

An empirical study of the impact of Neurobranding applications used by Amul on consumer buying behavior

Deepa KedarRele¹, Sunita Kharate², Anshuman Magar³, Rupali Gawande⁴, Sachin Hadole⁵

¹ Associate Professor, MIMA Institute of Management Pune, India

² Assistant Professor, MIMA Institute of Management Pune, India

³ Senior Assistant Professor, Faculty of Business Management and Commerce, JSPM University, Pune, India

⁴ Assistant Professor, Amity Global Business School, Pune, India

⁵ Assistant Professor, MIMA Institute of Management Pune, India

Received: 17.04.2024

Revised : 11.05.2024

Accepted: 20.05.2024

ABSTRACT

Purpose: This research paper's goal is to comprehend how neuro-branding affects consumer purchasing behavior through an empirical analysis of the well-known brand Amul. Using a blended research approach, the authors have studied the emotional angle of branding which has a deep as well as direct impact on buyer behavior as well as the neurobrand dynamics which further enhance the brand identity. In marketing, change is the only constant. Marketing is more of science than art today with the application of latest trend of Neuromarketing.

Design/methodology/approach: The study is drawn upon a survey conducted on 213 consumers analyzing their preference for the brand under study with various emotional branding parameters. The authors have used simple random sampling technique to carry out this study. While the data is being analyzed using the SPSS tool, the authors have attempted to evaluate the data by performing factor analysis, regression analysis, and paired T-test. The questionnaire designed is tested through the Reliability Test- Cronbach Alpha.

Findings: The researchers have tried their best to come up with new emotional brand identity parameters focusing on neurobranding which is a subset of Neuromarketing. The scope of neurobranding is quite wide and encompasses a lot of parameters. Overall, the scope of this topic involves a systematic exploration of the effects of neuro-branding techniques utilized by Amul on consumer behavior, with a particular emphasis on the role of emotions.

Originality/value: Though a lot of studies in the sphere of branding have been conducted all over the world, but there are limited studies on the emotional parameters which enhance the identity of any brand. Earlier research has ignored the emotional component of branding and neurobranding in favor of a more narrow focus on brand management and brand identity characteristics. Utilizing a developmental psychology perspective, the authors offer a nuanced and comprehensive framework to comprehend consumer preferences for the Amul brand.

Keywords: Brand impact, Neuromarketing, Emotional branding, Sensory Consumerism, Neurobranding, Amul Brand

INTRODUCTION

Since it is so simple to go from one brand to another in today's fiercely competitive industry, brands find it difficult to stand apart. In the exercise to become more competitive, the brands apply Neurobranding tools to enhance their engagement with the target audience. Today brands harp on feelings, and emotions to shape the choices of the consumers. Market trends also demand positive customer experiences and collaborative efforts from both customers and brands for better product designs as well as delivery. Today's branding is based upon "how the consumers feel". Brand loyalty is indeed costly as it is derived from customer attention- Review, Refer and Reward is the mantra.

Neuromarketing is one of the latest trends which can enhance the market research. It is culmination of neuroscience, technology and marketing. The authors have tried their level best to introduce this latest trend even in branding and propose a Neurobranding model by doing research on Amul brand. We propose a Neurobranding model which is based on strategies that focus on sensory branding, storytelling, empowerment and most vital are the emotions. The researchers have tried their best to bring forward the

emotions that consumers experience before or during the purchase of Amul products. The questionnaire therefore has two open ended questions which try to capture the same. Amul is an Indian dairy brand that needs no introduction.

We all recall Amul India because of their iconic advertisement featuring the then-leading actress Smita Patil for National Milk Day. The film makes us understand that in India we have rivers of milk. This was a very famous campaign that brought in feelings like patriotism, a feel-good factor about Indian traditions as well. Amul as a brand has always chalked a multi-channel approach with a combination of both traditional advertising with digital as well as experiential marketing. The brand campaigns always highlight diverse product ranges with a deep-rooted cultural connection.

The majority of brands focus on their market offerings with an objective of "Value for money" but Amul brand has adopted the philosophy of "Value for Many". The term value for money emphasizes on efficiency, cost-effectiveness, and maximizing returns on investment. This is a customer-centric concept wherein the quality is not compromised despite lower costs. The focus of the concept of Value for many is uniquely implemented by Amul.

Objectives

- To examine how various Neurobranding elements affect consumers' purchase decisions
- To assess how Neuromarketing affects consumers' purchasing decisions.

REVIEW OF LITERATURE

A systematic review of literature for any research paper has several key objectives, which collectively ensure that the review is thorough, unbiased, and reliable. We have established the following goals for our systematic literature evaluation in light of the current situation:

- Identify all relevant studies, both published and unpublished, to ensure a complete understanding of the scholarly contributions to Neurobranding as well as Neuromarketing
- To identify potential research gaps and provide future paths for Neurobranding research.
- To classify various viewpoints pertinent to Neurobranding research along with Neuromarketing.
- Avoid selection bias by using a systematic approach to search for literature.

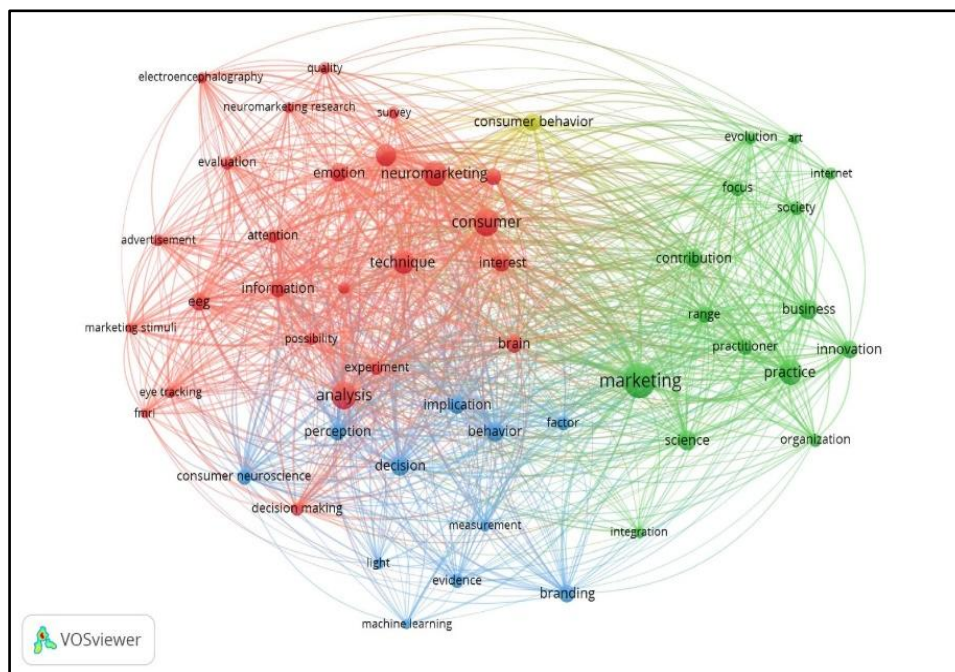


Diagram 1. Keyword Analysis using Vosviewer

The above diagram is created using Vosviewer. It illustrates the relationships and thematic clusters within the field of neuro-marketing and consumer behavior research. The red cluster in the center-left predominantly features terms related to consumer behavior and Neuromarketing, such as "consumer," "Neuromarketing," "emotion," "EEG," and "analysis." This suggests that there is a heavy emphasis on

learning how customers respond neurologically and emotionally to marketing stimuli. Data on consumer responses are gathered using techniques such as electroencephalography (EEG) and eye tracking.

The dense network of interconnections within this cluster suggests extensive research activity and a high level of interrelatedness among these topics. On the right, the green cluster highlights broader themes in marketing practices and management, including "marketing," "innovation," "business," "practice," and "technology." This cluster suggests a focus on the application of advanced technologies and innovative strategies in marketing and management. The presence of terms like "machine learning" and "artificial intelligence" indicates the incorporation of cutting-edge technological advancements into these practices. The interconnectedness within this cluster demonstrates the integration of these technologies into the evolving landscape of marketing and management research.

(Boksem, 2015) suggests that the human brain makes between 85% and 95% of decisions at an unconscious, emotional level. This emphasizes how crucial human emotions are to the development of brands.

Neuromarketing is identified as one of the fastest growing recent trends in market research. Tools like fMRI, EEG are being commonly used by marketers today to strengthen their consumer behavior knowledge. Gaining insight into consumer intents and developing more appealing brands are the ultimate goals. Customers' blood oxygen levels rise in the middle region of the cerebral cortex when they are exposed to a brand emblem, generating mental involvement, according to fMRI research. The brain then assesses a person's importance for that specific brand. There has been more disagreement the higher the degree of activation. The degree of brand activation can be raised with the aid of neuromarketing to have a greater influence on consumers. (Madan, 2010)

Being aware of a good brand will increase customers' pleasure and brand loyalty by helping them feel good about their selection, purchase, and use. (Sebastian, 2014).

Behavioral neurosciences are applied to marketing through the use of cutting-edge technologies in neuromarketing. A subcategory of neuromarketing is called neurobranding. Neuromarketing techniques detect signs and stimuli that reflect consumer behavior that are not visible to the unaided eye. Neuromarketing strategies support a number of areas, including successful branding, product design, and advertising.

They provide insights into the customer's complete shopping journey, starting from the moment they enter the store until they exit, excluding the neural response during the actual purchase. A virtual store with 2D and 3D retail merchandise that simulates a genuine store is an intriguing application. Real marketing experiences are provided to test consumers, and their purchasing decisions are skillfully studied. Building an emotional connection with consumers through cause branding is an effective strategy for businesses to address declining consumer interest and loyalty. (Prasad 2011).

Cause branding, also known as cause marketing, is a tactic that gives customers the chance to make purchases based on causes in order to improve social concerns other than their own interests. (Kim and Johnson 2011). When a brand addresses relevant as well as vital social issues, it can build emotional bonds with its customers. Amul has exactly understood this market pulse and till date has triggered various emotions through its branding. Since moral emotions are connected to their consumers' interests and desire to further a greater good, they are crucial. (Haidt 2003). Positive perceptions of the brand evoke emotions that shape consumer behavior. Sensory marketing has become crucial for generating pleasure and excitement among consumers, as the focus of marketing has shifted from the product itself to creating immersive experiences.

(Douce and Janssens 2013). Consumer views, decisions, and actions around a specific brand are influenced by sensory branding. (Krishna 2012). Except for notable instances like sight, which excels at detecting changes and differences in the environment, all five senses trigger emotional responses to products, services, and surroundings. (Orth and Malkewitz 2008) and the most vivid memories being triggered by scent (Fiore et al. 2000).

A brand's appeal to consumers' senses enables them to experience it more deeply and have a deeper emotional connection with it, as Lindstrom (2010) noted in his book *Brand Sense*. Our ancient scriptures like Bhagavad Geeta also have a reference to the power of the sense of smell which points toward Sensory marketing.

From the customer's viewpoint, there's a difference between actual taste and perceived taste. Perceived taste is what the brain makes out of all the different sensory inputs, the environment, the mood, what you know about the product or brand, and many more parameters. In food product development, it is crucial to consider the multisensory perception of the sensory stimuli of the market offering.

Mind Lab's online study examined how emotional states (happy, sad, bored, and stressed) affect spending behavior. Using emotional priming and tests, neuro marketers assessed 500 participants on factors like buying likelihood, impulsivity, and overspending. Participants were divided into five "mood" groups:

happy, sad, bored, stressed, and control. To induce specific emotional states like sadness or boredom, each participant, except those in the control group, watched a two-minute video as part of the emotional priming task. Control group participants did not watch any video. Following the emotional priming stage, participants took a battery of online tests to see how different emotional states affected their purchasing choices.

Emotions play a key role in buying decisions. Mind Lab's online study examined how emotions influence spending behavior, testing participants' likelihood to buy, impulsivity, and overspending. This scalable approach provided insights relevant to modern online shopping behaviors, comparing emotional groups to a control group to assess the impact of different moods on financial decisions. We researchers have taken references from the above study and tried to apply them to Amul and study the consumer responses.

RESEARCH METHODOLOGY

The primary and secondary data are extensively used in this study. The researchers used questionnaires to obtain primary data from 213 clients, and they gathered secondary data from a variety of websites, academic publications, etc. The primary data were gathered by the researchers using a straightforward random sampling method. The researcher used the SPSS application to analyze and interpret the data using factor analysis, regression analysis, and paired t-test.

Neuromarketing can be an answer to all biases in traditional market research. The Neuro techniques use physiological as well as a few neurological tactics like brain scans, eye tracking as well as monitoring of heart rate, and facial coding to know the target audience an inch more. No doubt every tool used has its pros and cons, yet a combined approach will help to gain substantial knowledge into consumers' subconscious reactions to stimuli. While guaranteeing that the data gathered is pertinent and trustworthy, the method selection should be in line with the goals of the study and financial restrictions.

Hypothesis

In any research, a hypothesis plays a crucial role as it provides a clear and focused direction for the study. It narrows down the research topic to specific, testable statements. A correct hypothesis can help in developing research instruments like questionnaires, surveys, or experiments. Null and alternative hypotheses are tested to accept or reject assumptions based on data. It serves as a foundation for scientific inquiry and ensures that research is systematic, focused, and meaningful outcome.

For current research study we have identified the following hypothesis

H0- There is no correlation among neuro branding and customer buying behavior

H1- There is a correlation between neuro branding and consumer behavior

H0- There is no positive influence of Neurobranding elements like- emotions, visuals, and storytelling on consumer behavior

H1- There is a positive influence of Neurobranding elements like- emotions, visuals, and storytelling on consumer behavior

H0- There is a negative correlation among the Frequency of buying Amul products and the Age, Education, and education of the individuals

H1- There is a positive relationship between the Frequency of purchasing Amul Products and Age, education, and marital status

Broad Research Questions

- What factors influence consumers' preferences for Amul products?
- How do consumers prioritize Amul products in a competitive market?
- What factors contribute to customer satisfaction and loyalty concerning Amul's brand?
- What brain regions are activated when consumers view emotionally appealing advertisements of Amul?
- How does the placement of key visual elements in Amul advertisements affect consumer attention and recall?

Research Gap

Identifying a research gap offers new insights and advances the research discipline thus contributing to the originality, and relevance of the study, guiding its focus, and ensuring its impact and contribution to the field. It helps in strengthening the scope of the research. The authors have tried to bring ahead the exact emotions of the consumers, the visual elements that attract them towards the Amul brand which is under study. In this exercise there is a major limitation that we are not able to apply the technical tools of

Neuromarketing like fMRI, EG, GSR and many more. Hence we have tried our level best to capture data through survey forms. The period devoted and number of respondents can also be a limiting factor.

Questionnaire Designing and Sampling

The role of a questionnaire in survey research is crucial as it serves as the primary tool for data collection. Standardized questions help minimize interviewer bias and ensure that responses are based solely on respondents' views and experiences. In addition to closed-ended questions, the researchers have included open-ended questions which have provided a deeper insight into respondents' thoughts and feelings. Questionnaires are a versatile, efficient, and effective tool for collecting both quantitative and qualitative data in research surveys. They are flexible to different research goals and situations and play a vital role in guaranteeing data validity, consistency, and reliability. While conducting a study on this topic the researchers have developed a systematic questionnaire containing a total of 13 questions for which the respondents have given their insights.

Method of data analysis

Data analysis is a vital component of research that transforms raw data into meaningful information. It involves various techniques and methods to process, summarize, and interpret data, ensuring the research conclusions are valid, reliable, and practically applicable. It plays a critical role in interpreting the results and drawing meaningful conclusions from the research. The next step is the data interpretation which explains the significance of the analyzed data, identifying patterns, relationships, and trends, and determining if the hypotheses were supported. This leads to informed decision making thus providing a factual basis for making decisions or recommendations based on empirical evidence.

For this research article, the authors have collected data from primary sources by designing a standard questionnaire that contained almost twelve questions. The Google form was designed and circulated for maximum reach and results all over India. The sample size and convenient sampling method were used.

Result and Analysis

Table 1. Reliability Test- Cronbach Alpha

Reliability Test - Cronbach Alpha				
Sr.No.	Factor	Item	Cronbach Alpha	Level of reliability
1	Neuromarketing factors	How often do you feel the Happiness emotions when you see an Amul advertisement?	0.917	Excellent
		How often do you feel the Trust emotions when you see an Amul advertisement?		
		How often do you feel the Nostalgia emotions when you see an Amul advertisement?		
		How often do you feel the Excitement emotions when you see an Amul advertisement?		
		How often do you feel the Curiosity emotions when you see an Amul advertisement?		

Compiled by Authors with the help of SPSS – 25

One important metric for evaluating the validity of study scales is Cronbach's alpha. It guarantees that a scale's items measure the same construct consistently, which improves the caliber and authenticity of study findings. Cronbach's alpha is a metric used to assess internal consistency, indicating how closely related a set of items are to each other.

It is a measure of scale reliability or the reliability of the items in a questionnaire. When developing new scales, researchers use Cronbach's alpha to determine which items to retain. Items that don't contribute to a high alpha may be revised or discarded. The standard questionnaire that we have used before going for the final analysis, we have done the reliability test Cronbach Alpha which is renowned for checking the internal consistency of data sort. We have found that the value is 0.9 which indicates excellent level of reliability. 95% of confidence level is what we have considered.

Table 2. One Sample Test

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
How familiar are you with the Amul brand?	86.517	202	0.000	4.665	4.56	4.77
Frequency of buying the Amul products	60.262	202	0.000	3.852	3.73	3.98
How often do you feel the Happiness emotions when you see an Amul advertisement?	55.381	202	0.000	4.074	3.93	4.22
How often do you feel the Trust emotions when you see an Amul advertisement?	43.909	202	0.000	3.754	3.59	3.92
How often do you feel the Nostalgia emotions when you see an Amul advertisement?	45.039	202	0.000	3.700	3.54	3.86
How often do you feel the Excitement emotions when you see an Amul advertisement?	40.670	202	0.000	3.517	3.35	3.69
How often do you feel the Curiosity emotions when you see an Amul advertisement?	40.863	202	0.000	3.522	3.35	3.69

Compiled by Authors with the help of SPSS – 25

The survey included questions about the familiarity of the Amul brand, yielding a t-Statistic of 86.517. This high t-value suggests a substantial difference between the sample mean and 0. With a p-value below 0.05, the result is statistically significant. The Mean Difference of 4.665 indicates that the average familiarity score is 4.665, significantly different from 0. The 95% Confidence Interval, ranging from 4.56 to 4.77, we conclude that we are 95% confident that the true mean familiarity score falls between these values.

In case of the question for knowing the frequency of buying Amul products; t-Statistic (60.262) which points out that a very high t-value indicates a large difference between the sample mean and 0. The p-Value is (.000); since the p-value is less than 0.05, the result is statistically important. The Mean Difference (3.852) points out that the average frequency of buying Amul products is 3.852, which is significantly different from 0. The 95% Confidence Interval (3.73 to 3.98) pinpoints that; we are 95% confident that the true mean frequency of buying Amul products is between 3.73 and 3.98.

We assessed consumers' happiness after viewing Amul advertisements, and the results are as follows: a t-Statistic of 55.381, indicating a noticeable difference between the sample mean and 0. The p-Value of 0.000 confirms statistical significance, as it is below 0.05. The Mean Difference of 4.074 shows that the average frequency of feeling happiness when seeing an Amul ad is 4.074, significantly different from 0. The 95% Confidence Interval of 3.93 to 4.22 shows that we are 95% confident that the true mean frequency lies between these values.

For the success of any brand consumer trust plays a vital role. Our survey form which has a question about the same puts forward the following results; t-Statistic (43.909) which indicates a very high t-value indicates a large difference between the sample mean and 0. The p-Value (.000): since the p-value is less than 0.05, the result is vital from statistical view point.

Feeling nostalgic is a very common emotion experienced by consumers who regularly use a particular brand. We have tried to gauge this aspect through our survey and got the following outcome which will be useful for the marketers as well as the brand custodians; t-Statistic (45.039) indicates a very high t-value indicates a large difference between the sample mean and 0. The p-Value (.000) shows that since the p-value is less than 0.05, the result is statistically significant. The Mean Difference (3.700) indicates that the average frequency of feeling nostalgia when seeing an Amul ad is 3.700, which is significantly different

from 0. The 95% Confidence Interval (3.54 to 3.86) indicates that we are 95% confident that the true mean frequency is between 3.54 and 3.86.

We examined how close consumers feel to the brand and its impact on their excitement, reflected in one of our survey questions. The results show a t-Statistic of 40.670, indicating a vital difference between the sample mean and 0. The p-Value of 0.000, being less than 0.05, confirms statistical significance. The Mean Difference of 3.517 reveals that the average frequency of feeling excitement when seeing an Amul ad is 3.517, significantly different from 0. The 95% Confidence Interval, ranging from 3.35 to 3.69, means we are 95% confident that the true mean frequency lies within this range.

The brand which is renowned always ignites curiosity amongst its consumers, this aspect too has been captured by the researchers with following results-The t-Statistic of 40.863 points out a noticeable difference between the sample mean and 0. With a p-Value of 0.000, the result is statistically significant, as it is below 0.05. The Mean Difference of 3.522 shows that the average frequency of feeling curiosity when seeing an Amul ad is 3.522, significantly different from 0. The 95% Confidence Interval (3.35 to 3.69) shows that we are 95% confident that the true mean frequency is between 3.35 and 3.69.

Thus we conclude that Null Hypotheses Rejected and alternate accepted. All the variables have mean values that are significantly different from 0, with very high t-statistics and p-values less than 0.05. Amul brand, frequently buy Amul products, and often feel happiness, trust, nostalgia, excitement, and curiosity when seeing Amul advertisements.

Table 3: One-Sample Test

	One-Sample Test					
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper	
"The use of humor in Amul advertisements positively influences my perception of the brand."	58.649	202	0.000	4.192	4.05	4.33
To what extent do you believe that Amul's storytelling approach in its advertisements affects your buying decisions?	47.323	202	0.000	3.837	3.68	4.00
Frequency of buying the Amul products	60.262	202	0.000	3.852	3.73	3.98
How appealing do you find the visual elements (e.g., colors, packaging) used in Amul advertisements?	67.695	202	0.000	4.187	4.07	4.31

Compiled by Authors with the help of SPSS – 25

The Statistical Significance indicates that all p-values are 0.000, which is less than the standard significance level of 0.05. This indicates that the null hypothesis (which states that the mean difference is zero) can be rejected for all the statements. The mean differences for all statements are positive and substantial, suggesting that respondents have strong positive perceptions and behaviors toward Amul's advertisements. The 95% confidence intervals do not include zero, which further supports the significance of the results. These results demonstrate that humor in advertisements, storytelling approaches, frequency of product purchase, and visual appeal of advertisements significantly positively influence respondents' perceptions and behaviors towards the Amul brand. Thus here too the Null Hypotheses were rejected and alternate accepted.

From this, we get to learn that, making customers laugh is always a great idea. Humor creates a connection, making the customer experience memorable. When customers laugh, they feel good, & happy customers are more likely to return. Customer satisfaction is incredibly important because happy customers directly contribute to a business's success.

Storytelling is a potent tool for enhancing customer satisfaction. By creating emotional connections, simplifying complex information, differentiating from competitors, and engaging customers, Amul as a brand has successfully built stronger relationships and fostered loyalty amongst its consumers.

Table 4. Frequency of buying Amul products

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.453	0.357		9.678	0.000
	Age (in Years)	0.130	0.069	0.182	1.871	0.048
	Education Level	0.058	0.106	0.038	0.545	0.046
	Marital Status	0.013	0.017	0.077	0.094	0.042

a. Dependent Variable: Frequency of buying the Amul products

Compiled by Authors with the help of SPSS – 25

The Constant (3.453) indicates the average frequency of buying Amul products is 3.453 when age, education and marital status are zero. Given that age, education and marital status cannot be zero in a practical context, the constant serves as a baseline reference point.

The Age (0.130) indicates that the frequency of purchasing Amul items rises by 0.130 units for every year of age. The statistical significance of this link ($p = 0.048$) suggests that age is a useful predictor of the frequency of purchases.

The Education Level (0.058) shows that for each additional unit increase in education level, the frequency of buying Amul products increases by 0.058 units. This relationship is statistically significant as ($p = 0.045$); suggesting that education is also a significant predictor of buying frequency.

The Marital Status (0.013) shows that the frequency of purchasing Amul items rises by 0.013 units for every unit change in marital status. The statistical significance of this link ($p = 0.042$) suggests that marital status is a significant predictor of the frequency of purchases.

All three predictors—age, education level, and marital status significantly influence the frequency of buying Amul products.

Age: There is a positive and vital relationship between age and buying frequency, suggesting that older individuals tend to buy Amul products more frequently.

Education Level: Additionally, there is a strong and positive correlation between education and frequency of purchases, meaning that those with higher education levels are more likely to purchase Amul items.

Status of Marriage: There is a strong as well as positive correlation between the frequency of purchases and marital status, indicating that marital status affects purchasing decisions. The alternative hypothesis was accepted, whereas the null hypothesis was rejected.

DISCUSSION

The authors study is based on very strong objectives which revolve around Neurobranding parameters which influence the buyer behavior. The authors have considered brand Amul for their study as in India it is one of the most consumed as well as known brand. Consumers from every age group prefer this brand under study. There is no Neurobranding study initiated on the consumer behavior on this brand. Neuromarketing is the future of research along with the traditional tools. Thus, both objectives are satisfied.

The questionnaire designed has thirteen questions with initial few trying to capture the basic demographics of the respondents. While the others include a five point Likert scale trying to know the familiarity, emotions, visual elements as well as storytelling approach adopted by Amul. The questionnaire has two open ended questions about the emotions felt by the consumers while seeing the Amul ads. There is a lot of learning for the marketers from the “actual” feelings expressed by the respondent’s. The visual elements of the brand play a vital role in gauging the buyer behavior.

The brand Amul is a market leader in the butter market, approx. 65% share in cheese as well as in infant milk. The recall is “Amul Butter” to consumers wherein butter is equal to Amul. Whether in rural or urban markets almost every Indian consumer prefers the Amul brand among all dairy products. For more than fifty years now, Amul’s girl has entertained generations with its advertisements based on current happenings. The Guinness World Record for the longest-running advertising campaign has been given to the brand.

According to research in the field of neuro branding, humor, sarcasm, and wit in an advertisement increase brand recall, especially among youths. Humans are known to need recognition and appreciation,

which is what Amul has been providing through its advertisements. It helps keep the business at the forefront of consumers' minds by making people of all ages feel unique and acknowledged. The brand Amul has taught us that butter is not a part of English breakfast but Indians can also use it and the tagline of the brand- 'Taste of India' unites all. Amul has created a "need" or requirement for its various market offerings. The advertisements of Amul highlight "oneness" or togetherness which is a unique feature of Indian families. Indian culture is displayed in its various campaigns thus establishing an emotional connection.



Image 1. "Round" Packing of Amul Shrikhand

When the tagline has an emotional bend the brand stands out from the clutter. Amul has been following this fundamental which also breaks the myth that a brand sells when endorsed by celebrities. This is one of the vital Neuromarketing insights. Amul has always raised a milk glass of power for children as well as women. One very interesting element under visual clues of the brand with respect to Neurobranding are the packaging dynamics. Human brain connects round shape with sweetness; the base is evolutionary psychology as well as the cultural influences. While the angular typefaces are linked with sour taste. This establishes that packing not only affects appearance but also influences the taste expectations about the product.



Image 2. "Angular" Packing of Amul Butter

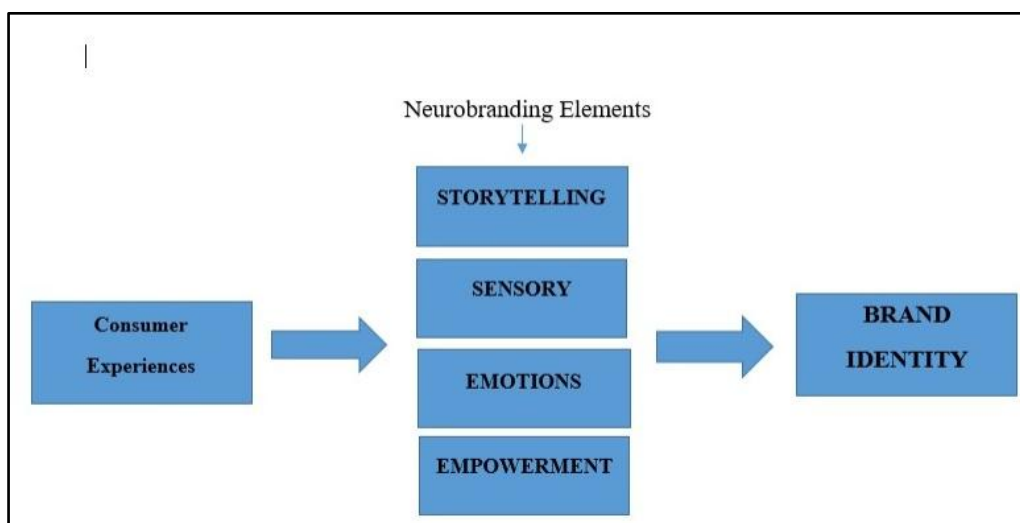


Image 3. The Neurobranding Model

The above model throws light on the Neurobranding elements which contribute towards the identity of the brand. The research done by authors is also focusing on the emotional engagement of the consumers with the brand, the five senses experience which translates into purchase, how brands empower the end users and the most important touch point is the storytelling approach. The consumers try to relate themselves with the brand. The most highlighting part of Amul is that its advertisements have no celebrity, Amul has always focused on common man from India.

Limitations

Neurobranding research, which integrates neuroscience and marketing to understand consumer behavior and brand perception, holds great promise. The extensive use of neuroimaging technologies in research and real-world applications is restricted by their high cost and need for specialized facilities and knowledge. The use of neuroimaging techniques on participants raises ethical issues related to privacy, consent, and potential misuse of sensitive data. Neurobranding should complement, not replace, other approaches to understanding consumer behavior. Thus, addressing these limitations requires a balanced approach, integrating neuro branding with other marketing research methodologies and ensuring rigorous ethical standards and robust scientific practices.

Future Scope of Study

The future of neurobranding lies in its potential to revolutionize how brands understand and interact with consumers. By leveraging advances in neuroscience and technology, and adhering to ethical standards, neurobranding can provide deep insights into consumer behavior, leading to more effective and personalized branding strategies. This new area of study has fascinating prospects for multidisciplinary investigation, useful applications in a range of sectors, and noteworthy developments in both academic and professional contexts.

Neurobranding insights can be applied to understand and capture emerging markets with different consumer behaviors and preferences. Marketing professionals can apply neurobranding insights effectively in real-world campaigns. Thus, Neurobranding is an emerging field that combines neuroscience with branding to understand and influence consumer behavior at a subconscious level. The future scope of study in neuro branding is vast and promising

CONCLUSION AND RECOMMENDATIONS

Effective storytelling requires understanding the audience, being authentic, using multiple channels, focusing on customer-centric narratives, and maintaining a consistent brand voice. Storytelling is an ancient art form that has been used for centuries to convey messages, share experiences, and connect people. Storytelling has grown to be a potent tool in today's corporate environment for attracting clients, fostering brand loyalty, and raising client happiness.

Amul has leveraged this approach through emotional and cognitive aspects of storytelling to create a memorable and impactful customer experience.

Target Marketing Strategies- Tailor marketing campaigns to target older consumers, who are more likely to buy Amul products frequently. Develop educational content and promotional strategies that appeal to individuals with higher education levels. Consider marital status in marketing strategies, perhaps targeting campaigns towards specific marital groups.

Further Research- Investigate other potential predictors that might influence the frequency of buying Amul products. Conduct a segmentation analysis to better understand how different demographic groups respond to Amul products.

Practical Application- Utilize these data to improve your product offers and messaging so that they better suit the tastes and habits of various age groups, educational backgrounds, and marital statuses.

Emotions, then, act as the mediating variable in this study, suggesting that emotions are important in connecting Amul's neuro-branding initiatives to shifts in customer purchasing patterns. The research seeks to explore how emotions evoked by Amul's branding exercise strengthen the relationship between neurological responses and purchasing decisions.

REFERENCES

- [1] Karmarkar, Uma R (2011) Note on Neuromarketing. Harvard business school background Note 512-031.
- [2] Javor A, Koller M, Lee N, Chamberlain L, Ransmayr G (2013) Neuromarketing and consumer neuroscience: Contributions to neurology. BMC Neurology 13(1): 1-12
- [3] Pradeep AK (2010) The buying brain: Secrets for selling to the subconscious mind. John Wiley & Sons

- [4] Madan CR (2010) Neuromarketing: The next step in market research? *Eureka* 1(1): 34-42
- [5] Fisher CE, Chin L, Klitzman R (2010) Defining neuromarketing: Practices and professional challenges. *Harvard Review of Psychiatry* 18(4): 230-237. 16.
- [6] Butler MJ (2008) Neuromarketing and the perception of knowledge. *Journal of Consumer Behaviour* 7(4-5): 415-419
- [7] Kotler P, Keller KL (2006) *Marketing Management*. Prentice-Hall International, New Jersey, USA
- [8] Page G (2012) scientific realism: What 'Neuromarketing' can and can't tell us about consumers. *International Journal of Market Research* 54(2): 287-290
- [9] Pieters R, Warlop L (1999) Visual attention during brand choice: The impact of time pressure and task motivation. *International Journal of Research in Marketing* 16(1): 1-16.
- [10] Plassmann H, Ramsøy TZ, Milosavljevic M (2012) Branding the brain: A critical review and outlook. *Journal of Consumer Psychology* 22(1): 18-36.
- [11] Dreze X, Hussherr FX (2003) Internet advertising: Is anybody watching? *Journal of Interactive Marketing* 17(4): 8-23
- [12] Pravin Raj Solomon. Neuromarketing: Applications, Challenges and Promises. *Biomed J Sci & Tech Res* 12(2)-2018. BJSTR. MS.ID.002230. DOI: 10.26717/BJSTR.2018.12.002230
- [13] Ailawadi KL, Keller KL (2004) Understanding retail branding: Conceptual insights and research priorities. *Journal of Retailing* 80(4): 331-342
- [14] Plassmann H, Ramsøy TZ, Milosavljevic M (2012) Branding the brain: A critical review and outlook. *Journal of Consumer Psychology* 22(1): 18-36
- [15] Lee YC, Huang SY A new fuzzy concept approach for Kano's model. *Expert Syst. Appl.* 2009, 36:4479-4484.
- [16] Leonard, D., &Rayport, J. F., Spark innovation through empathic design. *Harvard business review*, 1997, 75, 102-115.
- [17] Morrison, S., & Frederick, G. C. (2007). Building the service brand by creating and managing an emotional brand experience. *Journal of Brand Management*, 14, 410-421.
- [18] Mossberg, L. (2008). Extraordinary experiences through storytelling. *Scandinavian Journal of Hospitality and Tourism*, 8(3), 195-210.
- [19] Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology*, 22(3), 332-351.
- [20] Kumar, A., & Kim, Y.-K. (2014). The store-as-a-brand strategy: The impact of store atmosphere and merchandise on customer response. *Journal of Retailing and Consumer Services*, 21(5), 685-695.
- [21] Füller, J., Mühlbacher, H., Matzler, K., &Jawecki, G. (2009). Consumer empowerment through internet-based co-creation. *Journal of Management Information Systems*, 26(3), 71-102.
- [22] Fugate, D. L. (2007). Neuromarketing: a layman's look at neuroscience and its potential application to marketing practice. *Journal of Consumer Marketing*, 24(7), 385-394
- [23] González-Morales, A., Mitrovic, J., & Garcia, R. C. (2020). Ecological consumer neuroscience for competitive advantage and business or organizational differentiation. *European Research on Management and Business Economics*, 26(3), 174-180.
- [24] Valencia, E. (2017). Neuromarketing step by step: Based on scientific publications. In *Applying neuroscience to business practice* (pp. 18-48). IGI Global.
- [25] Parekh, Krunal. "An Empirical Study on the Post-Pandemic Impact of Neuro Branding on Buying Behavior of Consumers in India." *International Forum on Cultural Studies* Vol. 3 (2023).