

A STUDY ON EFFECTIVENESS OF SUBLIMINAL PERCEPTION ON BRAND, LOGO AND PRODUCT RECOGNITION

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ABSTRACT

Successful marketing depends upon the strategies adopted to attract and retain the consumers. The customer retention and satisfaction play a fundamental responsibility in the progress of any firm. Brand loyalty is one of the keys to accelerate the growth of every business. In order to maintain the brand positioning and brand loyalty, the marketers adopt various strategies. One of such strategies is to induce the prospective buyers or existing consumers through their sub conscious minds. The messages given in advertisements reach the minds of the consumers and they develop subliminal perception. Various studies undertaken in the past have not focussed on the impact of subliminal perception on brand, logo and product recognition. In this context, the present study is undertaken with the aim of understanding the influence of subliminal perception of consumers on brand, logo and product recognition. The survey was conducted among 150 consumers selected on convenience basis. The data collected through a questionnaire and analyzed with the suitable arithmetical tools. The results revealed that the education, occupation and income have significant association with the brand recognition and logo recognition.

Keywords: Brand recognition; Logo recognition; Impact; Product recognition; Subliminal Perception.

Introduction

At the outset, “Subliminal messages” are broadly classified into two major categories; “Auditory” and “Visual”. Studies conducted by Sofi & Nika, (2013) indicate that such kinds can pilot to inconsiderate performance, intellectual change, desperate acts of anxiety and even addiction to drugs. Since the outcomes resulted in negative impact, the concept of “subliminal messages” is always subjected to question of uncertainly by the detractors. Usage of such types of advertisements generally raised ethical and professional issues and eventually listed them as deceiving. Public opinion on these concepts had negative outlook towards “subliminal advertisements” however qualified and proficient intellectuals have always been on pursuing the grassroots to convincing the opponents that “subliminal advertising” do not subsist at all (Klimov, 2003).

Subliminal Process

Capturing a stimulus through “subliminal methodology” keeping in mind the various reasons involved pertaining to poor dimensions, deficient attention and diminutive duration reflect on not reaching the conscious of human beings. On contrary, Moore (1982) proved on the concept of establishing cutting edge behaviour of a person that decides on their will and conscious. The term “subliminal process” originated for the purpose of describing situations that encounter weak stimuli and perceived feeble responses unconsciously described by Dixon, (1971). Interest in “subliminal perception” emerged at the end of the nineteenth century and the beginning of the twentieth, conceiving number of studies on psychological dimensions and commercial aspects Aarts, & Smith,(2012); Goldstein & Barthol (1959); Bruner & Postman, (1947).

Review of Literature

Subliminal perception, or subliminal stimulus is considered by Peacock & Samuel, (2016); Smarandescu & Shimp, (2015); Broyles (2006), as any text in the form of picture, audio, or phrases that is perceived in an abnormal assortment of perception in the state of conscious mindset, which is designed in a such a ways that the consciousness skips that notification. Over a period of time the classification has induced entirely a different classification of elements that suggest phrases and hidden scenes that others could remember easily.

According to Karam, R. et al. (2017) the participants have chosen the colour which they liked the most while selecting the number, they have listened to the audio containing subliminal messages and these messages have influenced them to select the number. However, while selecting a colour from the three given colours, the preference was given to the colour which is their favourite colour. Therefore, they have concluded that the preference of numbers is influenced by subliminal messages. Study conducted by Sofi, S.A. et al. (2018) testing the impact on “subliminal messages” towards consumer behaviour. In this regard, they have considered the television advertisements. They have adopted the behavioural approach to scrutinize the force of “consumer behaviour” on “subliminal messages”. They have found that the purchase intentions of young consumers significantly influenced the television advertisements “subliminal messages”. They have concluded that the consumer buying behaviour has been affected by subliminal advertisements. Shukla; S. (2022) found that the awareness level of students about the subliminal advertisements was low and the gender of the students has no significant influence on the awareness of students on subliminal advertisements. It is indicated by the students that the subliminal advertisements were not to protect their interests but they are against their interests. There was a strong perception among the students that the subliminal advertisement was not a correct ethical practice.

STATEMENT OF THE PROBLEM

The purchase intentions generally influence several factors eventually. Marketers adopt different strategies from time to time. They try to influence the prospective buyers or consumers through all possible ways. Advertisements are imperative and fundamental in persuading consumers. The advertisements which could stay in the subconscious minds of the consumers reflect on their purchase intentions. While going for shopping, these advertisements help the consumers to recognise the brands, logo and products through subliminal perception. These aspects have not been studied by many previous scholars. The previous studies have focused on the subliminal advertising, customer awareness, and customer attitude only. Hence, the researchers deemed it necessary to carry out an exclusive study to find out the impact of subliminal perception on brand, logo and product recognition.

Objectives

1. To examine the effect of subliminal perception of consumers on brand recognition
2. To investigate the impact of subliminal perception of consumers on logo recognition
3. To assess the influence of subliminal perception of consumers on product recognition

Hypotheses

In order to fulfil the above objectives, the researchers have formulated the following hypotheses and tested with appropriate statistical tools.

Null Hypotheses

1. No association between demographic variables (gender, education, occupation and income) and the impact of subliminal perception on brand recognition
2. No association between demographic variables (gender, education, occupation and income) and the impact of subliminal perception on logo recognition
3. No association between demographic variables (gender, education, occupation and income) and the impact of subliminal perception on product recognition

Alternative Hypotheses

1. Significant association exists among demographic variables (gender, education, occupation and income) and the impact of subliminal perception on brand recognition
2. Significant association exist among demographic variables (gender, education, occupation and income) and the impact of subliminal perception on logo recognition
3. Significant association exists among demographic variables (gender, education, occupation and income) and the impact of subliminal perception on product recognition

Methodology

The current study implores chiefly on the primary data gathered from sample respondents. The essential primary data necessary to execute the reassert was collected using a structured survey instrument. The researchers have prepared a questionnaire and administered among the respondents. The duly filled in questionnaires were collected from the respondents after a specific time. Overall, 150 responses (n=150) were collected from consumers in Hosur City of Krishnagiri District, Tamil Nadu. These respondents were selected using convenience sampling method. The collected data from respondents were analyzed using essential statistical tools viz., percentage analysis, chi square test, Mann Whitney U test, Kruskal Wallis test, mean, standard deviation, t test and ANOVA.

Results & Discussion

The analysis has been made in four different dimensions. The descriptive statistics have been used for describing the demographic variables. The chi square test is administered to experiment the influence of subliminal perception on brand recognition. The “Mann Whitney U” and “Kruskal Wallis” tests have been administered to investigate on the effect of “subliminal perception” on “logo recognition”. The effect of “subliminal perception” on product recognition has been analyzed using t test and ANOVA.

Table 1: Demographic Variables

Demographic Variables	Groups	Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	73	48.7	48.7	48.7
	Female	77	51.3	51.3	100
Education	Up to School Level	39	26	26	26
	Up to College Level	107	71.3	71.3	97.3
	Uneducated	4	2.7	2.7	100
Occupation	Student	28	18.7	18.7	18.7
	Employed	71	47.3	47.3	66
	Business	16	10.7	10.7	76.7
	Housewife	31	20.7	20.7	97.3
	Retired Person	4	2.7	2.7	100
Monthly Income	No Income	52	34.7	34.7	34.7
	Up to Rs.10000	18	12	12	46.7
	Rs.10001 to Rs.20000	27	18	18	64.7
	Rs.20001 to Rs.30000	28	18.7	18.7	83.3
	Rs.30001 to Rs.40000	21	14	14	97.3
	Rs.40001 to Rs.50000	1	0.7	0.7	98
	Above Rs.50000	3	2	2	100
	Total	150	100	100	

Table 1 proclaims that out of the total sample, 48.7 percent were male respondents and remaining 51.3 percent were female respondents.

Among the sample respondents, 26 percent have completed school level education, while 71.3 percent have completed college level education; remaining 2.7 percent of them remain uneducated.

Students formed 18.7 percent of the total respondents whereas employed contributed to 47.3 percent of the total respondents. The proportion of businessmen among the total respondents was 10.7 percent. Housewives constituted 20.7 percent of the sample and 2.7 percent consisted of retired persons.

No income was earned by 34.7 percent of the respondents, income earned by 12 percent of the respondents fall below Rs.10000, 18 percent of the respondents ranged between Rs.10001 and Rs.20000. It was reported by 18.7 percent of the respondents that their monthly income was ranging from Rs.20001 to Rs.30000 whereas 14 percent of the respondents earn Rs.30001 to Rs.40000. Results show that income between Rs.40001 and Rs.50000 earned by 0.7 percent of the respondents while 2 percent of the respondents earn above Rs.50000.

SUBLIMINAL PERCEPTION AND BRAND RECOGNITION

The influence of subliminal perception on brand recognition has been examined in accordance with the respondent’s demographic variables that include gender, education, occupation and monthly family income. Keeping context in mind, the respondents were probed to identify the brands of specified seven products. The respondents matched the products and brands. Based on the right matching, the scores were assigned. The following brands were considered:

1. Procter & Gamble
2. Amul
3. Parle
4. Britannia
5. Puma
6. Reebok and
7. Colgate Palmolive

Table 2: Gender and Brand Recognition – Chi square test

Brands	X ²	'p'	Result
Procter & Gamble	0.629	0.428	Accepted
Amul	0.936	0.333	Accepted
Parle	0.857	0.355	Accepted
Britannia	0.161	0.688	Accepted
Puma	0.901	0.342	Accepted
Reebok	0.000	0.990	Accepted
Colgate Palmolive	1.500	0.221	Accepted

From the Table 2, it is evinced that the gender has no significant relationship with impact of “subliminal perception” on recognition of Procter & Gamble brand. The association between gender and influence of subliminal perception on the recognition of Amul brand is not significant. There exists an insignificant relationship between gender and effect of subliminal perception on Parle brand recognition. The brand recognition towards Britannia as influenced by subliminal perception has no significant association with the gender of the respondents.

There is no significant relationship identified between “gender” of respondents and impact of “subliminal perception” on brand recognition of Puma. The recognition of Reebok brand by subliminal perception has an insignificant relationship with the gender of the respondents. It is observed that the gender and influence of subliminal perception on Colgate Palmolive brand recognition are insignificantly associated.

Table 3: Education and Brand Recognition – Chi square test

Brands	X ²	'p'	Result
Procter & Gamble	6.417	0.040	Rejected
Amul	1.157	0.561	Accepted
Parle	2.362	0.307	Accepted
Britannia	1.376	0.502	Accepted
Puma	3.848	0.146	Accepted
Reebok	3.184	0.204	Accepted
Colgate Palmolive	1.968	0.374	Accepted

Table 3 purports that the recognition of Procter & Gamble brand by subliminal perception has significant association with the education of the respondents while the recognition of Amul brand through subliminal perception and education of the respondents are not significantly associated. The association between education of the respondents and the effect of subliminal perception on Parle brand is not significant. The results decipher on absence of significant association among “education and recognition” of Britannia by subliminal perception. The brand recognition of Puma through subliminal perception is insignificantly associated with the education. The recognition of Reebok brand through subliminal perception is not associated with the education. The education and brand recognition of Colgate Palmolive are not statistically associated.

Table 4: Occupation and Brand Recognition – Chi square test

Brands	X ²	'p'	Result
Procter & Gamble	2.321	0.677	Accepted
Amul	17.73	0.001	Rejected
Parle	2.107	0.716	Accepted
Britannia	3.879	0.423	Accepted
Puma	2.337	0.674	Accepted
Reebok	4.384	0.357	Accepted
Colgate Palmolive	5.728	0.220	Accepted

It could be understood from the results furnished in the Table 4 that the occupation of the respondents has no significant relationship with the recognition of Procter & Gamble brand through subliminal perception. However, Amul brand recognition by subliminal perception significantly relate with occupation of respondents. Recognition of Parle and Britannia brands by subliminal perception is insignificantly associated with the occupation of the respondents. It is further observed that association between occupation and influence of subliminal perception on recognition of Puma and Reebok is statistically not significant. Significant association is absent among occupation of respondents and impact of subliminal perception on recognition of Colgate Palmolive brand.

Table 5: Income and Brand Recognition – Chi square test

Brands	X ²	'p'	Result
Procter & Gamble	13.322	0.038	Rejected
Amul	6.503	0.369	Accepted
Parle	2.703	0.845	Accepted
Britannia	6.049	0.418	Accepted
Puma	3.617	0.728	Accepted
Reebok	9.698	0.138	Accepted
Colgate Palmolive	11.36	0.078	Accepted

Table 5 portrays that the income of the respondents has significantly differentiated them with reference to the influence of subliminal perception on recognition of Procter & Gamble brand. The recognition of Amul and Parle brands through subliminal perception has no significant association with the income of the respondents. The relationship between income and impact of subliminal perception on recognition of Puma brand is found to be insignificant. Income of the respondents has no significant relationship with the effect of subliminal perception on the recognition of Reebok and Colgate Palmolive brands.

SUBLIMINAL PERCEPTION AND LOGO RECOGNITION

In the next part of the analysis, the respondents’ ability to recognize the logo of the given seven products through their subliminal perception has been analyzed. This analysis is made with reference to the selected demographic variables by applying “Mann Whitney U Test” and “Kruskal Wallis Test”. In this research, the investigator included the below listed Logos:

1. Coca Cola
2. ITC
3. Wipro
4. Dabur
5. Vodafone
6. KFC and
7. Titan

Table 6: Gender and Logo Recognition – Mann Whitney U Test

	Coca Cola	ITC	Wipro	Dabur	Vodafone	KFC	Titan
Mann-Whitney U	2733	2774	2532	2653.5	2774	2731	2681
Wilcoxon W	5434	5475	5233	5354.5	5777	5432	5684
Z	-0.398	-0.974	-1.238	-0.685	-0.974	-0.417	-0.887
'p'	0.691	0.330	0.216	0.494	0.330	0.677	0.375
Result	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted

The above Table 6 clearly proves the fact on absence of significant association among respondents and influence of “subliminal perception” on Coca Cola and ITC logo recognition. It is understood that the impact of subliminal perception on Wipro and Dabur logo recognition has no significant association with the gender of the respondents. Relationship among gender of respondents with effect of “subliminal perception” on “logo recognition” of Vodafone and KFC is statistically insignificant. The logo recognition of Titan by “subliminal perception” has no significant association with “gender” of respondents.

Table 7: Education and Logo Recognition – Kruskal Wallis Test

	Coca Cola	ITC	Wipro	Dabur	Vodafone	KFC	Titan
χ^2	1.596	0.402	0.387	1.186	0.402	1.286	0.595
df	2	2	2	2	2	2	2
'p'	0.45	0.818	0.824	0.553	0.818	0.526	0.743
Result	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted

It is lime lighted from the Table 7 that the education has no significant relationship with the influence of subliminal perception on logo recognition of Coca Cola; ITC and Wipro. It is accepted that the relationship between education and logo recognition of Dabur and Vodafone through subliminal perception is not significant. An insignificant association was observed between education and logo recognition of KFC and Titan by subliminal perception.

Table 8: Occupation and Logo Recognition – Kruskal Wallis Test

	Coca Cola	ITC	Wipro	Dabur	Vodafone	KFC	Titan
χ^2	4.937	4.357	8.679	2.958	4.357	9.337	4.396
df	4	4	4	4	4	4	4
'p'	0.294	0.36	0.07	0.565	0.36	0.053	0.355
Result	Accepted	Accepted	Rejected	Accepted	Accepted	Accepted	Accepted

Above analysis results dealing with relationship between occupation and logo recognition revealed absence of significant association among “occupation” and “logo recognition” of Coca Cola and ITC through subliminal perception. It is inferred from the results that the relationship between occupation and impact of subliminal perception on recognition of Wipro logo is significant while the association between occupation and influence of subliminal perception on recognition of Dabur and Vodafone logos is not significant. There is no significant evidence that the occupation is associated with the influence of subliminal perception on logo recognition of KFC and Titan.

Table 9: Income and Logo Recognition – Kruskal Wallis Test

	Coca Cola	ITC	Wipro	Dabur	Vodafone	KFC	Titan
χ^2	9.226	1.885	7.273	4.992	1.885	1.164	5.231
df	6	6	6	6	6	6	6
'p'	0.161	0.93	0.296	0.545	0.93	0.979	0.515
Result	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted

Above furnished results in Table 9 implied that the influence of subliminal perception on recognition of Coca cola logo has no significant association with the income of the respondents. It could be understood that relationship among income of “respondents” and impact of “subliminal recognition” on logo recognition of ITC, Wipro and Dabur is statistically not significant. Above results interpret existence of insignificant association among income and “subliminal perception” effect on recognition of Vodafone, KFC and Titan logos.

SUBLIMINAL PERCEPTION AND PRODUCT RECOGNITION

The respondents were asked to recognize the products based on the brands through their subliminal perception. Pertaining to recognizing the scores, score of 1 was assigned to correct recognition; score of 0 was assigned to wrong recognition. Respondents were given 6 products for recognition by subliminal perception. The total scores for all the six products were computed for each of the respondents. Based on the total scores, the association between demographic variables and impact of subliminal perception on product recognition has been tested using t test and ANOVA. The following products were considered:

1. Tik Tac
2. Hit
3. Lays
4. Slice
5. Vivel and
6. Yardly

Table 10: Gender and Product Recognition – t test

Gender	N	Mean	SD	't'	'p'	Result
Male	73	3.03	1.093	1.136	0.258	Accepted
Female	77	2.83	1.018			

The results of t test reveals computed t value as 1.136 and p value indicates strong relationship between gender and influence of subliminal perception on product recognition is 0.258 ($p > 0.05$). The evidence of p value exceeds 0.05; infers the acceptance range. This scenario accepts the null hypothesis and concludes absence of any significant relationship among gender and subliminal perception effect on product recognition.

Table 11: Education and Product Recognition – ANOVA

Source of variation	Sum of Squares	df	Mean Square	'F'	'p'	Result
Between Groups	1.777	2	0.888	0.794	0.454	Accepted
Within Groups	164.416	147	1.118			
Total	166.193	149				

The Table 11, deciphers the computed 'F' value is 0.794 and computed 'p' value is 0.454. While comparing the results, 'p' value is greater than 0.05, therefore this scenario lead to accepting the null hypothesis. Thus, it can be very well concluded the relationship between education and impact of subliminal perception on product recognition is statistically not significant.

Table 12: Occupation and Product Recognition – ANOVA

Source of variation	Sum of Squares	df	Mean Square	'F'	'p'	Result
Between Groups	0.982	4	0.245	0.215	0.93	Accepted
Within Groups	165.212	145	1.139			
Total	166.193	149				

Table 12 evinces that computed 'F' value is 0.215 and computed 'p' value is 0.93, stating the relationship between occupation and impact of subliminal perception on product recognition. While comparing results, the 'p' value exceeds 0.05 and this accepts the null hypothesis. Therefore, null hypothesis is accepted and the conclusion drawn from the results is there is no significant relationship among occupation and subliminal perception impact on product recognition.

Table 13: Income and Product Recognition – ANOVA

Source of variation	Sum of Squares	df	Mean Square	'F'	'p'	Result
Between Groups	3.125	6	0.521	0.457	0.839	Accepted
Within Groups	163.068	143	1.14			
Total	166.193	149				

According to the Table 13, the relationship between income and the influence of subliminal perception on product recognition is measured in terms of 'F' value of 0.457 and 'p' value of 0.839. While comparing results, 'p' value is exceeds 0.05, which pitches in the acceptance range. Hence, based on the results, null hypothesis is accepted and to conclude that the relationship existing between income and the impact of subliminal perception on product recognition is statistically not significant.

Conclusion

Subliminal messages are used as a strategy to inspire the minds of the consumers. These messages try to find a place in the sub conscious minds of the consumers. It induces the consumers when they tend to purchase goods that are advertised. Even though the consumer has no purchase intention to buy a particular product, simply on seeing the product, the subliminal perception persuades the consumer to buy that product. The present study attempted to understand subliminal perception impact on brand recognition, logo recognition and product recognition. As distinct from other previous studies, relationship among demographic variables, influence of subliminal perception on brand, logo and product recognition has been examined using various tests. The results showed that education, occupation and income has association with brand recognition while occupation has been significantly associated with logo recognition. However, the selected demographic variables have no significant association with product recognition.

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