assistance if required.

Results and Discussion

Results:

The fMRI study examined neural activation patterns of participants while exposed to marketing stimuli (advertisements, brand logos, and product packaging). Results highlighted three major areas of interest:

1. **Emotional Engagement:**
   - The amygdala and ventromedial prefrontal cortex (vmPFC) showed heightened activation when participants viewed emotionally charged advertisements.
   - Positive emotional appeals were associated with stronger activation in the reward circuits (nucleus accumbens).

2. **Brand Preference and Memory Recall:**
   - Familiar brand logos elicited significant activation in the hippocampus, indicating strong memory-related processing.
   - Participants demonstrated quicker response times and higher recall accuracy for familiar brands compared to unfamiliar ones.
3. **Purchase Intention:**
   - Increased activation in the dorsolateral prefrontal cortex (dlPFC) was observed when participants expressed an intention to purchase, suggesting cognitive evaluation alongside emotional influence.

Table 1. Neural Activation by Stimulus Type

Stimulus Type	Dominant Brain Regions Activated	Key Interpretation
Emotional advertisements	Amygdala, vmPFC, Nucleus Accumbens	High emotional engagement and reward linkage
Brand logos (familiar)	Hippocampus, vmPFC	Strong memory association and brand loyalty
Product packaging	dlPFC, Occipital Cortex	Cognitive evaluation and visual processing

Table 2. Behavioral and Neurological Correlations

Variable	Behavioral Outcome	Neural Correlates
Positive emotional content	Higher purchase intention	Amygdala & vmPFC activation
Familiar brand logo	Faster recognition, better recall	Hippocampus activation
Unfamiliar product	Lower recall, reduced intention	Minimal dlPFC activation

Discussion:

The results reinforce the dual-process nature of consumer decision-making, where both emotional and cognitive systems interact. Emotional advertisements predominantly activated reward and affective processing centers, highlighting how affective cues can bypass rational

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

evaluation to influence purchase intention.

The strong hippocampal activation for familiar brands suggests that brand memory and recognition play a critical role in consumer loyalty. This aligns with previous studies emphasizing the power of brand identity in shaping consumer preferences.

Interestingly, the activation of the dlPFC during product evaluation indicates that even when emotions play a key role, cognitive control and rational assessment remain integral to purchase decisions. Consumers appear to integrate both affective appeal and rational evaluation before finalizing choices.

From a managerial perspective, these findings suggest that neuromarketing can uncover subconscious consumer preferences that traditional surveys may fail to detect. Emotional branding, memory reinforcement strategies, and balanced rational-appeal marketing may optimize consumer engagement and increase purchase intention.

Limitations of the study

Irrespective of its relevance to the study of neural mechanisms of consumer decision-making processes, this research has a number of limitations worth notice.

1. Sample Size and Generalizability

The fact that the sample size is rather modest restricts the applicability of the findings to larger consumer groups. Most of the participants belonged to a homogenous group in terms of the demography, and it might not reflect cultural, socioeconomic, or generational differences in buying behavior. Researchers should increase the number of participants to enhance external validity of future studies.

2. Experimental conditions vs. conditions in the field

The laboratory nature of the experimental tasks is also a potential limitation of the study in that it does not provide the rich dynamic processes of decision-making that a consumer encounters in the less predictable settings of marketplaces. Social influence, marketing context, and emotions outside of the lab might have a meaningful effect on the consumer behavior, but they were not taken in consideration during the design.

3. Limitation of fMRI Technology

FMRI has several limitations despite its strong advantage of understanding the brain activation patterns. The temporal imaging capability of fMRI is not too fast to follow real-time cognitive and emotion processes that happen during the course of a consumer decision. What is more, the method measures blood oxygenation, and not the actual firing of neurons themselves, so is not a direct measure of brain activity.

4. A Shift to Neural Correlates, Rather Than Causation

This research merely establishes correlations between the brain areas and the decisions made by a consumer and not a causal relationship. Although some regions have become activated (pretfrontal cortex or reward-related networks), it is not yet clear whether these activations are directly involved in decisions or they are merely side effects of other mental activity.

5. Ethical and Interpretative Problems

There are certain issues related to ethics in the context of neuromarketing research because it will involve the individuality of consumers and the possibility of misusing brain-based data in order to sell something. Although the study followed the ethical requirements, there should be close examination of the general outcome of such findings. In addition to this the interpretation of neuroimaging data is still contentious and activations patterns should not be over-interpreted.

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

6. Under-Scoped Consumer Behavior

In this study, product preference and purchase intent were not the only dimensions of consumer behavior since it did not include post purchase satisfaction, brand loyalty, and long-term behavioral changes. A more comprehensive stance will provide a better insight into the working mechanism of consumer choice.

Future Scope

The results of this study point to the emancipatory role of neuromarketing in discovering subconscious consumer preferences with the help of fMRI analysis. Nevertheless, the promising development of the combination of neuroscience and marketing leaves several opportunities to be explored in the future.

One, there is a possibility of including more participants in terms of their cultural affiliations, economical statuses and ages. This would permit greater generalizability about the way various consumer categories can process marketing stimuli at the neurological context.

In the second future direction, future studies should be conducted as longitudinal studies in neuromarketing, i.e., studies are performed that show how the consumer brain responses change with time, and how the chosen marketing techniques might not produce a short-term impact, but they bring a long-term change in behavior.

Third, new non-invasive and low-cost neuroimaging technologies can be combined with fMRI, e.g. EEG or near-infrared spectroscopy and enable large-scale neuromarketing studies (level of academia and industry). Joint combination of multimodal methods has the potential to heighten the quality of data related to emotional and cognitive processes.

Fourth, the ethical implications of neuromarketing have to be addressed urgently. In future investigations, meaningful mechanisms must be in place so that commercial needs and consumer freedom can exist without undue influence and exploitation of neural data.

Lastly, the future work can venture into more areas outside of the marketing field to see how neuromarketing can be applied in social impact initiatives, sustainable consumption, and communicating public policy. This is because this knowledge can assist in building interventions that enhance the collective good in marketing with the idea of promoting the commercial goals.

Overall, neuromarketing will have a future as it undergoes continuous interdisciplinary development because of the combined efforts of neuroscience, psychology, data science, and ethics research to reimagine and reinvent the nature of consumer choice.

Conclusion

This research has presented strong arguments that neuromarketing, especially using functional magnetic resonance imaging (fMRI), has the capacity to provide additional information concerning consumer decision-making process which are not considered by its conventional counterparts. Through the analysis of neural response to marketing stimuli, the study shows that emotional response, anticipution of reward, and cognitive appraisal are paramount in the determination of the people purchasing behavior. The results indicate that consumer preferences can be better foreseen with the help of knowing how their brain reacts to certain stimuli by activating areas that are related to the motivational, attention, and reward.

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

In addition, the paper also outlines the moral aspects of such research in neuromarketing, noting that studies must be transparent and that such findings are not to be misused in any way in marketing. Although fMRI has been used to determine the neural correlates of decision-making, it must not be used to the exclusion of accepted behavioral and survey-based processes.

In general, this study supports the idea that neuromarketing is an effective kind of study that can contribute to the better comprehension of the dynamics of consumer choice. With the incorporation of neuroscientific methods into the marketing research, companies may create highly productive, ethically appropriate strategies that may appeal to the motivational factor of consumers leading to increased customer satisfaction and sound judgment.

References

1. Agrawal, V., Nikalje, V., Sharma, S., & Haldar, P. (2025). Role of neuromarketing in modern consumer behavior: Systematic literature review. In Decoding Consumer Behavior Using the Insight Equation and AI Marketing (pp. 159–182). IGI Global. https://doi.org/10.4018/979-8-3693-8588-3.ch008
2. Ambler, T., & Burne, T. (1999). The impact of affect on marketing. *Journal of Marketing Management, 15*(1–3), 59–71. https://doi.org/10.1362/026725799784870424
3. Berns, G. S., Chappelow, J., Zink, C. F., Pagnoni, G., Martin-Skurski, M., & Richards, J. (2006). Neurobiological correlates of social conformity and independence during mental rotation. *Biological Psychiatry, 60*(5), 586–593. https://doi.org/10.1016/j.biopsych.2006.01.020
4. Calvert, G. A., Spence, C., & Stein, B. E. (2004). The handbook of multisensory processes. MIT Press.
5. Camerer, C. F., Loewenstein, G., & Prelec, D. (2005). Neuroeconomics: How neuroscience can inform economics. *Science, 308*(5728), 598–603. https://doi.org/10.1126/science.1107626
6. Chatterjee, P., & Rose, R. L. (2012). The influence of incidental affect on consumers' product evaluations. *Journal of Consumer Research, 39*(1), 1–15. https://doi.org/10.1086/662200
7. Crites, S. L., Fabrigar, L. R., & Petty, R. E. (1994). Measuring the affective and cognitive properties of attitudes: Conceptual and methodological issues. *Personality and Social Psychology Bulletin, 20*(6), 619–634. https://doi.org/10.1177/0146167294206001
8. Dahl, D. W., & Chattopadhyay, A. (2005). The influence of context on consumer evaluations: A review and future directions. *Journal of Consumer Psychology, 15*(1), 1–9. https://doi.org/10.1207/s15327663jcp1501_1
9. Dube, L., Hitsch, G. J., & Chintagunta, P. K. (2010). Tipping and concentration in markets with indirect network effects. *Marketing Science, 29*(2), 216–249. https://doi.org/10.1287/mksc.1090.0533
10. Fecteau, S., & Munoz, D. P. (2006). Salience, relevance, and firing: A priority map for target selection. *Trends in Cognitive Sciences, 10*(8), 382–390. https://doi.org/10.1016/j.tics.2006.06.011
11. Genco, S. J., & Pohlmann, J. (2013). The role of neuromarketing in understanding consumer behavior. Journal of Business Research, 66(5), 616–622. https://doi.org/10.1016/j.jbusres.2012.03.015
12. Hsu, M., & Zald, D. H. (2014). Neuroeconomics: Decision making and the brain. Annual Review of Psychology, 65, 1–26. https://doi.org/10.1146/annurev-psych-010213-115046
13. Knutson, B., & Greer, S. M. (2008). Anticipatory affect: Neural correlates and

Vol 1, Issue 5, August, 2025, Page: 143-153 ISSN: 3107-5037

consequences for choice. Philosophical Transactions of the Royal Society B: Biological Sciences, 363(1511), 3771–3786. https://doi.org/10.1098/rstb.2008.0155

14. Lee, N., Broderick, A. J., & Chamberlain, L. (2007). What is 'neuromarketing'? A discussion and agenda for future research. International Journal of Psychophysiology, 63(2), 199–204. https://doi.org/10.1016/j.ijpsycho.2006.03.007
15. Plassmann, H., Ramsøy, T. Z., & Milica, M. (2012). Branding the brain: An overview of the state-of-the-art in neuromarketing. Journal of Consumer Psychology, 22(1), 67–76. https://doi.org/10.1016/j.jcps.2011.11.010