

MPRA

Munich Personal RePEc Archive

Does subliminal advertisement affect consumer behavior? An exploratory comparative analysis between marketing and non-marketing professionals.

Yasir Ali Soomro

King AbdulAziz University

14 April 2018

Online at <https://mpa.ub.uni-muenchen.de/92124/>
MPRA Paper No. 92124, posted 11 July 2019 15:44 UTC

Does subliminal advertisement affect consumer behavior? An exploratory comparative analysis between marketing and non-marketing professionals.

Dr. Yasir Ali Soomro

Assistant Professor, Department of Marketing,

King AbdulAziz University Jeddah, Saudi Arabia

Email ID: dr.yasir@hotmail.com & ysomro@kau.edu.sa

Abstract

This research study is an effort to explore the difference in the understanding of marketers and non-marketers about their perception, awareness, knowledge, attitude and behavior about the subliminal messages in advertising. To serve the objective of comparative analysis conceptual model was developed for both groups which involved Perception, Awareness and Knowledge relationship with attitude, then relationship of attitude on Behavior towards the brand. Three commercials were selected which had embedded subliminal messages and respondents viewed the advertisements before filling out questionnaires to identify their level of awareness and the degree of knowledge about the type of subliminal content embedded in the ads. For each group total of 140 participants gave their responses. Structural Equation modeling was performed to test the hypothesized relationship between variables. Results of Path analysis show that only one factors for marketers, such that Knowledge about subliminal messages had significant positive effect on attitude towards subliminal Ads. Also marketers' attitude towards subliminal ads was negatively significant on behavior towards brand. For non-marketers, no support for any of the hypotheses found. Overall results reveal that both the marketing and non-marketing professionals view and perceive the subliminal messages embedded in the ads with a statistically significant difference.

Keywords: *Subliminal Ads, Perception, Awareness, Knowledge, Attitude, Behavior and SEM.*

Introduction

With time, the marketing world has undergone a revolution when it came to advertising and promotional strategies. What first started from simple advertisements via newspapers, radio and television had now digitally advanced its pace to the World Wide Web. Along such a progression, various types and modes of advertisements too have influenced the daily lives of people. In the fast-paced world of today, subliminal advertising had become an industry itself and with the support of research and technology, it had evolved to an overwhelming extent. With competition so cut-throat and high in the air, marketers inspired by this genre of promotion, ensure to leave no stone unturned to overpower their target market by targeting its subconscious psyche to exercise

greater control on the consumer. Surrounded by a wide assortment of young and dying brands, they are forever in a quest to attain brand loyalty of their target market. Marketers want absolute influence of the consumers so that they do not switch to some other brand. They constantly are in search of creative ways, one of them being hidden messages in adverts, to achieve maximum positive impression from a potential buyer. However, it is quite unfortunate that there is never adequate evidence to prove the workings and effects of subliminal practices. Nevertheless, a belief still prevails on the success rate of concealed messages embedded in promotional campaigns. Regardless of the lack of evidence to prove its existence, it is apparent that the public is keen to attain awareness of the ways marketing experts can manipulate an innocent consumer via subliminal techniques.

One smart skill used worldwide by marketers is the strategy of subliminal messages in ads. Advertising is a medium for image management there by creating and maintaining images and meanings in consumer's mind. Teaming this phenomenon with hidden messages to target the subconscious mind had been a much-used tactic by many brands. Prior studies have provided strong rational, data and evidence regarding the involvement of subliminal messages in advertisements and how its influences their behavior (Bamberger, 2013; Smarandescu & Shimp, 2015).

Subliminal messages can be of two types; auditory and visual. Studies indicate that these types can lead to antisocial behavior, early sex stimulation; cultural change, suicidal acts and even drug use (Sofi & Nika, 2013). Due to their negative outcomes, concept of subliminal messages has always been in question and doubted by the critics. Thus, the usage of these types of ads usually raises many ethical issues and defines them as manipulative. The public had always had a negative opinion about subliminal ads but the professionals have always been on their footsteps to convince the critics that subliminal advertising does not exist (Klimov, 2003).

Furthermore, the concern for credibility had always remained a major issue with advertising. The perception of consumers always affects the credibility. Thus, certain hidden images need to remain hidden during publication or broadcast. The reduced credibility and public perception about subliminal ads have always been a concern for advertisers for decades (Broyles, 2006). It becomes crucial to both, conveying the message intended to consumer and for convincing regarding credibility and trustworthiness of a brand. Further evidence suggests that subliminal embeds do not effect cognitively based judgments. They appear to be very subtle and mostly affect feelings rather than cognitive measures (Aylesworth & Goodstein, 1999).

Apart from TVC and print ads, brands do not event spare movies from the subliminal advertising strategy. From brands like Coca Cola to Kool cigarettes advertising campaign, many Holly wood movies are also engaging themselves into subliminal advertising. Promoting your product via a film is one thing that is usually acceptable and had become a common tactic by brands today. But using subliminal communication in movies and even cartoons that are watched by a vast audience, including adults and youngsters both, is unethical on all grounds. Yet another debatable topic

comes in to consideration when we hear subliminal messages being used in something as pure and naive as child entertainment. Well, the answer is a yes to this (Klimov, 2003). The degree of awareness depends on the exposure time as well. A study reported that brief exposures may produce no significant experience while longer exposures produced a much clearer experience (Ramsøy & Overgaard, 2004).

Besides this it is suggested that marketers should not be using subliminal tactics in their communication. There are many stronger ways to manipulate feelings and to create a much more positive impact. Thus, it would be unwise for marketers to test unethical boundaries when consciously used elements of ads can be used to achieve the same goals much more effectively (Aylesworth & Goodstein, 1999).

These kind of subliminal ads are applicable if the marketer is able to induce either a goal, motivation or need in a consumer by conscious means so as to influence consumer choice without the consumer being aware of it. There by, applying subliminal messages in practice with effectiveness on its peak (Bamberger, 2013).

This study will help to widen the knowledge regarding messages that target the subconscious mind. The human brain is vulnerable to manipulation. If the advertisers are aware of all such vulnerabilities, then they should avoid taking advantage of it to promote a brand or a product. Previous researches have already revealed that subliminal ads really do work and manipulate the mind of those that watch those adverts. Many brands like Coca Cola, McDonalds, Ferrari, Marlboro, KFC, Hardees have been accused of using subliminal message in their advertising. In this case, such a comparative study becomes imperative to review the measure of involvement of subliminal advertising in influencing the mind of the viewers and the consumers. While the debate on the topic will never be over, it had become a huge subject of concern for the public.

One way always suggested by the critics is to introduce and explain the concept of subliminal messages and its agenda of manipulation to eligible students of colleges and universities. Until date, the common trend reported in marketing and journalism institutes about the teachings of this concept shows that the professors and instructors describe subliminally embedded ads as unethical and an unacceptable practice, as it is considered as illegal in many cultures and banned in many countries around the world.

The main objective of this study is to understand the difference between two groups of people i.e marketing and non- marketing professionals. In addition, the aim is to do comparative analyze on the degree of comprehension held by the marketers regarding subliminal advertisement. Lastly, to present empirically tested model for Attitude towards the subliminal ads and behavior towards brand.

Literature Review

Subliminal Messages and Subliminal Advertisement

Subliminal Messages are defined as sensory stimuli encoded in a medium, e.g. advertisements, intended to pass through the human brain, but remains unidentified by the subconscious mind and can positively or negatively influence the subconscious frame of mind.

For more than hundred years, researchers and marketers alike have studied the phenomena of subliminal messages that have embedded in all kinds of promotional advertisements and campaigns. Certainly, in all eras of advertising, the idea of sidestepping the conscious branch of the human mind and penetrating into the subconscious wing of the brain had appeared quite intriguing to the gurus of the marketing world.

Nonetheless, decades of study have proven that subliminal messages do exist, yet they have become a controversial issue today (Broyles, 2006). At the same time, many of the studies show confusion on the extent of their reality and their degree of influence on the viewers.

However, denial on the existence of subliminal message becomes yet another immoral deed on the part of the professionals who make way for such adverts to thrive in the marketing world.

However, the content of such advertisements can help the brands develop the desirable effect on consumers related to the product evaluation, awareness and processing style (Trampe, Stapel, & Siero, 2011). This becomes one of the most prominent reasons for their demand in the advertising world.

Without doubt, the human mind is being brainwashed with such kind of ads in a massive quantity and most of the times the audience do not even realize it. Enough proof already exists, prior to the current research, supporting this reality. The book, "Hidden Persuaders" was one way of proving that subliminal techniques existed and thus this book was highly criticized for promoting subliminal techniques. The book had a significant impact on advertising and society and claims that media and advertising environment had changed, yet much had remained the same as well (Nelson, 2008).

Research had still not yet solved the dilemma related to the effectiveness of subliminal messages; whether they actually affect human behavior or not. However, subliminal perception can be considered via two limits (threshold). First being which does not lead to any action but the threshold changes from resting to action potential. Second being synaptic transmission, producing an action potential (Hussin, Hamdar, Farha, Boudiab, & Beyruti, 2013).

People due to lack of knowledge are very poor at recognizing the true causes of their actions. However, it is evident that subliminal stimulus can have an indirect effect on behavior. Yet, some research had proven that subliminal advertising effectiveness is still uncertain. On the other hand, it had been stated and proven that subliminal advertising had a very negligible effect on consumer choice (Hussin et al., 2013).

Similarly, some studies indicate that subliminal embeds in any advertisement have significant effects on the upbeat and negative feelings without an individual's conscious awareness (Aylesworth & Goodstein, 1999). Thus, marketers must not ignore the fact that subliminal embeds affect feelings, but also the nature of the feelings whether warm, positive or negative. Perhaps, realizing the intensity of such a strategy in advertisements, subliminally intended promos have always been popular in the advertising world.

Advertising of all sorts is one of the fundamental activities performed by all businesses. However, one cannot ignore the fact that the effects of different types of advertisement vary on large extent from each other. When it comes to subliminal advertising it had always been contradictory and there is no clear evidence to explain or predict as how this concept actually works and to what extent individuals are affected (Hussin et al., 2013).

Sexual content in advertising can vary which involves a stimuli implanted within the ad which the public interprets as sexual (Reichert & Lambiase, 2003). Both men and women react in a completely different manner depending on the degree of how they perceive it individually. The idea to incorporate sexual content is the most common and popular used line of attack in adverts. Regardless, marketers are always looking for subliminal techniques to be implant in their advertisement to promote their products well enough and implant the message in a consumers mind effectively without the consumer being aware of it. The point to reflect that marketers must take into consideration the measure and intensity of all minor and major effects advertisement causes to the human mind. Advertisements are just not important to advertisers but to the customer as well thus certain aspects like the level of pornography, sexual actions should be taken in to consideration (Sofi & Nika, 2013). Thus, this major factor cannot be neglect in any form of promotion.

While exploring in terms of the degree of influence these ads had on both genders, results show that there is a difference in reaction to subliminal ads when genders difference into account. Study reveals that females exposed to subliminal ads are more likely to show irrational behavior rather than men (Sofi & Nika, 2013). On the other hand, when it comes to the age factor no significant difference in behavior is evident, whether male or female.

There was (a) time when advertisers were only certified for changing emotions and feelings via a mode of promotion. Now they also trigger and control behavior and emotions through messages that can directly influence the subconscious psyche (Rahman, 2013). Multiple studies and papers have analyzed the reality of mind control done via subliminal ads. The initial studies were conduct to ensure whether hints of such hidden messages could actually be perceive by the subconscious mind. Today, the researcher aim to find what effects of such messages on human mind and consumer behavior. This concept came under discussion for the very first time when an American marketing executive James Vicary in 1957 exposed the use of subliminal manipulation on the consumer mind. Extensive study and research conducted by Vicary revealed that hidden messages like "Eat Popcorn" and "Drink Coke" displayed between movies, at large to the audience at movie

cinemas. This message displayed so swiftly at a speed of 1/3000 per second on the screens by the experts, that the viewers were not consciously able to identify their appearance on the screen (Messaris, 2013). Meanwhile, Vicary recorded a sudden boost in the mobs of people, lined up outside the Popcorn stands. Similarly, he also recorded a rise in sales of Coke. For half a century, this research by James Vicary had been quite a buzz in the marketing cosmos and is still quite popular. However, until this date, the claimed connection between the rise in the craving of “coke” and “popcorn” and the incorporation of concealed notes in movies are yet to be prove via substantial results.

Over the years, a plethora of advertising messages with hidden meanings were brought into play by the marketing specialists, integrating them in commercials and promos that were aired on television, printed in books, newspapers magazines and were even broadcasted in radio transmissions. Likewise, study by Iftekhar, Ayub, Razzaq & Aslam (2013) studies the effects of subliminal use of messages on the buying behavior of the target market. The papers states that since the consumer is ignorant and naïve, the marketers take advantage in their obsession to boost their sales and profits. While their pursuit for revenue and brand loyalty increases every day, viewers are apparently unknown about the secret integration of subliminal notes in the brands they almost buy daily. Without any doubt, brands are now eagerly aiming to have absolute influence on the buying behavior and patterns of their target market, via subliminal manipulation that is termed as the supreme way of consumer exploitation (Iftekhar et al., 2013).

The inclusion of messages in marketing promos, targeting the subconscious threshold of mind, had now become quite a calculated and tactical art itself. The audience and the consumers exposed to such ads are clearly conscious of the advertised product and the brand. Nonetheless, they are clueless about the strategy of auditory and symbolic visuals, use of paints and shades, approach of people and objects; all subliminally used to elicit certain behavior patterns in their subconscious psyche (Kirdar, 2012). In addition, the use of such strategies was not limited to just food advertising, but fashion and cartoons were to join the list of those industries as well, where the use of concealed messages was discovered the most. It has demonstrated with evidential proof that children, who constitute the target market of these animated movies, where subliminally showed the word “Sex” and even subtle male and female nude images. The research by Kirdar (2012) exposed notorious Disney cartoons like Lion King, Jessica Rabbit, Aladdin and Tangled flashed erotic sexual visuals and expressions in the cartoons.

Subliminal messages used in food advertising have an effect and triggers unhealthy dietary behavior in viewers of such adverts, most importantly children. A study reveals that subliminal food cues might also trigger patterns of unhealthy eating or binge consumption, especially in addictive individuals. Research reveals that if the subliminal advertising pattern in food campaigns is diverted from junk food to healthy eating, it can reinforce constructive and nutritious eating habits in the lifestyle of the consumers (Csorba, 2011).

Tunali (2013) revealed in study that advertisers are exploiting the knowledge attained from the motivational study about the hidden desires of the human mind and consumer behavior to maneuver the user into buying a product. The researcher is of the opinion that use of subliminal advertisement is unethical and deceiving. Since the viewer of such ads does not identify the messages at an ordinary awareness level, the right to make a choice of acceptance or dismissal of the message automatically stolen from the consumer. It is only knowledge of such adverts that can protect the consumers from sinking in the pools of such vulnerable deception. Consumers must question themselves on why they are buying a certain product and not fall prey to its attractive packaging or intriguing brand name. It is the price, taste or quality of the product that should be the factors of a purchase decision (Tunali, 2013).

Many qualitative studies have conducted based on a Knowledge-Attitudes-Practices (KAP) model. To understand human response to specific phenomena KAP model have been use particularly in the health related studies (Launiala, 2009; Manderson, &Aaby, 1992). In psychology field, Theory of Planned Behavior also explains the connection between people's attitudes and behavior (Ajzen, 2002). Based on these studies, researcher has framed research model to draw a parallel between the level of awareness of this genre of promotion between the marketer themselves and, of course, the non-marketer who are exposed to such advertisements on regular basis.

Hypotheses of research

There are several hypothesis developed for this study that would help in conducting the research in a proper manner. Separate hypotheses for two groups (Marketers & Non-Marketers) are outline below:

H1a: Perception of subliminal messages significantly affect the attitude towards Subliminal Advertisements.

H2a: Awareness of subliminal messages significantly affect the attitude towards Subliminal Advertisements.

H3a: Knowledge of subliminal messages significantly affect the attitude towards Subliminal Advertisements.

H4a: Attitude towards subliminal ads has significant relationship to behavior towards brand.

Hypotheses for Non-Marketers

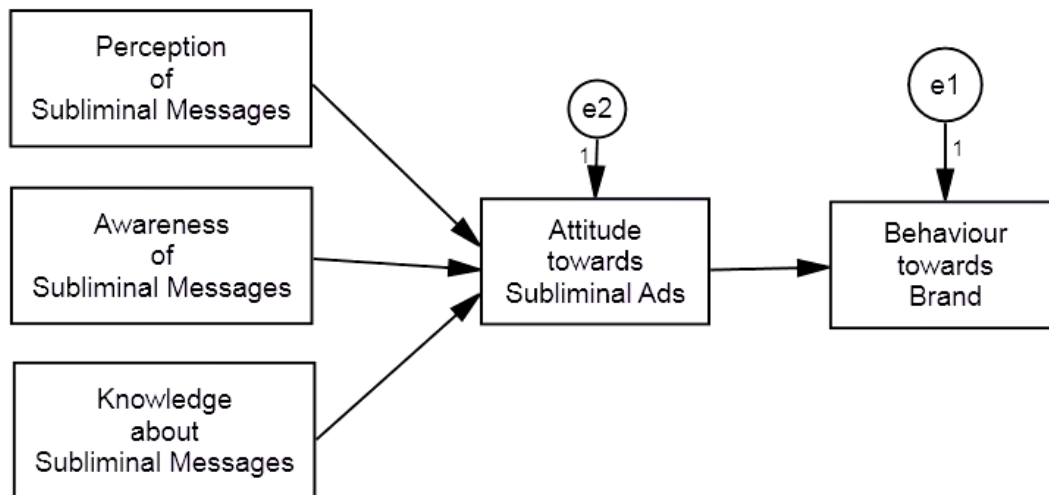
H1b: Perception of subliminal messages significantly affect the attitude towards Subliminal Advertisements.

H2b: Awareness of subliminal messages significantly affect the attitude towards Subliminal Advertisements.

H3b: Knowledge of subliminal messages significantly affect the attitude towards Subliminal Advertisements.

H4b: Attitude towards subliminal ads has significant relationship to behavior towards brand.

Figure 1: *Conceptual research model*



Method

Participants, Procedure and Measures

For this research survey, participants were identified very carefully as the research included 140 participants each belonging to Marketing and non-marketing profession. Therefore, professional working in different organization in Karachi, Pakistan were request to take part in this research with minimum undergraduate education qualification. Demographic details of respondents are in table 1. Sample participants were 70 % males and remaining were females, as per Age 90.7 % respondents belonged to 20-25 age group. Out of 280 respondents, 51.4 % were with post-graduation qualification and 48.6 % were with undergraduate college degree. Three commercials were selected which had embedded subliminal messages. The first video was a TVC commercial of AT&T and incorporated a hidden message. The second commercial was of Arby's that subliminally portrayed seduction. The last TVC was of Volkswagen that integrated the concept of racism in its storyline. The respondents viewed the adverts and were request to fill out questionnaires to identify their level of awareness and the degree of knowledge about the type of

subliminal content embedded in the ad. The total duration of the entire commercial was 84 seconds and commercials shown on an iPad by researcher all at once to participants without repetition. After viewing the videos, questionnaire given to participant, which included question items related to their perception, awareness, knowledge, attitude towards subliminal advertizing, and their behavior towards that brand shown in the commercial. The total respondents for this research were 280.

Instrument of Data Collection was questionnaire, which had 15 items with five point Likert scales to measure the response related to five variables of the study mentioned above and shown in figure 1. Each item had three questions; these questions were adopt from past studies and modified to suit the research objectives. As the study involved question items picked and modified to fit the study, therefore reliability check was perform for each item in the questionnaire to avoid any errors in data collection instrument for further data analysis. Cronbach's alpha, which is the measure for reliability, for each item was in acceptable range that is greater than 0.6 values (shown in table 2)

Table 1: Demographic details of respondents.

<i>Items</i>	<i>Percentage</i>	<i>Item</i>	<i>Percentage</i>
<i>Gender</i>		<i>Education</i>	
Male	70.0	Under Graduate	48.6
Female	30.0	Post Graduate	51.4
<i>Age</i>		<i>Profession</i>	
20-25	90.7	Marketing	50.0
26-30	7.9	Non-Marketing	50.0
31-35	1.4		

Note: Sample (N)= 280

Table 2: Items, Scales with Reliability Statistics

<i>Variables</i>	<i>Sources</i>	<i>No of Item</i>	<i>Cronbach's alpha (α)</i>
Perception	Masud et al., (2015).	03 Modified items; each related to three commercials shown	0.655

Awareness	Masud et al., (2015). Aminrad et al.,(2013)	03 Modified items; each related to three commercials shown	0.624
Knowledge	Launiala, (2009)& De Pretto, (2015)	03 Modified items; each related to three commercials shown	0.711
Attitude	Masud et al., (2015) & De Pretto, (2015)	03 Modified items; each related to three commercials shown	0.612
Behavior towards brand	Masud et al., (2015).	03 Modified items; each related to three commercials shown	0.646

Results

Data collected through questionnaire was carefully check for any missing values and outliers. It is very important to detect outliers in the data set because these people have not read the question items carefully and just given random responses and their data differ from the normal for majority of the items. Mahalanobis D2 distance calculated to detect outlier on Amos 18.0 version. As per the criteria, a case will detected multivariate outlier if the probability with its D2 is equal to 0.001 or lesser then given value. In the data set, respondent number 13 with marketing profession was having value less than 0.001 (refer table 3) and this case was exclude from further analysis.

Table 3: Outlier detection

<i>Observation number</i>	<i>Mahalanobis d-squared</i>	<i>p1</i>	<i>p2</i>
13	24.776	.000	.021

Confirmatory Factor Analysis Test:

Once the data for clear from outliers, Confirmatory factor analysis (CFA) was perform using the Amos 18 version prior to structural equation modeling. Reason for performing the CFA was to check whether measured variables have connection with latent variables. As per criteria given

by Anderson (2010) & Byrne (2001), model one was create with Perception, Awareness, Knowledge and attitude constructs. The CFA fit indices were in acceptable range. RMSEA less than 0.08, CFI more than 0.95 level and other factors also fall as per desired CFA fit indices level.

Table 4: *Confirmatory analysis for SEM*

Indices and Standardized Coefficients	Model 1	Reference
Chi Square (χ^2)	147.024	Hair, Black, Babin, & Anderson,
DF	06	(2010)
GFI	0.922	Byrne (2001)
Adjusted GFI	0.811	
Normed fit index	0.957	
RMSEA	0.041	
CFI	0.989	
TLI	0.346	

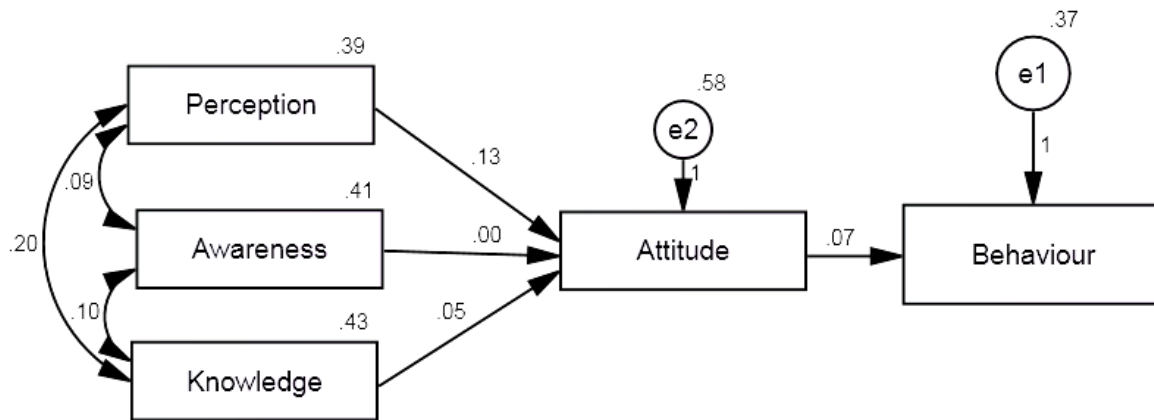
Note: CFI = Comparative Fit Index; Df = Degree of Freedom; GFI = Goodness-of-fit index; AGFI = Adjusted GFI; RMSEA = Root-Mean Square Error of Approximation; TLI = Tucker–Lewis Index

Structural equation modeling (SEM) Test for hypothesized relations:

SEM was performed to test the hypothesized relation among Perception of subliminal messages, Awareness of subliminal messages, knowledge about subliminal messages, attitude towards subliminal advertisement and Behavior towards Brand (see figure 1). CFA for this model was also perform and all the fit indices gave satisfactory results like RMSEA of 0.041, TLI 0.346, GFI and AGFI of 0.922 and 0.811 respectively and CFI than 0.95 level. As there were two groups, therefore two models presented (figure 2 and figure 3). As shown in Figure 2, the R square for attitude towards Subliminal Ads (dependent 1) is 0.58 and Behavior towards brand (dependent 2) is 0.37, which indicates that greater percentage of variance in Attitude is explained by three variable Perception, Awareness and Knowledge, Whereas, percentage variance explained by attitude on behavior is relatively less. Similarly, for non- marketers, the variance in dependent variables explained by independent variable is less than 50 % (see figure 3).

Results of Path analysis show that only one factors for marketers, such that Knowledge about subliminal messages had significant positive effect on attitude towards subliminal Ads. SEM results also revealed that for marketers' attitude towards subliminal ads had negative but significant effect on behavior towards brand.

Figure 2: *Structural equation modeling of Marketers*



Results of SEM (see figure 3) for non-marketers revealed no support for any of the hypothesis. As the result showed no significant effect of all three variables on Attitude towards the Subliminal Ads. Hence, Attitude towards the subliminal ads had no significant effect on behavior towards brand.

Figure 3: *Structural equation modeling of non-Marketers*

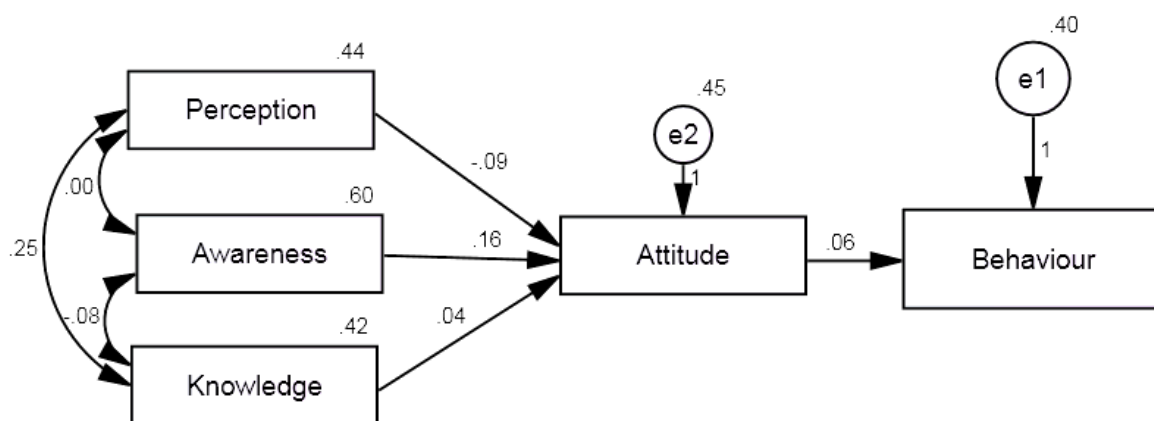


Table 5: Hypotheses Path Summary

Model 1 (Marketers)	Coefficient	S.E.	P-Value	Remarks
Hypothesized Paths	(β)			
H1a Perception → Attitude	.126	.121	.300	Unsupported
H2a Awareness → Attitude	-.001	.106	.989	Unsupported
H3a Knowledge → Attitude	.054	.115	.028*	Supported
H4a Attitude → Behavior	-.069	.068	.000**	Supported
Model 2 (Non-Marketers)				
H1b Perception → Attitude	-.093	.105	.377	Unsupported
H2b Awareness → Attitude	.165	.075	.228	Unsupported
H3b Knowledge → Attitude	.039	.109	.722	Unsupported
H4b Attitude → Behavior	.063	.079	.421	Unsupported

*Note: * significance level at 0.05, ** significance level at .001*

Overall results reveal that both the marketing and non-marketing professionals view and perceive the subliminal messages embedded in the ads with a statistically significant difference.

Discussions and Conclusion

This research study with SEM showed the difference among the non-marketers and the marketing professionals about the phenomenon of subliminal messages in advertisements. In addition, how the understanding affects their behavior towards the brand. The respondents viewed the adverts and were request to fill out questionnaires to identify their level of awareness and the degree of knowledge about the type of subliminal content embedded in the ad. The total duration of the entire commercial was 84 seconds and commercials shown on an iPad by researcher all at once to participants without repetition. After viewing the videos, questionnaire given to participant, which included question items related to their perception, awareness, knowledge, attitude towards subliminal adverting, and their behavior towards that brand shown in the commercial. The total respondents for this research were 280. The results revealed that both the marketing professionals and individuals perceived and viewed the advertisement differently, with marketers having a significant difference in their knowledge and attitude towards subliminal content. It seems that

marketing professionals might have studied about the concept of subliminal messages in their studies or may have been part of concept discussion while planning for their brands.

The research concluded that majority of the non-marketers were not able to identify the subliminal message embedded in the ad shown due to lack of knowledge about the concept. As the result showed no significant effect of all three variables on Attitude towards the Subliminal Ads. Hence, Attitude towards the subliminal ads had no significant effect on behavior towards brand.

Policy Implication & Future Research

The research findings paved way for marketers to understand consumer behavior directly related to the perception about subliminal messages. Now before the construction of any subliminal message, Advertisers may consider that non- marketing related consumers are better target audience for subliminal content. The future research for studies of subliminal messages stand wide, with more potential for findings and discussions related to the topic. The research can be conducted on a larger population and even include people from diverse backgrounds across cities, nations and continents for stronger, extensive findings for this subject. Individuals from different educational backgrounds can also be a potential part of the study. All these probable initiatives will improve the results of the study and add to the plethora of researches on the topic of subliminal advertising.

References

- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of applied social psychology*, 32(4), 665-683.
- Aminrad, Z., Zakariya, S. Z. B. S., Hadi, A. S., & Sakari, M. (2013). Relationship between awareness, knowledge and attitudes towards environmental education among secondary school students in Malaysia. *World Applied Sciences Journal*, 22(9), 1326-1333.
- Aylesworth, A. B., & Goodstein, R. C. (1999). Effect of Archetypal Embeds on Feelings: An Indirect Route to Affecting Attitudes. *Journal of Advertising*, 28 (3), 73-81.
- Bamberger, B. (2013). *Possibilities and Limitations of Subliminal Messages in Advertisements*. University of Groningen. Subliminal Messages in Advertising.
- Broyles, S. J. (2006). Subliminal Advertising and the Perpetual Popularity of Playing to People's Paranoia. *The Journal of Consumer Affairs*, 40 (2), 392-406.

- Byrne, B.M., 2001. *Structural equation modeling with AMOS: Basic concepts, application, and programming*. Hillsdale, NJ: Lawrence Erlbaum
- Csorba, M. (2011). Mediterranean Center of Social and Educational Research. *Mediterranean Journal of Social Sciences*, 2(4), 203-211.
- De Pretto, L., Acreman, S., Ashfold, M. J., Mohankumar, S. K., & Campos-Arceiz, A. (2015). The link between knowledge, attitudes and practices in relation to atmospheric haze pollution in Peninsular Malaysia. *PloS one*, 10(12), e0143655.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E., 2010. *Multivariate data analysis* (7thed.). Upper Saddle River: NJ: Prentice Hall.
- Hussin, H., Hamdar, B., Farha, G., Boudiab, R., & Beyruti, N. (2013). Subliminal Marketing: An Exploratory Research in Lebanon. *Journal of Business & Management (COES&RJ-JBM)*, 1 (3), 2306-8043.
- Iftekhhar, H., Ayub, A., Razzaq, A., & Aslam, M. S. (2013). Detrimental Effects of Marketing Practices on Consumers' Buying Behaviors. *Business Management Dynamics*, 2(10), 01-05.
- Kirdar, Y. (2012). Mysticism in Subliminal Advertising. *Journal Academic Marketing Mysticism Online (JAMMO)*, 4(1), 222-239.
- Klimov, B. (2003). *There! Did you see it? Care! They do see you. . . Subliminal messages in advertisement, movie making and cartoons in a 'not so-innocent world'. Profit driven or 'dark' conspiracy?* Central European University Budapest. MPRA.
- Launiala, A. (2009). How much can a KAP survey tell us about people's knowledge, attitudes and practices? Some observations from medical anthropology research on malaria in pregnancy in Malawi. *Anthropology Matters*, 11(1).
- Manderson, L., & Aaby, P. (1992). An epidemic in the field? Rapid assessment procedures and health research. *Social science & medicine*, 35(7), 839-850.
- Masud, M. M., Akhtar, R., Afroz, R., Al-Amin, A. Q., & Kari, F. B. (2015). Pro-environmental behavior and public understanding of climate change. *Mitigation and Adaptation Strategies for Global Change*, 20(4), 591-600.
- Messaris, P. (2013). How to Make Money from Subliminal Advertising and Motivation Research. *International Journal of Communication*, 7, 626-641.
- Nelson, M. R. (2008). The Hidden Persuaders: Then and Now. *Journal of Advertising*, 37 (1), 113-126.
- Rahman, S. A. (2013). Impact of Television Advertisements on buying pattern of Women. *European Journal of Business and Management*, 3(3), 222-283.

- Ramsoy, T. Z., & Overgaard, M. (2004). Introspection and subliminal perception. *Phenomenology and the Cognitive Sciences*, 3, 1–23.
- Reichert, T., & Lambiase, J. (2003). How To Get "Kissably Close": Examining How Advertisers Appeal To Consumers' Sexual Needs And Desires. *Advertising campaign strategy: A guide to marketing communication*, 14 (1), 75-90.
- Smarandescu, L., & Shimp, T. A. (2015). Drink coca-cola, eat popcorn, and choose powerade: testing the limits of subliminal persuasion. *Marketing Letters*, 26(4), 715-726.
- Sofi, S. A., & Nika, D. F. (2013). Impact of Subliminal Messages in TV Advertisements on Customer Behavior. *Journal of Business Management & Social Sciences Research*, 2 (12).
- Tunali, E. (2013). *Subliminal Manipulation in the Advertising*. Izmir: IZMIR University of Economics.
- Trampe, D., Stapel, D. A., & Siero, F. W. (2011). The Self-Activation Effect of Advertisements: Ads Can Affect Whether and How Consumers Think about the Self. *Journal of Consumer Research*, 37 (6), 1030-1045.