# Impact of Subliminal Messages on Consumer Behavior: A Fresh Look into the Future Dr.K.Prabhakar Rajkumar M.Priya

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#### Abstract

Since time immemorial, subliminal advertisement has continued to haunt the society and especially after James Vicary's experiment in New Jersey, it reached a new height. Since then, there has been much argument about whether this can be an efficient technique of marketing communications. Decades of research has gone into establishing or abolishing this technique. But no satisfactory evidence, so far, has been provided by any researcher on either pole. While researching on subliminal advertisement are fewer in number, this study does a critical review of such available works and argues, without any bias that subliminal advertising cannot be an effective tool to persuade the consumers to pursue any goal, as desired by the marketers. While the current study examines the proposed topic in the light of the researches, it also deals with psychological aspects that prompt certain behavior. Such aspects deal with the role of mere exposure, threshold concepts and their subsequent effect on behavior. All these aspects have been given their theoretical treatments and their implications in research have been discussed. While asserting the central proposition, this study indicates both the theoretical and practical problems that do not make subliminal advertisements an effective tool of marketing. In the concluding part, this study points out the future research directions that can have the desired results and can qualify itself as an alternative to traditional marketing practices.

**Keywords:** Subliminal advertising, mere exposure, sub-conscious processing, threshold.

#### Introduction

Consumerism in today's world is something that has stretched its arms across the globe and is tightening its grip every time it gets a scope to do so. The most effective tool which assists consumerism to perform the tightening task is an advertisement. So, before we proceed to the epicenter of this study, we will do a short review of the existing research on advertisement, its impact on consumer behavior, and will show that subliminal messages are not an effective tool of marketing communications. While many researchers have been conducted to explain the functioning of subliminal messages, including the seminal work of James Vicary (1957), such studies have failed to come up with satisfactory results and have been commented upon harshly. For example, William Foster of the London Sunday Times commented that, if Vicary wanted to address the desires of his audience at his press conference, he should have projected "gin and tonic" rather than a soda advertisement (15th September, 1957) and even author Dominic Streatfeild commented that it has not been 'researched', but 'believed' (BBC, 19th January, 2015). Even in an interview with 'Advertising Age' (1962), Vicary himself admitted that the experiment was a 'gimmick' and that the data was 'too short to be meaningful'. Though, Later researches (Cupperfain & Clarke, 1985), and studies done on public perceptions (Zanot, Pincus and Lamp, 1983, Rogers and Smith 1993, Synodinos, 1988) have provided enough evidence pertaining to the functioning and effectiveness of subliminal messages, no direction has been forwarded so far, which can lead us to a whole new era of advertising using psychological tools. Though, Question, Pertaining to ethics continue to haunt advertisers, public perception on subliminal advertisement are pretty clear. As such, in the sections to follow, we will see how research on subliminal messages has progressed- both in psychological literatures and in consumer researches, and what is the main extract of such research. While doing that, we will also analyze what are the shortfalls of such research and explore the main constraints in extending such research to the existing marketing practices. Having cleared the basic ideas for this study, we will take a brief look at how these concepts came to existence and that will shed further light on few facts why this tool has a tough way to come up with.

For the first time, subliminal advertisement was used in Britain in 1956. But that was a small time test compared to James Vicary's experiment in 1957. But before we proceed towards any arrogant step of marketing communication, we will have a concise tour of the then American society which prompted advertisers to take up this step. During World War II, the life of the Americans started to improve and as the war drew to an end, it started improving further and it became impossible to preach thrift among the consumers. For example, in 1940, unemployment was 14.6 percent, but by 1944 it had dropped to 1.2 percent. During the same period the gross national product rose from \$91.9 billion in 1939 to \$213.6 billion in 1945 (Washington, D.C.: Government Printing Office, 1961). With real income increasing by 68% percent, fears prevailed in the market that saving will go down and this fear really occurred. For example, in one study it was found that the purchase of the mechanical refrigerators rose from 44% to 80% in the period of 1940 to 1950 (Daniel Harowitz, 1994). Advertisers decided to take advantage of the situation and began to address consumers on personal levels and there was going to be in turmoil. Under such conditions, advertisers were confirmed that there must be some unexplored avenues in the mind of the consumers that prompts the consumers to take decisions. Apart from using the scientific motivations, advertisers started to explore the unconscious mind of the consumers and this paved for the way for Motivational Research which culminated in the form of Subliminal Advertising. Although psychological researches regarding the mind of the consumers were started as early as of 1938, the subject drew attention after James Vicary's famous experiment in 1957. In this experiment in New Jersey, Vicary flashed the words 'drink coca-cola', 'eat pop-corn' for 1/3000<sup>th</sup> of every five second to some 45,699 people over a period of six weeks. Result of this, Vicary claimed, the sale of Coca Cola rose by 18.1% and the sale of popcorn rose by 57.7% (Advertising Age, 1957), though he declined to answer the most basic questions in the press conference that followed and from this point the critics started attacking this concept. Not only, such literature has been divergent in nature- both in terms of existing literature and scientific experiments, but also the scientific mechanism needs to be reviewed to reach the focal point of this study.

# Purpose of the study

The prime object of this study is to reveal the impact that subliminal advertising can have on consumer behavior, especially in the purchase decision of consumers. Advertisers have long been keen to find some way in which they can persuade the consumers to purchase their products, while facing the minimum constraints on the part of the consumers. One such important constraint needs to be mentioned here regarding consumer's purchase decision. While making a purchase decision, consumers judge their purchase decision depending upon the product attributes as displayed in the advertisement. For the first time, the consumers may purchase a product relying on the marketing promotions, but when their pre-dispositions are shattered by the performance of the product, it becomes tough for a brand to ensure repeat purchase of that product. This is a major hindrance and has been referred to as expect anywise confirmation (Oliver 1980, Oliver 1993). As such to overcome such hindrances and to capture the consumer from the claws of the competitors, advertisers started to look at subliminal advertisement as a way-out. But that did not yield the expected results. Despite major setbacks in conducting such experiments, advertisers have been alleged to have employed subliminal advertising. Such advertisers cut a long list. Among the international players KFC, Coca Cola, Disney, Harry Potter film (Order of Phoenix) are the eminent names, among the Indian advertisers, MTS Telecommunications, Zodiac Clothing Ltd., ONN innerwear, Kurkure has been alleged to have used subliminal advertising. But, what has been the output of using such a technique is not clear. As a result, this study intends to throw light on such factors pertaining to the outcome of subliminal advertisements. A notable experiment has been conducted by the Kunst-Wilson, Zajonc (1980) that claim the effectiveness of such techniques. Even after that it has been commented that such an experiment might not have 'interesting implication for marketers' (Moore, 1982). But what are the major obstacles in the way of subliminal advertisements to be an effective tool of marketing communication has rarely been discussed in a comprehensive manner. Apart from Moore (1982), very few

literatures have given a comprehensive idea about the implementation of such advertisement technique. As such, this paper intends to re-interpret the existing results to erect a comprehensive body of work to show the functional hindrances in the way of subliminal advertisement and will also pave the way for alternate research that might be pursued as a correct alternative for traditional practices of marketing communications.

# Theoretical background

In the opening paragraphs of this study, we have given a brief description of the social background of the subliminal advertisement and have shown how it came to prominence. In such a social setting it was not unnatural to note that women could be linked to cars to evoke a feeling of passion. Ernst Dichter, another researcher on consumer behavior, completed his research with Chrysler and linked convertibles with mistresses and sedans with wives (The Economist, 2011). In this section, we will discuss the theoretical background of this issue and re-interpret the available information related to such advertisement in the light of social psychology.

Subliminal advertisement is a way of communicating subliminal stimuli. The term subliminal consists of two roots: sub meaning 'under' and limning meaning 'threshold', i.e. the information which enters the consumers' mind without their conscious consideration. In this way, it enters the mind of the consumers and this information elicits reactions of which the consumers have a little rationale to explain. So, on the basis of what has been said so far in this section about subliminal advertisement, we can conclude that it is a way of subconscious processing of the mind. So, while psychological literature pertaining to subconscious processing of information is abundant and a review of such literature will involve a mammoth task, we will confine our discussion to those researches which bear resemblance to consumer behavior. So far, while describing subliminal messages, we have used a few words like threshold, stimuli which needs further explanation. So, before we proceed into details of modern research, we will study these terms in depth and in this regard, Clarke Hull's (1943) account needs to be studied as a foundation stone of research in social psychology.

In his book, Principles of Behavior: Clarke Hull has given the basic definition of threshold. In his opinion, "the term threshold implies in general a quantum of resistance or inertia which must be overcome by an opposing force before the latter can pass over into action." So, it follows that a threshold is actually a level of resistance posing an obstacle in the free passage of information. Following this Hull elaborates that a certain amount of light must enter the eye to make any meaningful output and similarly in the case of any neurological gate, i.e. threshold, sufficient information must enter the system to make any impact. Now talking strictly in terms of information passage Hull comments that, any stimuli, irrespective of what type it is, is expected to make a reaction only if it exceeds the reaction threshold, i.e. "minimal effective reaction potential which will evoke observable reaction" (Clark, 1943). Thus, for any information to have any reaction, the following citation must be satisfied.

## **Effective Reaction-Threshold Reaction Evoked Reaction**

We will, in the paragraphs to come, will use this equation to determine the intensity of threshold reaction. Hull called this difference super threshold effective reaction potential. Another important concept which we will use is the definition of minimal threshold. Regarding this, Hull opines that all the minimal thresholds in psychology are the sum of the entire inertial threshold plus an '....artifact of undetermined magnitude which arises from the oscillation function'. But, since we do not know what the inertial thresholds of different persons are, it is not possible for us to determine what can be the level of stimuli for the people in general to determine a 'subliminal message'. It may be noted in this regard that the probability of the action evocation fails to be an indicator of the reaction potentiality when the zone of oscillation is completely above the reaction threshold or completely below under it. However, under certain conditions information that passes completely above the effective reaction potential gives a 'uniform' 100% evoked potential. This means that stimuli that enter

the neurological network above the threshold is always expected to have their clearly defined results. There are, however concepts of reaction latency and experimental extinction involved in such discussion. Such discussions are beyond the scope of this study.

Having discussed the roots of the concept and reviewed the theoretical mechanism, we will proceed to further discussion and while doing that we will review experiments conducted at different times and will review them in this section. In the next section, we will come up with the results of such experiment and re-interpret them to conclude the discussion. Regarding the experimental findings pertaining to the issue, we will consider the experiments conducted by Kunst-Wilson, Zajonc (1980), Seamon, Brody and Kauff (1983), and Bonano and Stillings(1986). Though these experiments were not directly related to consumer research aspects, they had far reaching results which many researchers thought to have major marketing implications. Following that, experiments by Hawkins (1970), Cupperfain and Clarke (1985) will be discussed which were presumed to have some direct and measurable effect on marketing communications. As discussed, in this section, we will use both Freudian theories and corollaries of Hull to explain the happenings and re-interpret these results in the next section. In light of theoretical approaches, we will show that all those results which were labeled 'subliminal' are not strictly magical events & have their roots in the different psychological processes which can have yet other applications than being only 'subliminal'.

But before, we proceed with experiments as described above; we need to explain the concept of mere exposure, because such experiments have been interpreted on the basis of mere exposure. To begin with mere exposure, theoretical approaches of Zajonc (1968, 1980, 2001), needs mentioning. Mere exposure, as Zajonc (2001) puts it, is a way of presenting stimuli to people who will encounter it for a specific period of time and the response of such people will be recorded and analyzed to denote any significant change in the behavior. According to the recorded results, it has been seen that participants develop a preference for the stimuli that has been presented to them earlier, and occurs at primitives stages of life. Such exposure and preference are not only limited to human beings but also to other nonhuman animals. Rajecki (1974) exposed fertile chicken eggs to two types of music. When hatched, he repeated the music to the new born chicks and it was found that they had developed a preference for the music that was played to them in pre-natal condition and did not prefer the music that was not played. In human beings, similar experiments have been conducted. In one experiment (Monahan, Murphy, Zajonc, 2000), subjects were exposed to Chinese ideographs in two groups- one group saw the 5 ideographs, five times each and the other group saw 25 ideographs with no repetition. In both the cases, the duration of the exposure was 4 ms When the subjects were asked how they feel when the same ideographs are shown (the first group), to them, they said they feel to be in a better mood, than those subjects who were shown 25 ideographs with no repetition. This lead Zajonc to conclude that repeated exposure of the familiar stimuli leads to a preference and goes on to say that such stimuli are sometimes so 'degraded' (Zajonc, 2001) that the individuals are not aware that they have received such stimuli. Such a description seems to be appropriate for the projection of 'subliminal' messages. By this time, we have made clear that subliminal messages are in their functional pat dependent on the 'mere exposure'. Rather, Zajonc (2001) argues that preference effects are 'more pronounced' when they occur subliminally. Having discussed 'mere exposure' in the basic form of experiments, we will consider other experiment in which preference; familiarity will be manifested via mere exposure (Bonano and Stillings, 1986). In this experiment, the experimenters tried to establish two things- the availability of familiarity in the absence of recognition memory an.

Both preference and familiarity would be unaffected by the manipulation of the context. We will be considering only the first part of the experiment, i.e. familiarity of the stimuli. In this experiment the subjects were exposed to a stimulus for a period of 1 m and were asked whether they have seen anything on the screen. In the next part of the same study, subjects were told to select one stimulus from a pair of the stimuli displayed on the screen. They were told that one stimulus was a new one and the other was displayed to them in the first part of the experiment. They were told to select that stimulus they remember seeing in the first part

of the experiment, if not, then any stimuli that they feel good to select. It was quite obvious that since the previous exposure was too little, it was impossible for the participants to see anything. It was found that familiarity in this case was 63%, i.e., in 63% of the cases, the subjects chose that stimulus that has been previously exposed to them, and that even irrespective of the background color. This proves that familiarity can occur without even cognition occurring beforehand. Based on such findings, Zajonc. (1980) hypothesized that such action may occur without cognition, and may even precede it. This was later scientifically proved in later experiments (Zola-Morgan, et al., 1991). The above mentioned experiment has been replicated in another experiment by Seamon, Brody and Kauff (1983), but it was varied in the time the participants got to report their feelings. They also exposed their subjects to 10 random geometric shapes to five times each and for 5 ms. It is seen that the as the time gap increases, the recognition memory decreases and the affective response picks up. This in the later part of the discussion will take up an important place in the discussion. For now, we will shift to those experiments that bear direct resemblance to consumer aspects. In this aspect, the experiment of Hawkins (1970) bears special importance.

## Conclusion

However, such results cannot be taken as they exhibit their results and needs further introspection. We will point out a few theoretical hindrances and later on will come up with practical hindrances and will show how alternate research can be conducted. One obstacle arises from the threshold concept of Hull. Hulk says that since a threshold is a level of resistance, then this resistance must be overcome an opposing force to evoke some reaction in the human beings. In other words, the super threshold effective reaction potential must be above the reaction threshold to evoke desirable results. Otherwise results may occur, but that may not serve the end of the advertiser.

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