

# SUBLIMINAL ADVERTISING, CONSUMER AWARENESS, AND ADVERTISING ETHICS

<sup>1</sup>Dr. Sunayana Shukla

<sup>1</sup>Faculty of Commerce and Management, Kalinga University, Naya Raipur, Chattisgarh, India,  
[sunayana.shukla@kalingauniversity.ac.in](mailto:sunayana.shukla@kalingauniversity.ac.in)

## Abstract

The study aims at creating awareness of subliminal advertising amongst consumers. The study also aims at finding out if gender plays a role in the awareness levels of people. The primary data comprises young students of the Sambalpur district. A t-test of significance was used to test the hypothesis. The results of the study reveal that the awareness level regarding subliminal advertising is yet to improve in the area under the study. Also, there is no significant difference in the awareness levels of boys and girls regarding subliminal advertising. The study also attempted to check whether consumers perceive the practice of using hidden stimuli in advertisements, as being ethically correct. The results of the primary data study show that people do not consider the practice to be morally and ethically correct. They feel that subliminal advertising is a manipulative practice and is against consumer's interests.

**Keywords:** Subliminal Advertising, Awareness, stimuli, T-test, Consumer's interests.

## INTRODUCTION

Consumers have the impression that they regularly choose how to behave by consciously selecting the actions that move them through their lives. Yet researches show that actions can be set in motion just by a mere perception of stimuli that are associated with behaviors (J.E. Lincoln, 2020).

Consumers are pelted with thousands of advertisements per day, and it is in their best interest to understand the effect of those advertisements. The modern-day idea of "subliminal advertising" works in conformity with the concept of affecting consumer behavior with the help of unconscious hidden persuaders in advertisements.

The term 'subliminal' comes from the Latin word 'limen' which means 'threshold'. The term subliminal as defined by Webster's dictionary means "existing or functioning below the threshold of conscious perception". The term subliminal advertising means an advertising technique that uses messages/cues that are not

perceived by the conscious mind of the consumers but are registered and stored in the subconscious minds of the consumers. "Subliminal advertising is a technique of exposing consumers to product pictures, brand names, or other marketing stimuli without the consumers having conscious awareness. Once exposed to a subliminal marketing stimulus, the consumer is believed to decode the information and act upon it without being able to acknowledge a communication source" (Charles Trappey, 1996).

Lucia Wang, 2017, defines subliminal stimuli as "signals below the ATL (Absolute Threshold Level) of our conscious awareness." She further talks about subliminal sensory stimuli and states that there are 37 known sensory inputs across 7 broad categories: visual, auditory, tactile (touch), taste, smell, vestibular (balance and movement), and body awareness. The visual category is the most dominating perception as stated by Lucia. She states that subliminal stimuli target only two senses; visual and

auditory and under each category, there are different techniques.

Previous studies have proved that the awareness of consumers regarding subliminal advertising is not impressive (Bennice Willemse, 2019). As consumers, people need to be aware of every piece of information, supraliminal as well as subliminal, which is presented before them. Also, there are various ethical issues associated with the practice of subliminal advertising due to which it has been banned by various countries (J.E. Gratz, 1984).

## OBJECTIVES

- 1- To study the awareness level of students, in regards to Subliminal Advertising, in institutions of higher learning, in the district of Sambalpur.
- 2- To compare the awareness levels of boys and girls in regards to Subliminal Advertising.
- 3- To explore the 'ethical' and 'unethical' aspects related to Subliminal Advertising.
- 4- To determine whether consumers perceive the practice of subliminal advertising as being ethically correct

## LITERATURE REVIEW

Regardless of whether or not subliminal advertising influences consumer behavior, people need to be aware of the existence of such practices. Studies have shown that subliminal advertising does not affect consumer behavior if the consumers are made aware of the presence of the hidden stimulus.

Consumers are highly unaware of the concept of subliminal advertising. However, the impact of those hidden messages on their attitude is positive (Hejase, Hamdar, Farha, Boudiab, and Beyruti, 2013).

Soomro & Yasir Ali, 2018 analyzed the role of awareness, perception, and knowledge on the effectiveness of subliminal advertisements between marketers and non-marketers. The results of the experiments revealed that when people are made aware of subliminal messages, the effect of the message declines. Chris Lorsch, 2012, proved that when the consumers are

informed about the fact that they are being primed, the subliminal stimuli lose their effectiveness. Lorsch conducted an experiment in which the participants were divided into two groups and were exposed to subliminal stimuli through an advertisement. One group was informed about the presence of subliminal stimuli in the advertisement whereas the other group was not. The group which was aware of the presence of subliminal stimuli did not show any significant behavior change; whereas the uninformed group showed quite a significant behavior change. Thijs Verwijmere et al. 2013 aimed at finding whether warning people of the presence of subliminal ads could decrease subliminal advertising effects. This experimental study conducted on one hundred and seventy-three students revealed that consumers can be protected from the effects of subliminal messages by creating awareness amongst them. Awareness about the prime; causes consumers to refrain from unconscious buying.

Osimo et al. 2020, attempted to find out if attentional bias was present subliminal stimulus was consciously recognized by people. The results proved that the effect of a subliminal stimulus can be considerably taken down if awareness about the presence of stimulus is created amongst consumers.

Passarelli et al. 2020, researched to examine the impact of subliminal advertisements on consumer behavior based on non-familiar brands. The study was conducted under the presumption that consumer preferences can be influenced through subliminal stimuli (Elgendi et al., 2018). The results of the study proved that information processing is easier when the message hits the unconscious minds of the consumers. Armstrong et al. 2013 conducted a series of five experiments to investigate the extent of subliminal processing of negation. The results of the study indicated that subjects identified the correct noun of the pair even when the correct noun was negatively subliminally primed. This reveals that the priming effect is possible only when the consumers are unaware of the stimuli. If the consumers are made aware of the hidden stimulus, the influence of the stimulus on consumers becomes almost negligible. Hence, awareness plays a key role in determining the effectiveness of subliminal messages or cues. Cestaro & Victor L., 2013

attempted to investigate the probability and magnitude of electro-dermal responses elicited by subliminal stimuli. The study stood in support of those previous studies that claim the influence of subliminal advertising on consumer behavior. Also, subliminal stimuli have a greater and far-reaching impact on the consumer psyche than supraliminal stimuli. The analysis of this study also suggests that subliminally presented visual stimuli affect consumers as they can elicit differential autonomic nervous systems inside a human brain.

Xia et al. 2021, positive subliminal stimuli such as that of trust and motivation had a greater influence on the consumer psyche than negative subliminal stimuli such as doubt or suspicion.

As per previous studies, the awareness level of people about subliminal advertising has proved to be unsatisfactory (Asiamah et. Al., 2017). Various studies have aimed at finding out whether or not the awareness of subliminal advertisement is dependent upon the “Gender” of the subjects. The studies concluded that although the awareness level of consumers regarding subliminal advertising is insufficient, there is no significant difference in the awareness levels of boys and girls (Bennice Willemse, 2017). Jamie Lynne Wilfong, 2002 also studied the difference in the awareness levels of boys and girls about subliminal advertising and found no significant difference. A similar result was concluded by Zachariadis et al., 2013 where no evidence of any difference in the awareness levels of boy respondents and girl respondents was found.

Based on the above studies, the researcher hypothesized that:

H1o: There is no significant difference in the awareness levels of subliminal advertising between boys and girls.

#### ETHICAL AND UNETHICAL ASPECTS OF SUBLIMINAL ADVERTISING- THEORETICAL ANALYSIS

Is subliminal advertising an ethical practice?. Is there a way to practice subliminal advertising ethically, without manipulating the minds of the consumers? How can subliminal advertising be done in such a way that the interest of the consumers is not harmed?. This study aimed at answering these questions.

An independent regulatory agency of the United States, the Federal Communications Commission; that regulates communications by radio, television, wire satellite, and cable across the United States (Wikipedia), has given the following statement in regards to subliminal advertising:

“Subliminal programming is designed to be perceived on a subconscious level only. Regardless of whether it is effective, the use of subliminal perception is inconsistent with a station’s obligation to serve the public interest because the broadcast is intended to be deceptive.” [Federal Communications Commission Record (2001) <http://umich.edu/~onebook/pages/frames/legalF.html>]

The Federal Communications Commission has made it pretty clear that regardless of whether or not subliminal advertising is effective, it is against the interest of consumers to be manipulated by any hidden stimulus.

The answer to the question: ‘Is subliminal advertising ethical?’ was given by Gratz, 1984 in one of his research works. According to the study, subliminal advertising is an unethical practice as it aims to play with the minds of the consumers without their consent. Anything which tries to change an individual’s behavior without his/her consent is against ethical integrity. Another study was done in the recent decade by Flores et al. 2020 which collected consumer’s opinions to conclude whether subliminal advertising is an ethical practice for profit & non-profit organizations or not. The empirical shreds of evidence obtained from the study revealed that consumers considered subliminal neuromarketing by profit-making organizations as unethical practice whereas when it came to non-profit organizations, consumers considered such practices as ‘ethical’.

However, subliminal advertisements are not always unethical. When subliminal advertising is done to reinforce the brand in the minds of the consumers or to subtly explain the features offered by a product/ services offered by a company; subliminal advertising does not go against the interests of the consumers (Dunlop, Sybbil & Minnesota Lawyer, 2019). Another analysis by Kiran, Vasanth, Kishore & Krishna, 2013 critically examined the ethical and

unethical aspects of subliminal advertising. A bunch of advertisements, using subliminal stimuli were studied and the actual message behind those masked primes was tried to convey. The authors suggested that there is an urgent need to educate consumers about such practices as they are going against the interests of the consumers. The study also re-iterated the point that reinforcement of the brand in the consumer's mind does not make it unethical. This means that subliminal advertising can be ethically used if the advertisers do not try to manipulate consumers against their will. As stated by the Federal Communications Commission, that the ethical concerns associated with subliminal advertising go beyond the controversies on its effectiveness. In the study by Kelly & J Steven, 1979, the authors explained that marketers who intentionally use subliminal embeds in advertisements are either unaware of the impact they might be causing in the minds of their consumers, or are aware but do not care. In either case, the consumers are the sufferers. Any hidden stimulus which is meant to manipulate the consumers is against the ethics of advertising. There have been several cases where the use of such embeds has been found out and those are serious challenges to Advertising Ethics. The study, similar to the previous studies suggested that awareness amongst the consumers as well as strict actions against the practitioners must be taken to cope up with such mal- practices.

Ethical concerns related to subliminal messages that are used in children's films must be thrown light upon. Charvat & Mary, 2001 attempted to find out whether or not subliminal messages are used in children's television and films. The study discussed the effects of subliminal primes in the subconscious minds of children that were presented via television films and advertisements. Although, there was no concrete proof on whether these primes had any effect on the behavior of the subjects; but some recognizable effects such as low self-esteem, obesity, self- image, etc were observed. The study exposed such practices to make the consumers aware of the probable effects of being exposed to subliminal stimuli.

To empirically check the claims made by the above-mentioned studies, the researcher aimed at surveying the students from higher educational institutions in the district of

Sambalpur, to conclude whether they perceive subliminal advertisement as being ethical. The purpose of the survey was to find out whether the claims made by previous researchers hold good in the area considered under this study by the researcher. The results of the study are discussed ahead.

## METHODOLOGY

### Sample

The sample for this study was chosen from amongst the students studying in higher educational institutions, in the district of Sambalpur. Both males and females were part of the sample and the age of the students ranged between 18-25 years. The technique used to choose the sample respondents was stratified random sampling, as a method of probability sampling. Probability sampling means that every item in the population has an equal chance of being included in the sample (Hamed Taherdoost, 2006). Stratified random sampling is used where the population is divided into strata or sub-groups and a random sample is taken from each group. The population was categorized into strata; based on gender (Boys & Girls) and a sample of 700 students was chosen (348 Boys and 352 Girls). Responses were received from a total of 600 respondents (272 Boys and 328 Girls) and out of those 600 respondents; the responses of 500 students (250 boys and 250 girls) were randomly chosen as the sample for this study. The purpose of this analysis was to identify whether there is a difference in the awareness levels of boys and girls in regards to subliminal advertising. Hence, it would be easier to assess the difference (if any) if the number of girls and boys were equal. The size of the sample was determined with the help of G Power 3.1 software. G Power 3.1 is software that offers the ability to compute the statistical power analyses for various tests including t-tests, F-tests, and chi-squared tests. Power analysis calculated the size of the sample as 450. Oversampling has been done to eliminate the risk of errors and outliers.

To meet the purpose of the study, a five-point Likert scale, structured questionnaire was used. The questionnaire contained a cover letter that described the nature and purpose of the study. The cover letter also included statements assuring the confidentiality of records, and a

request for participation in the study. The name and email address of the researcher has also been mentioned in the paragraph in case the respondents had doubts or questions regarding the study. The questionnaire was sent to the participants via email and Whatsapp. Except for four questions, that were categorical, all the other questions in the questionnaire were framed using a five-point Likert scale ranging from 1(Strongly Disagree) to 5 (Strongly Agree) and consisted of four sections. Few of the questions in the questionnaire were adopted [“Subliminal Marketing: An exploratory research Lebanon” (Hejase, Hamdar, Farha, Boudiab, 2013)], whereas few of them were modified as per the purpose and demography of the study. All the measures used in the questionnaire were validity tested. (Section 1 included the personal information of the respondents- age, educational qualification, Gender. Section 2 included basic questions about advertisements, respondent’s inclination towards advertisements, and their attitude towards emotional and sensuous advertisements. Section-3 of the questionnaire was designed to test the awareness of the respondents on advertisements with double meaning and hidden messages. Finally, Section-4 was meant to infer whether the consumers believe in the idea that the marketers intentionally incorporate hidden messages in advertisements and

if so whether such a practice, according to their opinion is ethical or unethical. The questionnaire was created online with the help of Google Forms.

#### Data analysis and results

##### Demographic details of the respondents

The number of boys and girls in the study was kept equal on purpose, to differentiate between the awareness levels of consumers based on Gender. Therefore, 50% of the respondents were male, whereas 50% of the respondents were female. The age of the respondents ranged between 18-25 years. Table 1 represents the demographic details of the respondents.

Table 1- *Demographic details of the respondents*

| Items                                    | Percentage |
|--|------------|
| <b>GENDER</b>                            |            |
| Male                                     | 50%        |
| Female                                   | 50%        |
| <b>AGE</b>                               |            |
| 18 Years                                 | 0.4%       |
| 19 Years                                 | 5.6%       |
| 20 Years                                 | 18%        |
| 21 Years                                 | 23.6%      |
| 22 Years                                 | 13.6%      |
| 23 Years                                 | 11.8%      |
| 24 Years                                 | 24%        |
| 25 Years                                 | 4%         |
| <b>HIGHEST EDUCATIONAL QUALIFICATION</b> |            |
| Higher Secondary                         | 60.4%      |
| Graduation                               | 11.6%      |
| Post Graduation                          | 28%        |

Prior to data analysis, data processing was performed to locate the missing frequencies, improper coding, and unengaged responses. The analysis was done using SPSS software. The mean and the Standard Deviations of the items in the data were found out to check the missing values and unengaged responses by the respondents. Any response with zero as standard deviation was considered as an “unengaged response” and was discarded from the data set.

## RESULTS

The purpose of the study was to find out the awareness level of the students. To accomplish the purpose, questions were asked to the respondents via a survey research instrument, and conclusions were drawn based on the answers of the respondents. The questionnaire began with basic advertisement-related questions to measure the general response of the students towards advertisements. The first three

questions discuss the attitude of the students towards advertisements.

Figures 1,2 & 3 reveal the general attitude of students towards advertisements.

Figure-1 *General attitude towards advertisements*

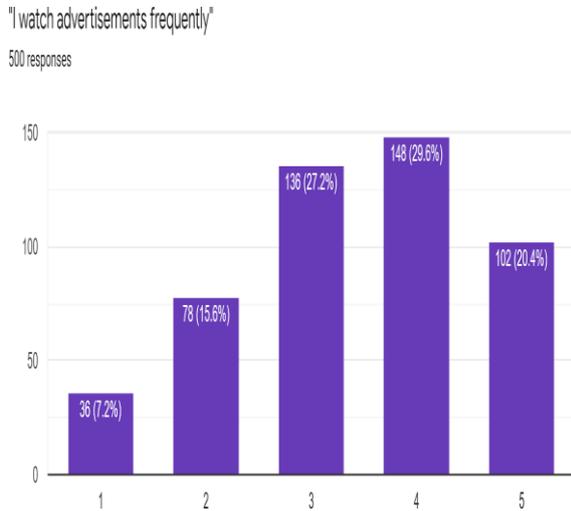


Figure-2 *General attitude towards advertisements*

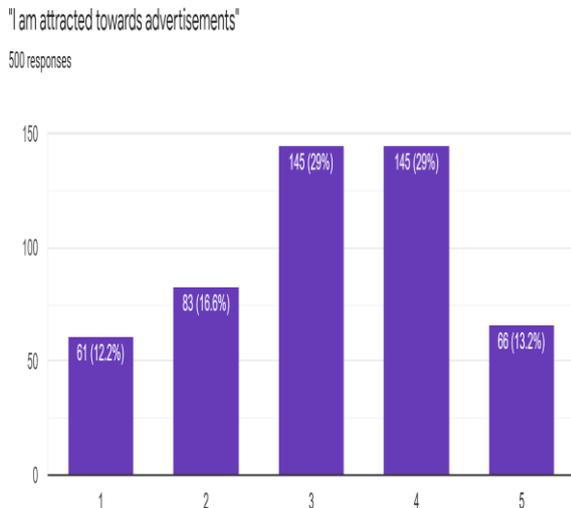
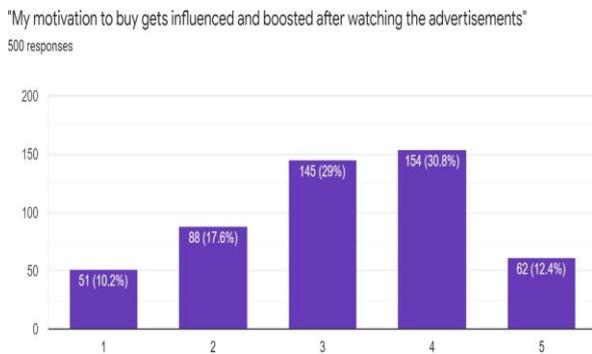


Figure-3 *General attitude towards advertisements*

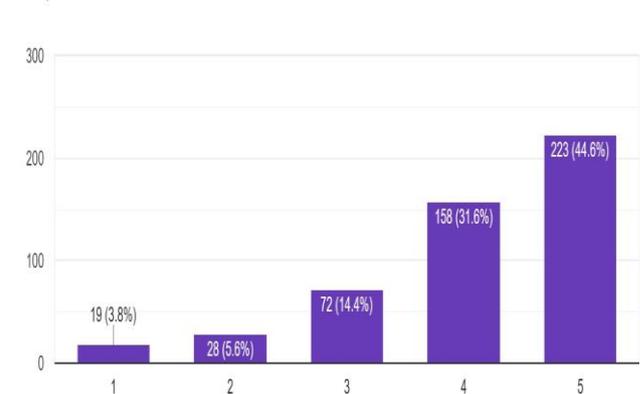


The results showed that around 50% of the students are frequent advertisement-watchers, 27.2% watch advertisements sometimes whereas around 22% of students watch advertisements infrequently. 43% (approx) students said that advertisements attract them, 29% were neutral towards advertisements whereas around 30% of students said that advertisements do not attract them. Around 43% of students agreed that their motivation to buy a product gets boosted after watching the advertisement, 29% were not sure whereas around 28% of the students denied the statement.

Further in the analysis, questions related to emotional advertisements were asked to the respondents. Subliminal advertisements create subtle feelings and emotions within the subjects, which acts as a driving force in determining their preference towards the brand (Wilfong, 2002). Also, advertisers have been using subtle sensuous content in advertisements to entice consumers (Michael Barton Magri,1979). Hence, responses of the students towards such kinds of advertisements were recorded. Figure 4& Figure 5 shows the attitude of the students towards advertisements that trigger feelings and emotions.

Figure-4 *Attitude towards advertisements that trigger feelings and emotions*

"Ads which create emotions, such as- love, patriotism, unity, celebration, sadness, etc are more attractive than other ads"



**Figure-5 Attitude towards advertisements that trigger feelings and emotions**

"Ads with sensuous contents make them more likable"

500 responses



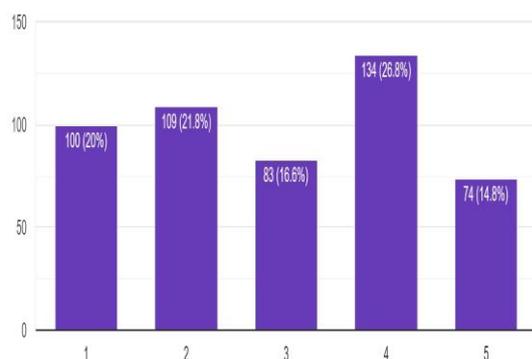
The results show that around 75% of the students like advertisements that create certain emotions within them. 15.4% of students are neutral towards emotional advertisements whereas around 10% of students do not like advertisements that trigger emotions. Surprisingly, around 48% of students agreed that advertisements with sensuous content make them likable. 29.4% of students showed a neutral attitude towards sensuous advertisements whereas around 25% of students said that they do not like advertisements with sensuous contents.

Further, indirect questions related to the practice of using hidden messages in graphics, logos, imagery, etc., were asked to the respondents. The awareness of the respondents towards subliminal advertisements was measured through these questions. Figure-6, Figure-7, Figure-8, Figure-9 & Figure-10 reveal the awareness of students towards hidden messages in advertisements.

**Figure-6 Awareness towards hidden stimuli in advertisements**

"Sometimes, I unconsciously purchase a product even when I know that I don't need that product"

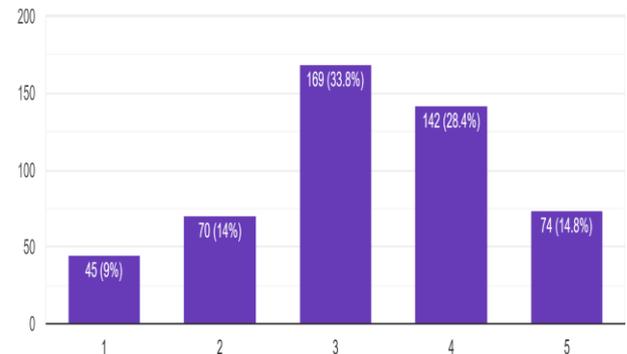
500 responses



**Figure-7 Awareness towards hidden stimuli in advertisements**

"Ads have double meanings"

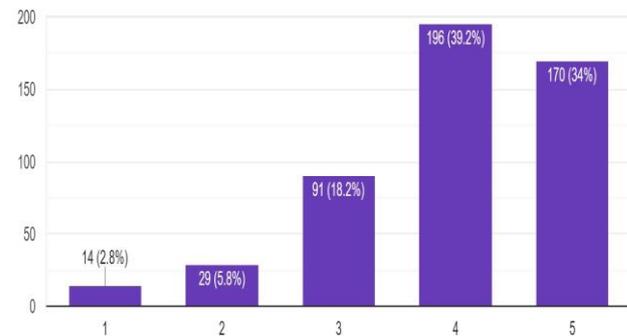
500 responses



**Figure-8 Awareness towards hidden stimuli in advertisements**

"Ads have hidden messages embedded in its logos, graphics, and music"

500 responses



**Figure-9 Awareness towards hidden stimuli in advertisements**

"I believe that the marketers intentionally put hidden messages in advertisements"

500 responses

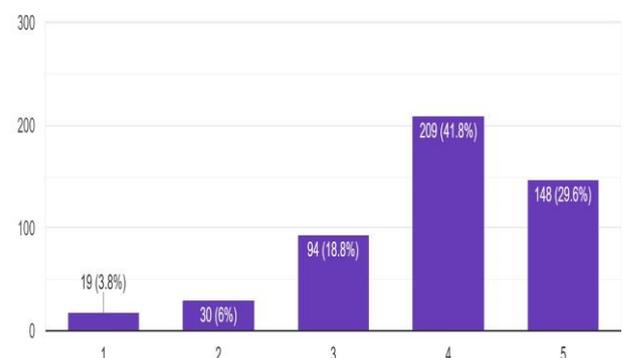
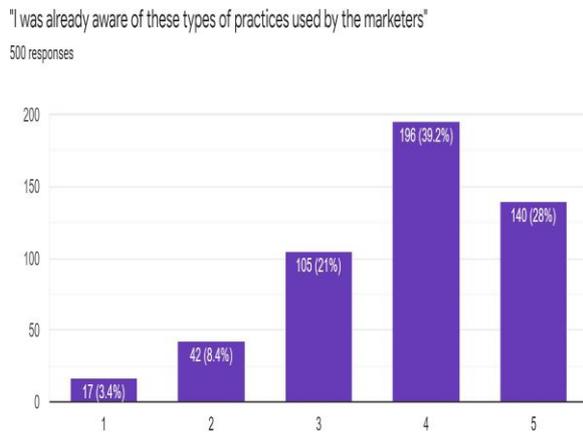


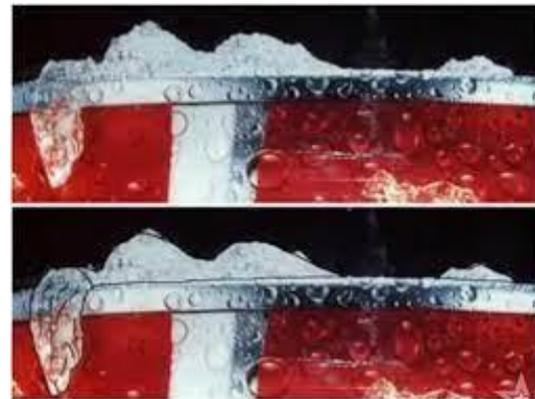
Figure-10 Awareness towards hidden stimuli in advertisements



The results show that around 40% of students believe that they purchase certain products even when they don't want to whereas 41% said that they purchase only when they want to. 42% of the students said that ads have double meanings, whereas 24% denied the statement. 75% of the students agreed that advertisements contain hidden messages, whereas 25% disagree with this statement. 2.8% were neutral about such practices. Surprisingly around 71% of students considered the practice of using hidden messages in advertisements as a marketing strategy whereas only 9.8% disagreed with the statement. The remaining 18% of the students were neutral about it. 28% of the students accepted that they were already aware of such practices used in advertisements whereas 3.4% of the students were not aware of the same. To assess the awareness level of the students about subliminal advertising more accurately, the respondents were shown an image of a renowned soft-drinks brand, with a hidden subliminal stimulus (Hejase et al., 2013). The students were asked if they already knew about such a message. Surprisingly only 5% of the students said that they already knew about such a stimulus.

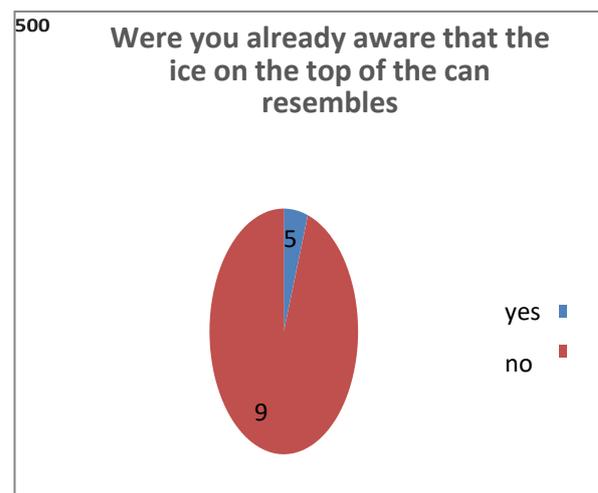
The subliminal image used is depicted in Figure-11.

Figure-11 Subliminal image of a famous soft drinks brand



[Source:https://www.google.com/imgres?imgurl=https%3A%2F%2Fimeeanra.files.wordpress.com%2F2012%2F06%2Fsubliminal2.]

Figure-12 represents the responses of the students in regards to the subliminal image.



Finally, when the students were asked if they were aware of subliminal advertising, only 18% of the total students responded yes, whereas 82% of the students did not know about subliminal advertising.

Figure-13 Awareness level of students towards subliminal advertising

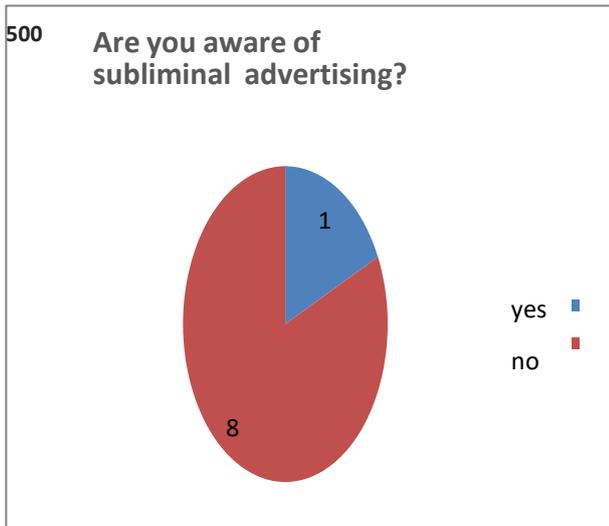
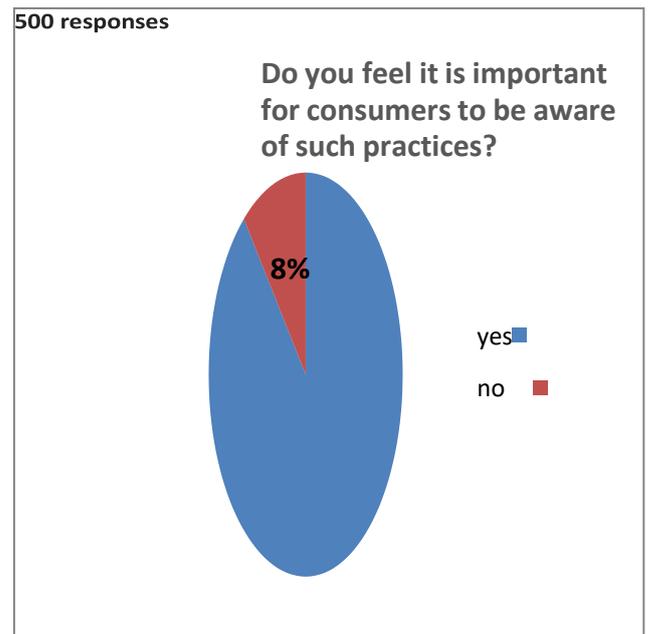
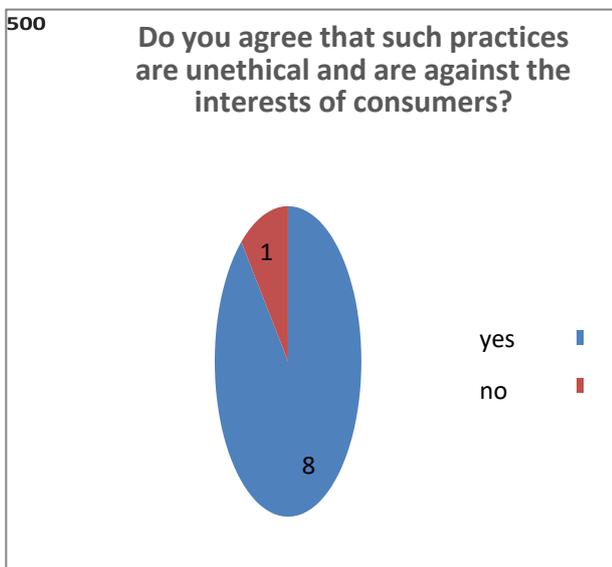


Figure-15 Subliminal Ethics



Based on the subliminal image shown to the respondents (Figure-11), the respondents were asked whether they consider such a practice to be ethical and whether consumers need to be aware of such practices or not. The responses are represented by Figure-14 & Figure-15

Figure-14 Subliminal Ethics



Hypothesis Testing

Two independent sample t-test was performed to test whether gender creates any difference in the awareness levels of consumers about subliminal advertising. Based on previous studies, the researcher has hypothesized:

Null Hypothesis: There is no significant difference in the awareness levels of boys and girls.

To check whether gender plays any role in the awareness levels of students, a two-sample t-test was performed. A t-test is a parametric test used to determine if two sets of data are significantly different from each other (William Sealy Gosset, 1908). Gosset laid few assumptions under which two independent sample t-test work. (Kent States University website)

1- The dependent variable must be continuous whereas the independent variable must be categorical. 2- The data of the dependent variable for each group must be normally distributed.

3- The variances must approximately be equal across groups i.e., (Homogeneity of variances).

A one-sample KS test (Kolmogorov- Smirnov test) and a Shapiro-Wilk test were performed to test of normality of each group of dependent variables. Levene’s Test for Equality of

Variances was performed to check the Homogeneity of Variance across groups. Two statements from the questionnaire were chosen as dependent variables to measure the awareness level of the respondents, viz. "Ads have hidden messages in their logo, graphics, and pictures" & "I was already aware of the practice of using hidden stimuli in advertisements". Table- 2 shows the mean, standard deviation, and standard error of the two statements.

The tests were performed with the help of SPSS software. The results of the KS test & Shapiro-Wilk test showed a p-value greater than 0.05 for both the statements (Table-3). A p-value > 0.05 in the KS test & Shapiro-Wilk test signifies that the data is normally distributed (Razali et al., 2011).

The results of Levene's test exceeded the accepted limit of 0.05 (Levene, 1960), i.e., the variances across groups were more than 0.05. Levene's test checks the null hypothesis that the variance of the two groups is equal (Peter

Samuels, 2014). The p-value for both the statements used to measure the awareness level was calculated .348 &

.603 respectively which concludes that equal variances were assumed (Table-4). The value of the t-statistic for both the statement was calculated as -1.686, 0.897 (Table-4). The p-value for the first statement came out to be

.092 ( $p > 0.05$ ); whereas the p-value for the second statement was calculated as 0.129 ( $p > 0.05$ ). The results stand in support of the null hypothesis and prove that any difference in the awareness levels of boys & girls about subliminal advertising is merely by chance. The results of two independent sample t-test showed that there is no significant difference in the awareness levels of boys and girls about a subliminal advertisement ( $p > 0.05$ ). Hence, the null hypothesis is accepted. Table-4 shows that gender does not play any significant role in determining the awareness levels of consumers about subliminal advertising.

Table-2 Mean, standard deviation, and Standard error of dependent variables

#### Group Statistics

|   | Gender | N   | Mean   | Std. Deviation | Std. Error Mean |
|---|--------|-----|--------|----------------|-----------------|
| "Ads have hidden messages embedded in its logos, graphics, and music"   | Male   | 250 | 3.8880 | .99166         | .06272          |
|   | Female | 250 | 5.0360 | .97081         | .06140          |
| "I was already aware of these types of practices used by the marketers" | Male   | 250 | 3.8160 | 1.05954        | .06701          |
|   | Female | 250 | 3.8040 | 1.01276        | .06405          |

Table-3 Results of Normality test

|   | Gender | Kolmogorov-Smirnov <sup>a</sup> |     |      | Shapiro-Wilk |     |      |
|---|--------|---------------------------------|-----|------|--------------|-----|------|
|   |        | Statistic                       | Df  | Sig. | Statistic    | df  | Sig. |
| "I was already aware of these types of practices used by the marketers" | Male   | .257                            | 250 | .211 | .857         | 250 | .498 |
|   | Female | .249                            | 250 | .342 | .866         | 250 | .524 |
| "Ads have hidden messages embedded in its logos, graphics, and music"   | Male   | .245                            | 250 | .122 | .853         | 250 | .423 |
|   | Female | .257                            | 250 | .228 | .820         | 250 | .509 |

Table-4 Results of Independent sample t-test

|   |                       | "Ads have hidden messages embedded in its logos, graphics, and music" | "I was already aware of these types of practices used by the marketers" |                         |                             |
|---|-----------------------|---|---|-------------------------|-----------------------------|
|   |                       | Equal variances assumed   | Equal variances not assumed   | Equal variances assumed | Equal variances not assumed |
| Levene's Test for Equality of Variances   | F                     | .883  |   | .271                    |                             |
|   | Sig.                  | .348  |   | .603                    |                             |
| t-test for equality of means              | T                     | -1.686  | -1.686  | .129                    | .129                        |
|   | Df                    | 498   | 497.775   | 498                     | 496.988                     |
|   | Sig. (2-tailed)       | .092  | .092  | .897                    | .897                        |
|   | Mean Difference       | -.14800   | -.14800   | .01200                  | .01200                      |
|   | Std. Error Difference | .08777  | .08777  | .09270                  | .09270                      |
| 95% Confidence Interval of the Difference | Lower                 | -.32044   | -.32044   | -.17013                 | -.17013                     |
|   | Upper                 | .02444  | .02444  | .19413                  | .19413                      |

## CONCLUSION AND DISCUSSION

The above analyses helped the researcher to accomplish the objectives specified in this chapter. The responses from the survey undertaken to measure the awareness of students about subliminal advertising showed some interesting results. The results revealed that the students have a vague idea about the practice of using subtle embeds in advertisements by researchers; however, they are not exactly aware of the term used for such a practice. The reason behind conducting the survey was not only to measure the awareness level but to also create awareness amongst people, especially students, towards subliminal advertising. A lot of students

agreed upon the idea that advertisements have double meanings and the advertisers intentionally put hidden messages in advertisements. The very acceptance of these statements is a positive sign on the road to creating awareness about subliminal advertising. The awareness levels of the students learning in higher educational institutions in Sambalpur district showed positive nuances. Although, the exact percentage of students that were aware of subliminal advertising was insufficient; the fact that students were open and accepting towards the practice of hiding subtle stimuli in advertisements opened doors to creating awareness. Also, the results of the hypothesis test revealed that "Gender" in

particular has no role to play in the awareness about subliminal advertising. Any difference noticed in the awareness levels of boys and girls towards the practice of subliminal advertising; is insignificant and is merely by chance. Studies have also proved that not only gender, but education, income, and even age have no role in creating any difference in awareness levels towards the practice of subliminal advertising (Zanot et al., 1983).

An important point to be noted in the present context is that just because the students were aware and open to the notion of subliminal advertising, doesn't mean that they keep this point in mind while making purchases. So, it is important to make people understand how a subliminal message works and what its implications are.

Finally, the researcher's aim to find out whether people perceive subliminal advertising as being ethically correct was also revealed by the data collected. Almost 90% of the respondents voted against the practice of subliminal advertising declaring it to be ethically incorrect. The respondents perceived subliminal advertising to be against their interests. Similar conclusions can be drawn from previous studies also.

Regardless of these results, some organizations adopt the practice of subliminal advertising not to manipulate their consumers, but to reinforce the brand and the range of services offered. An apt example here would be the Amazon logo. The company has not tried to manipulate its consumers; rather the company subtly explains the range of services offered by it (A-Z), which is not a lie. Hence, it can be concluded that subliminal advertising can also be done without going against the interests of the consumers (John E Lincoln, 2020).

#### **LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH**

This study provides a scenario about the current awareness levels of the students towards subliminal advertising and answers whether gender plays a role in creating any difference in the awareness levels of boys and girls. However, the results of this study have their limitations. Firstly, the design of the study is cross-sectional due to which the relationship between the

variables is prone to biases (Bobko et al., 1998; Jung Hoo Lee, 2012). Therefore, it is suggested by the researcher to go for longitudinal designs to reduce such biases. Secondly, the size of the sample was also a limitation in drawing inferences for the entire population. In the future, the study should be done by taking a larger sample size for better reliability. Thirdly, the study was limited to an institutional setup in the district of Sambalpur. Thus, the findings of this study might not hold well in other institutional setups or any different environment. Therefore, it is recommended to replicate the study under different environments and settings. The study is intertwined with the psychological climate of the respondents and the area under the study. It is suggested that future researchers must study the psychological climate of their respondents and the environment as a whole, before proceeding ahead with the actual study. Finally, the study used a questionnaire to collect the responses and despite its usefulness and benefits, subjective state of mind, disposition, or attitude may lead to biases in the response (Wallbott & Scherer, 1989; Jung Hoo Lee, 2012). To diminish these biases the researcher emphasized guaranteed confidentiality and anonymity of responses throughout the survey (Mulki et al., 2006, Jung Hoo Lee, 2012), however, these biases on the results can't be completely ruled out. Thus, the researcher recommends using multiple sources and more accurate qualitative data in future research (Jung Hoo Lee, 2012).

#### **Reference**

- [1] Margaret triemer and Michael Simonson(2010) Subliminal messages, persuasion and behavior change <https://doi.org/10.1080/00224545.1988.9713776>
- [2] Bahrami, B., Lavie, N., & Rees, G. (2007)-Attentional load modulates responses of human behaviour
- [3] Beatty, S. E., & Hawkins, D. I. (1989)-Subliminal stimulation: Some new data and interpretation. *Journal of Advertising*, 18, 4-8.
- [4] Weinheim: Beltz.Brannon, L. A., & Brock, T. C. (1994)-The subliminal persuasion controversy: Reality, enduring fable, and Polonius's weasel. In S. Shavitt & T. C. Brock (Eds.), *Persuasion:*

- [6] Psychological insights and perspectives- Boston: Allyn and Bacon.
- [7] Broyles, S. J. (2006)-Subliminal advertising and the perpetual popularity of playing to people's paranoia.
- [8] Journal of Consumer Affairs, 40, 392-406.
- [9] Bruner, J. S., & Postman, L. (1947)- Tension and tension release as organizing factors in perception.
- [10] Journal of Personality, 15, 300-308.
- [11] Cooper, J., & Cooper, G. (2002)- Subliminal motivation: A story revisited. Journal of applied social Psychology, 32, 2213-2227.
- [12] Cuperfain, R., & Clarke, T. K. (1985)-A new perspective of subliminal perception. Journal of Advertising, 14, 36-41.
- [13] Dijksterhuis, A., Aarts, H., & Smith, P. K. (2005)-The power of the subliminal: On subliminal persuasion and other potential applications.
- [14] Aronson E., & Pratkanis A.R. (1992)- Social Psychology. New York University Press
- [15] Bengesser, G., & Walli, J. (1994)- Suggestive measures involving exposure to phobias. European Journal of Psychiatry, 8, 205-208.
- [16] Bermeitinger, C., Goelz, R., Johr, N., Neumann, M., Ecker, U. K. H., & Doerr, R. (2009)-The hidden persuaders break into the tired brain. Journal of Experimental Social Psychology
- [17] Bos, M. W., Dijksterhuis, A., & van Baaren, R. B. (2011)-The benefits of "sleeping on things": Unconscious thought leads to automatic weighting. Journal of Consumer Psychology
- [18] Hawkins, D. (1970)-The effects of subliminal stimulation on drive level and brand preference. Journal of Marketing Research
- [19]
- [20] Jakštienė, S., Susnienė, D., Narbutas, V. (2008) The Psychological Impact of Advertising on the Customer Behavior. Communications of the IBIMA, Vol. 3
- [21] Johnson, H., & Eriksen, C. W. (1961). Preconscious perception: A re-examination of the Poetzl phenomenon. Journal of Abnormal and Social Psychology, 62, 497-503.
- [22] Karremans, J. C., Stroebe, W., & Claus, J. (2006) Beyond Vicary's fantasies: The impact of subliminal priming and brand choice. Journal of Experimental Social Psychology, 42(6), 792-798.
- [23] Kemp-Wheeler, S. M., & Hill, A. B. (1987). Anxiety responses to the subliminal experience of mild stress. British Journal of Psychology, 365-374.
- [24] Kemp-Wheeler, S. M., & Hill, A. B. (1992). Semantic and emotional priming below the objective detection threshold. Cognition and Emotion, 6, 113-128.
- [25] Key, W. B. (1973). Subliminal seduction. Englewood Cliffs, NJ: Signet.
- [26] Légal, J.P., Chappé, J., Coiffard, V., & Villard-Forest, A. (2011). Don't you know that you want to trust me? Subliminal goal priming and persuasion. Journal of Experimental Social Psychology
- [27] Lewicki, (Hsu & Chen, 2020b)
- [28] P., Hill, T., & Czyzewska, M. (1997). Hidden covariation detection: A fundamental and ubiquitous phenomenon. Journal of Experimental Psychology: Learning, Memory, and cognition, 23, 221-228.