



# Analyzing Role of Subliminal Perception on Effectiveness of Non-Personal Advertising

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### ABSTRACT

Marketing and advertising experts seek for novel methods and intelligent means to attract consumers and customers. Subliminal messages can play crucial role in attracting consumers in the branding world. The important task in advertising is to find novel techniques for convincing the consumers to use the products and services. The first impression of the word “advertising” is the publicities on posters and via public media which are in fact audio and visual media. However, advertising industry affects the behaviors of consumers unconsciously with the aid of the tools they use via promoting the emotions followed by changes in their purchase decisions. Utilization of subliminal stimuli is among the new methods deployed by marketing specialists for sales of products aimed at persuading the customer and changing their minds in purchase process. The present study proposes role of subliminal perception in effectiveness of non-personal advertisements. The model is researcher-made and derived from literature review. Having reviewed historical background of the respective research and codifying the objective relationships between variables within a theoretical framework, subliminal perception was tested using three indexes namely, personal factors, stimulus-related factors, and attention to stimulus. Personal factors were analyzed using three components (perceptual consciousness, acceptance, and experience) and stimulus-related factors were taken into account using four components (color, freshness, size, and situation). The data were collected via codification of a structured questionnaire with 5-choice Likert scale consisting of 4 general and 33 specialized questions. The questionnaire was distributed among the sample members after checking its reliability and validity levels. Kolmogorov–Smirnov test was used to verify normality of data distribution. The results corroborated normality of data distribution. Statistical parametric test was also applied to analyze and test the research hypotheses. The data were analyzed using LISREL software. Based on the results of structural equations method and confirmatory factor analysis, personal factors influenced effectiveness of non-personal advertisements with a value of 0.52%. The respective values for stimulus-related factors and attention to stimulus were respectively equal to 0.45% and 0.67%. Furthermore, the independent variable of subliminal perception influenced effectiveness of non-personal advertising with a value of 0.33%.

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### Introduction

Advertising has its roots in ancient times. Although advertisements are mainly used by private institutes, they are used in all countries even socialistic countries (Heslop, 2010, 54). The application of advertising is the ability to convey commercial information to customers. An advertisement normally provides information about the advertising company, features of commodity, and the distributing branches (Talayee, 2013, 120).

Advertising costs exceeded 125 billion US dollars in 1989. This sum of money was not spent by commercial and producing institutions but instead social organizations and marketing specialists took benefit of this advertising style for declaring their intents (Raise, 2010, 4).

In general, advertising domain is divided into three main categories; the first category involves the publicities normally broadcast in television between different programs. The second category is referred to as subconscious advertisements which are abundantly seen in cinema and TV films as embedded advertising (product placement) despite the fact that their ethicality and effectiveness are still under debate among the researchers (Liang et al., 2007, 16).

The advertisements of the third category are embedded in the films such that the viewer considers them not as an external element, but instead, as a part of the displayed scenario (Dickson, 1971, 66) because they insinuate that presence or use of a certain product leads to success of the story's hero (Tankard, 2000, 102).

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Exceeding development of advertisements via novel frameworks such as Internet and utilization of subliminal messages has caused many challenges in the cultural and social systems of the countries such that commercial publicities have turned into a threat to public space of countries (Coomari, 2013, 8-37).

Ascending growth of advertisements has transformed this issue into one of the highly significant phenomena of the modern societies. One of advertising methods is to utilize subliminal messages for introducing the product, which is also known as intangible advertising (Atrass, 2013, 10). Subliminal stimuli, in contrast to sensory stimuli which are positioned lower than absolute threshold of the person for conscious perception, play a substantial role in the field of marketing (Heydarzadeh, 2014, 22). Experts and specialists in the scope of advertising and marketing seek for novel methods through unconscious stimulation of internal sentiments and stimuli of the person to purchase the products with prior knowledge and decision-making. (Dickson, 2013, 79 & Hobber 2014, 42).

Deployment of subliminal stimuli for marketing the products is one of the newest advertising methods. In such an advertising method, the defensive system of body is weakened and the addressee or customer gets more flexible toward acceptance of film messages.

In subliminal perception, the viewer watches a displayed brand without knowing that any specific brand is being broadcast. Advertisement of the respective brand is shown during the film in a fraction of second such that the viewer is not able to identify. The displaying duration is the minimal time needed for detection of an object. In fact, such advertising style leaves the principal impact on the addressee subconscious mind. It causes the viewer to find an intangible mind acquaintance with the displayed brand. And during shopping, this sense of acquaintance with the respective brand strengthens the purchase action and orientates the purchase decision (Kotler, 2014, 11).

Accordingly, Samsung Corporation requires today a novel and intelligent means for survival in the current competitive world to be able to attract new potential customers for its products. One of the techniques is to infiltrate and provoke customers' sentiments by consumer behavior science" (Aker, 2014, 80). It is worth mentioning that different scientists like "Pakard" primarily expressed the relationship between subliminal perception and advertising in 1975 as hidden persuader (Lamp et al., 2000, 32). Another investigation was carried out by "Howkins" in 1970 that could create a stronger feeling of thirst in the test group via stimulating motivational requirements in the unconscious mind of brain hypothesis by displaying the word "coke" (Defleur et al., 2012, 7-16). (Roggers & Smith (2000)) stated: "taking into account numerous experiments with differing results available on subliminal perception and advertising during 20 years", subliminal perception is turning into a comprehensible part of human culture which can lead to ultimate purchase by the consumer with the aid of non-personal advertising (Roggers, 2000, 5-24). In light with many researchers conducted on effectiveness of advertising via subliminal perception, the researcher in the current study intend to find the answer to the following question: "what influence does subliminal perception leave on effectiveness of non-personal advertising?"

## Literature Review

Subliminal perception had been reflected in psychology since late 18<sup>th</sup> and early 19<sup>th</sup> centuries. In the respective studies, the people were questioned if they were aware of perception or not. For instance, visual stimuli such as letters, digits or geometrical shapes were shown to the respondents from such distances that they either claimed seeing nothing or only a dim spot. Also, auditory stimuli such as words were whispered so gently that the respondents claimed hearing no voice at all (Solomon, 2014, 199-200). To test the hypothesis that the visual or auditory stimuli might have been perceived in spite of observer's responses, they were demanded to conjecture about the stimuli by expressing a number or word. The acquired results of the preliminary research suggested that observer's conjectures were more accurate than what expected based on random guesses (Soleimani, 2011, 97).

Subliminal perception was disclosed following an experiment by "James Vicary" in New Jersey Theater. He asserted that he had shown two advertisements to 35,699 spectators during a 6-week period in the middle of the film "Picnic". "(Hungry? Eat popcorn and drink Coca Cola)". This message had been displayed every 5 seconds and lasted 0.003 second each time. The displaying time was so short that the message could never be processed and interpreted by means of the conscious mind. Nonetheless, Vicary claimed that sales of popcorn and Coca Cola respectively increased by 57% and 18% during the 6-week period despite the customers were unaware of the messages (Klein, 2010). Vicary coined the term "subliminal perception" (Marseill, 2013, 5-104) and then founded the Advertisement Broadcasting Corporation based on the 6-week experiment. An advertising program called "Mini USA" benefitted from the idea that the message is will receive more attention if it addresses the addressee personally (Hagart, 2013, 118-19). "Mini Cooper" holders receive personal messages when passing by digital emblems of the corporation known as talking billboards. The billboards are designed such that they recognize the customers' need whenever a Mini Cooper car approaches them based on the radio signal embedded in a chip. The messages are personal and depend on the questionnaire filled by the automobile owner (Heydarzadeh, 2014, 289).

In Aristotle's opinion, memory is acquired for humans as a result of sensory perception and experience is acquired from memory and reminding, and, overall perception about details of phenomenon is acquired from experience (Tahanavi, 2005, 42).

According to "Farabi", experience is contemplation on specific instances, general premises and the predicate assessment of those premises with respect to the specific instances such that the experiencer gets necessarily confident that the predicate can be satisfied in all or most of specific instances (Sabzevari, 1991, 67). A study was carried out by "Defflower & Petranoff in 1959". Television was used in the respective study for subconscious persuasion. The experiment lasted 5 weeks and no evidence was found on effect of subconscious messages on encouraging the viewers (Defflower, 2000, 190).

Another study was done in 1992 by "Rosen & Singh" who took advantage of embedded advertisements for two less known brands namely "Liquor & Cologne". In their research, four dependent variables were analyzed (attention, change in attitude, purchase intention, and reminding after 24 hours).

**Table 1. Descriptive statistics of demographic indexes**

Percentage	Frequency	Variable	
50/5	101	Male	Gender
49	98	Female	
0/5	1	No Response	
27	54	25-30 years	Age
46	92	30-35 years	
21	42	35-40 years	
6	12	Over 40 years	
82/5	165	Employed	Occupational Status
14	28	Unemployed	
3/5	7	No Response	
4/5	9	Directing Manager	Job Position
3	6	Business-Marketing Manager	
13	26	Sales Manager	
12/5	25	Advertising Manager	
9/5	19	Market Research and Development Manager	
12/5	25	Marketing Expert	
6/5	13	Advertising Expert	
5	10	Sales Expert	
18/5	37	Others	
15	30	No Response	

The findings of their study indicated that product placement had no remarkable impact on any of variables (Rosen, 1992, 33).

In 2002, Cooper displayed “Simpson” products as embedded advertisement both orally and visually in a television program and realized that the two groups tested under completely controlled conditions had greater enthusiasm to purchase after exposure to embedded advertising (Cooper, 2002, 33).

In Iran, a research was carried out in 2011 by “Heydarzadeh” entitled “Intangible Brand Advertising and its Impact on Selection of Consumers”. Four variables (awareness of brand, media, individual factors, and gender) were evaluated. According to the acquired results, intangible brand advertising affects the unconscious self of consumer and enhances the awareness level of the consumers about the advertised brand unbeknown to them.

“Zahra Mousavi” devoted her master thesis majored at Commerce in 2013 to a research entitled “Subliminal Perception and its Effects on Advertisements”. She chose a 50-member sample and inferred that use of subliminal messages could affect people’s decisions but the method was legally forbidden due to the fear that use of such a method might negatively affect the values and individual’s mindset and could also misuse public opinions for achieving its goals. In this sort of advertising, the individuals behave according to the specified instructions without being aware of them. The corporations and producers will be able to attain great accomplishments if they manage to delineate an international framework for utilization of intangible advertisements (Mousavi, 2013).

#### **Theoretical Framework and Conceptual Model of Research**

The model is researcher-made derived from the relationships among variables taking into account the research works already carried out by scientists and theorists in this field.

#### **Subliminal Perception**

The consumers act very selectively in connection with what they pay attention to since the people’s tastes differ in noticing and processing the stimuli. Hence, a researcher named “Theus” (1994) analyzed the personal, physiological, and behavioral factors related to subliminal perception based on a study on 128 samples. According to the responses extracted from questionnaires, role of personal factors is regarded as the most significant component regarding subliminal perception (Kelly, 1979 –99–100).

#### **Hypothesis**

Subliminal perception influence effectiveness of non-personal advertising.

#### **Personal Factors**

In “Solomon’s” attitude, personal factors in subliminal perception can be measured by (1) consumer’s experience about the level of contrast with stimulus in the past, (2) acceptance (adoption) defined as the level of consumer’s attachment to stimulus, and (3) perceptual consciousness signifying consumer’s attention to stimulus with regard to the present requirements (Heydarzadeh, 2014, 230).

#### **Hypothesis 2**

Personal factors influence effectiveness of non-personal advertising.

#### **Stimulus-related Factors**

“Kleik” (1999) prepared an advertisement in an English advertising agency for cat food and used pictures of fish and mouse for attracting customers. Following investigations, he realized that 60% of cats exhibited a kind of response to the advertisement including movement of ears and scratching the TV monitor. Accordingly, he proposed role of stimulus as a key factor in evaluation of subliminal perception (Behboudi, 2009, 14).

“Darly & Smith” (2000) reached to the conclusion via researches on “Black & Decker” that size, freshness, situation, and color of stimulus all influence effectiveness of advertisements (Kotler, 2009, 89-90).

### Hypothesis 3

Stimulus-related factors influence effectiveness of non-personal advertising.

### Attention to Stimulus

In a TV advertisement for “Fox” company, Rickard (2000) used a television character named “Oleg”, a taxi driver with Greek accent. This advertisement was displayed for 8 seconds during the film “24” and succeeded in increasing the customers referring to Fox Co. by 100,000 persons. In the respective research, the role of the variable “attention” had the greatest impact on non-personal advertisements (Zetlin, 2010, 66).

### Hypothesis 4

Attention to stimulus influences effectiveness of non-personal advertising.

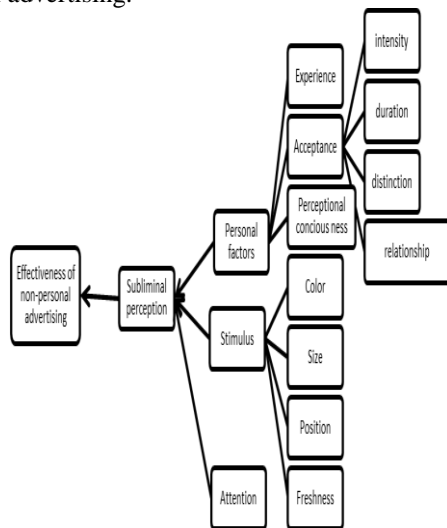


Figure 1. Conceptual model of research

References : ( Theus 1994; Kleik 1999; Darlly & Smith 2000; Rickard 200; Solomon 2014.)

### Research Methodology and Data Collection Tool

The current study is an applied research in terms of objective, a survey in terms of execution procedures, and of descriptive – survey type from statistical point of view. The statistical population of the research comprises PhD students of Business Administration specialized at marketing currently studying in management faculties of Islamic Azad Universities of Tehran City. The statistical population is limited and total number of target students is 400. Randomized and clustering technique was applied for sampling. The sample size was determined equal to 196 person based on Cochran’s formula. Therefore, 200 questionnaires were distributed among the students, out of which 190 ones were delivered back to the researcher.

### Data Collection Tool

Books, papers, public journals, and relevant dissertations were benefitted from in order to acquire the general information of the research. The questionnaire questions were codified and evaluated with the aid of professors and individuals specialized at marketing and advertising. The questionnaire included 37 closed-ended and specialized questions which were scored based on Likert scale ranging from 5 (very high) to 1 (very low). The first section of questionnaire has 33 questions for evaluation of independent variable and its associated indexes and components. The component of personal factors was evaluated by means of 15 codified questions, 11 questions measured the component of stimulus-related factors, and the component of attention was

measured by 5 questions. The second section of questionnaire evaluated demographic information via 7 general and closed-ended questions.

### Verification of Test Validity and Reliability

Cronbach’s alpha method was used to evaluate internal consistency of elements with the intention of determining validity after configuring the initial format of the questionnaire. For this purpose, an initial sample consisting of 20 questionnaires were pretested. Then, using the data obtained from the mentioned questionnaires and with the aid of SPSS statistical software, Cronbach’s alpha value was measured equal to 0.877 which is greater than 0.7 and in the acceptable range. To evaluate reliability of research results, likelihood-ratio test for reliability was used. The value of the respective test is 0.875 which lies in the interval (-1.96 to +1.96) and signifies that identical results have been deduced from both groups and the questionnaire is sufficiently reliable.

### Data Analysis and Model Estimation

Parametric statistical method was used for data analysis. Data are described using frequency distribution tables.

The method used is Structural Equations Model (SEM) and the software applied is LISREL.

### Descriptive Statistics

After preparing the questionnaires, the extracted information were monitored and categorized. Results of descriptive statistics of demographic variables are presented in Table (1).

Based on frequency table, 50.5% of the sample respondents are female and the rest 49.5% are male. Also, 27% of the sample members are in the age interval of 25-30 years, 46% in the age interval of 30-35 years, 21% in the age interval of 35-40 years, an 6% of them age over 40 years. 82.5% of the sample persons had jobs and the remaining 14% are unemployed. 4.5% of sample individuals are directing managers, 3% are business-marketing managers, 13% are sales managers, 12.5% are advertising managers, 9.5% are research and development managers, 12.5% are marketing experts, 6.5% are advertising experts, 5% are sales experts, and the rest 37% work in other job positions.

### Normality Test (Kolmogorov- Smirnov)

The results of the respective test are illustrated in Table (2). According to the table, it can be asserted that the distributions of variables are normal since significance level of normality test is more than 0.05 for all the variables: personal factors, stimulus-related factors, attention, and subliminal perception.

### Model Statement

The model statement is in fact the same as formal statement of the model. This stage includes formulation of a phrase about a set of parameters. The size and sign of the respective values are determined in Structural Equations Modeling (SEM). Once the model is stated and its confirmation state is evaluated, the next stage is to obtain estimations of free parameters from a set of observed data. Conventional techniques such as maximum likelihood estimation (MLE) or generalized least squares (GLS) are used. The model is said to fit a series of observed data when implicit covariance matrix of the model is equivalent with the covariance matrix of observed data, when the remainder matrix and its arrays are near zero. The most important model goodness of fit index is chi-squared test.

**Table 2. Verifying normality of variable distributions**

Result	Significance level (sig)	Z statistic value	Variable
Variable distribution is normal	0/453	0/858	Personal factors
Variable distribution is normal	0/161	1/123	Stimulus-related factors
Variable distribution is normal	0/093	1/238	Attention
Variable distribution is normal	0/437	0/871	Subliminal perception
Variable distribution is normal	0/07	1/295	Effectiveness of non-personal advertising

Source: test results

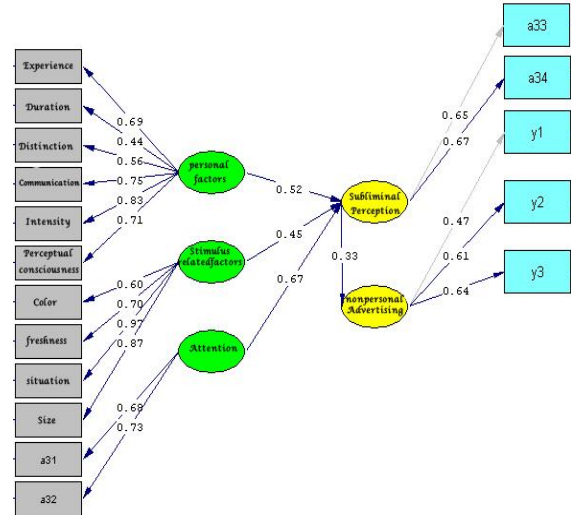
With rising dissatisfaction with chi-squared test, a series of secondary indexes were developed. The important difference between chi-squared fit test and secondary goodness of fit indexes is the fact that the chi-squared test actually represents a badness of fit index for the model and its smaller values mean better fit for the model. However, in contrast, secondary indexes such as GFI, NFI, and AGFI are goodness of fit indexes for the model. The greater values in the latter indexes indicate better fit. Chi-squared index is sensitive to sample size. Some researchers use ratio of chi-squared to degree of freedom as an alternative index. GFI and AGFI indexes are not affected by the sample size. The desirable value shall be greater than 90%. Nevertheless, these values can be large for poorly formulated models. RMR or RMSR is the measure for average difference between data and implicit covariance-variance matrix. The smaller value of this index is more favorable for the model's goodness of fit (below 0.05: excellent, between 0.05 and 0.08: suitable, and over 0.09 unsuitable). However, among the aforementioned indexes, RMSEA is considered as the desirable index and GFI as the best index but there is no unanimous consensus. Indexes of goodness of fit are generally defined in the range from zero to 1 and the coefficients exceeding 0.9 are regarded as acceptable (Hafeznia, 2002, 43). In model interpretation stage, if both the chi-squared and secondary goodness of fit tests show that the model is sufficiently fit, the factors of the fit model will be specified and focus will be shifted on them.

**Structural Equations Model**

Figure (2) illustrates research model in standardized estimation state. Based on LISREL software output, the  $\chi^2/d_x$  value was calculated equal to 2.016. The software output also suggested a value of RMSEA = 0.061 for the model. Measurement models in standard estimation case represent level of impact of each variable and/or the statements on variance distribution of variable scores or principal factors. As observed, the path model consists of 5 latent variables as well as 33 observable variables. Three of latent variables are external (personal factors, stimulus-related factors, and attention) and the two other variables are internal which include subliminal perception and effectiveness of non-personal advertising.

According to Table (2), all coefficients are positive indicating direct relationships between variables. The greatest

value of the coefficient (equal to 0.67) belongs to effect of attention on subliminal perception.



**Figure 2. Second-order structural equations model following estimation of standard coefficients**

The lowest level of effectiveness was acquired for impact of subliminal perception on effectiveness of non-personal advertising with a coefficient of 0.33.

**Model Fit Test in Structural Equations**

Following finalization of model, Table (4) includes different methods for estimating overall goodness of fit for the model using the observed data.

Based on the results of model fit test, it can be asserted that all indices are in the desirable range and the fitted model is a suitable one.

**Analysis of Direct and Indirect Effects**

Another type of relationship between latent variables in structural equations model is the direct effect. Direct effect in fact is one of the constituents of structural equation models and represents the directional relationship between two variables. This kind of relationships is normally evaluated by means of one-way analysis of variance (ANOVA). This sort of effect actually reflects the assumed linear causal effect of one variable on another one. Within a model, every direct effect specifies and expresses a relationship between a dependent variable and independent variable. However, a dependent variable can act as an independent variable in another direct effect and the opposite state might also happen. Additionally, a dependent variable can be correlated to several dependent variables in a multiple regression model. And also, an independent variable can be related to several dependent variables in a multiple/multivariate analysis of variance (MANOVA).

**Results of Hypotheses Tests**

As implied before, the relationship between dependent and independent were analyzed using structural equations method and LISREL software and the research hypotheses were also verified. The acquired results are shown in Table (6).

**Major Hypothesis: Subliminal perception influences effectiveness of non-personal advertising**

H0: Subliminal perception does not influence effectiveness of non-personal advertising.

H1: Subliminal perception influences effectiveness of non-personal advertising.

**Table 3. Principal statistics**

Confirmatory factor loading	SD	Mean	N	Observable variable	Latent variable
0/69	0/953	3/59	198	Experience	Personal factors
0/64	0/753	3/90	199	Duration	
0/58	0/755	4/01	198	Distinction	
0/75	0/730	4/14	198	Communication	
0/83	0/756	4/21	199	Intensity	
0/71	0/719	4/03	199	Perceptual consciousness	
0/60	0/742	4/02	199	Color	Stimulus-related factors
0/70	0/735	4/11	200	Freshness	
0/97	0/791	4/06	200	Situation	
0/87	0/792	4/15	200	Size	
0/69	0/832	4/04	200	Marginal Issues	Attention
0/73	0/868	4/18	200	Interpretation	
0/65	0/999	4/16	200	Advertising during film in cinema	Subliminal perception
0/67	0/721	3/93	200	Familiar brand	

Source: model estimations

**Table 4. Fit index of final model**

IFI	NNFI	NFI	AGFI	GFI	RMSEA	SRMR	CMIN/DF	Fit Index
>0.9	>0.9	>0.9	>0.9	>0.9	<0.08	<0.05	<3	Acceptable Values
0.95	0.93	0.94	0.93	0.91	0.061	0.041	2.016	Computed Values

**Table 5. Analysis of Direct and Indirect Effects**

Value of effect	Path	
0/33	Subliminal perception → Effectiveness of non-personal advertising	Direct Effect
0/52	Personal factors → Effectiveness of non-personal advertising	
0/45	Stimulus-related factors → Effectiveness of non-personal advertising	
0/67	Individual's attention → Effectiveness of non-personal advertising	
0/17	Personal factors → Subliminal perception → Effectiveness of non-personal advertising	Indirect Effect
0/14	Stimulus-related factors → Subliminal perception → Effectiveness of non-personal advertising	
0/22	Individual's attention → Subliminal perception → Effectiveness of non-personal advertising	
0/33	Subliminal perception → Effectiveness of non-personal advertising	Overall effect
0/69	Personal factors → Effectiveness of non-personal advertising	
0/59	Stimulus-related factors → Effectiveness of non-personal advertising	
0/89	Individual's attention → Effectiveness of non-personal advertising	

**Table 6. Verification of research hypotheses**

Result	T statistic	Path Coefficient	Hypotheses
Confirmed	4/50	0/33	1. Subliminal perception influences effectiveness of non-personal advertising
Confirmed	6/20	0/52	2. Personal factors influences effectiveness of non-personal advertising
Confirmed	5/53	0/45	3. Stimulus-related factors influence effectiveness of non-personal advertising
Confirmed	7/03	0/67	4. The individual's attention influences effectiveness of non-personal advertising

According to the results obtained from path coefficient and T statistic in Table (6), it was demonstrated that the variable "subliminal perception" has significant influence on effectiveness of non-personal advertising at confidence interval of 95% (T-statistic lies outside the interval -1.96 to +1.96). It can be stated based on path coefficient that subliminal perception has positive and significant influence on effectiveness of non-personal advertising because the obtained path coefficient for this variable is positive.

**The First Minor Hypothesis: Subliminal perception influences effectiveness of non-personal advertising**

H0: Personal factors do not influence effectiveness of non-personal advertising.

H1: Personal factors influence effectiveness of non-personal advertising.

Based on the results obtained from path coefficient and T statistic in Table (6), it was demonstrated that the variable "Personal factors" leaves a significant influence on effectiveness of non-personal advertising at confidence interval of 95% (T-statistic lies outside the interval -1.96 to

+1.96). It can be stated based on path coefficient that Personal factors has positive and significant influence on effectiveness of non-personal advertising because the obtained path coefficient for this variable is positive.

**The Third Minor Hypothesis: The individual's attention influences effectiveness of non-personal advertising**

H0: Individual's attention does not influence effectiveness of non-personal advertising.

H1: Individual's attention influence effectiveness of non-personal advertising.

Based on the results obtained from path coefficient and T-statistic in Table (6), it was demonstrated that the variable "Personal factors" significantly influences effectiveness of non-personal advertising at confidence interval of 95%

(T-statistic lies outside the interval -1.96 to +1.96). Based on path coefficient, it can be stated that individual's attention has positive and significant influence on effectiveness of non-personal advertising because the obtained path coefficient for this variable is positive.



### Conclusions and Recommendations

Non-personal advertising is utilized as one of the crucial solutions in promotion policies for customer's awareness of product and encouraging them to buy the products or services. Nowadays, people are least interested in seeing media and internet advertisements due to work preoccupations and psychological stresses. In 1960, sales of products increased considerably and exceedingly following integration of consumer behavior science in marketing and further recognition of humans and their requirements. In the 21<sup>st</sup> century, the individuals pay the least attention to their internal tendencies owing to ambient stresses and social responsibilities. And thus, marketers influence the human ID (self) using non-personal advertisements via provoking unconscious internal stimuli such as subliminal perception. As such, the customers awaken their internal interests through advertising and interpret and categorize the messages associated with advertisements in their memories so as to manifest their presumption to others by purchasing the advertised products.

The most prominent brands all over the world have managed to exponentially improve sales of their products with the aid of influence on subliminal perception of individuals. According to review and study of prominent universal brands and an overview of their advertisements, it seems that subliminal perception is able to play a substantial role in effectiveness of non-personal advertising. As of today, some contradictions have been observed - as elaborately reviewed in the second chapter -based on the research works carried out concerning this subject and the results extracted from them. Success of organizations like "Coca Cola" and "Nike" via subliminal perception motivated the researchers of the present study to localize the impact of the respective internal stimulus on non-personal advertising through scientific research with the aid of descriptive – survey method and having a practical objective in non-personal advertising of Samsung brand in Iran.

Keeping in mind the conceptual model of the research, subliminal perception was measured by means of three

The customer's favorite advertisement could affect attention to message and effectiveness of advertising. Interest of customers in the advertisement message can be determined via testing with the help of sampling from the population of brand customers; second, repetition of advertisement in public media or internet can influence effectiveness of advertising. Level of periodicity and repeatability is significant in this regard because unplanned repetition would result in habituation and negative feedback.

The stimulus-related factors also affect effectiveness of non-personal advertising. The following recommendations are made to promote the "freshness" component: first, the design of advertisements has to be novel and creative; second, it is favorable to benefit from updated knowledge due to growing pace of technology in environmental circumstances of the advertisements. To promote the "situation" component, the following recommendations can be proposed: first, for the advertisements broadcast before films in the cinemas, the associated messages are unconsciously interpreted and categorized in the memory; hence, utilization of this method in cinema can influence effectiveness of advertising; second, displaying advertisements on billboards in the cities might be an appropriate solution in modern life; third, the last way of displaying advertisements is on the public transport vehicles

such as buses, which is recommended as the last solution to improve effectiveness of advertisements. The followings are recommended to improve the "size" component; first, it is advisable to print the advertisements in the middle of the magazine's cover page and with large size in order to attract the attention of addressees; second; to gain better attention of addressees, the advertisement can be displayed as subtitle during a TV program following a field survey and identifying the favorite program of the target market. If the addressees are the public general, the advertisements are preferable to be broadcast during the programs of high significance for the public (FIFA World Cup or Olympic games, global negotiations, news, etc.).

The "color" component has the least impact on effectiveness of non-personal advertising. The following recommendations are made for promoting this component: first, advertising color is vitally significant in those printed on poster and catalogues: second; use of delighting, diverse, and energetic colors might be able to play a role in effectiveness of non-personal advertising. Ultimately, it must be mentioned that promotion of each of the aforementioned items can be an effective step for marketing and sales in commercial business taking into account importance of subliminal perception and its influence on effectiveness of non-personal advertising.

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