

## SUBLIMINAL MESSAGES AND THEIR IMPACT ON YOUNG PEOPLE'S CONSUMPTION BELIEFS AND ATTITUDES MENSAJES SUBLIMINALES Y SU IMPACTO EN LAS CREENCIAS Y ACTITUDES DE CONSUMO DE LOS JÓVENES

---

Alexander Varon Sandoval<sup>1</sup>, Javier Sanchez Torres<sup>2</sup>, Lizeth Carolina Zapata Castillo<sup>3</sup>

<sup>1</sup>Doctoral student in social and legal sciences (enterprise research line). Master in Neuromanagement. Magister in Organizational Sciences. Master in marketing. Specialist in Production management with concentration in enterprise logistics. Associated Professor. Administration and Organizations Department. Marketing Academic Area, Administration Sciences Faculty. Universidad del Valle. San Fernando Headquarters. Building 124. Address: Calle 4B No 36-00. alexander.varon@correounivalle.edu.co. <https://orcid.org/0000-0002-8534-3955>

<sup>2</sup>Doctor in Business. Instituto Tecnológico Metropolitano- Medellín, Colombia. University Of Medellín: Medellín, Antioquia, Colombia. jasatos@gmail.com. <https://orcid.org/0000-0002-8217-2177>

<sup>3</sup>Profesional en mercadeo. Calle 48 norte # 2an-87 barrio la merced, cali, Valle del cauca, Colombia. lizethzapata5@gmail.com. <https://orcid.org/0000-0002-0876-4326>

**Recibido:** 15/10/2018

**Aceptado:** 28/12/2018

### ABSTRACT

To test the effectiveness of subliminal messages inserted in media as a consumption or purchase incentive mechanism, specifically the effects with regard to changing and/or creating beliefs and attitudes in young people, and to determine the magnitude of this impact, an experiment that involved visual transmission, subliminal messages, and a group of students belonging to generation 'Z' was conducted. The results revealed partial rejection of a state of indifference among the groups that were exposed to subliminal messages, indicating a preferential attitude towards the brand. The most significant finding stems from the homogenous subsets created for subsequent analysis, which in most cases provided no evidence that exposure to subliminal messages had an effect on the beliefs and/or attitudes of the respondents. Our study found a direct relationship between the subliminal messages related to a product and the subsequent associations that consumers may have had as a result of this exposure.

**Key words:** Subliminal, advertising, message, brand, behaviour, young people

### RESUMEN

Para probar la efectividad de los mensajes subliminales insertados en los medios de comunicación como un mecanismo de incentivo de consumo o compra, específicamente los efectos con respecto al cambio y / o creación de creencias y actitudes en los jóvenes, y para determinar la magnitud de este impacto, un experimento que involucró elementos visuales. Se llevaron a cabo transmisiones, mensajes subliminales y un grupo de estudiantes pertenecientes a la generación 'Z'. Los resultados revelaron un rechazo parcial de un estado de indiferencia entre los grupos que fueron expuestos a mensajes subliminales, lo que indica una actitud preferencial hacia la marca. El hallazgo más significativo proviene de los subconjuntos homogéneos creados para el análisis posterior, que en la mayoría

de los casos no proporcionó evidencia de que la exposición a mensajes subliminales tuviera un efecto en las creencias y / o actitudes de los encuestados. Nuestro estudio encontró una relación directa entre los mensajes subliminales relacionados con un producto y las asociaciones subsiguientes que los consumidores pueden haber tenido como resultado de esta exposición.

**Palabras Claves:** Subliminal, publicidad, mensaje, marca, comportamiento, jóvenes.

## INTRODUCTION

The word subliminal derives from a combination of the Latin words sub and limen. Sub means under and limen means threshold; the meaning of subliminal thus refers to information present in people's minds without its conscious consideration (Sur, 2015). In other words, subliminal perception occurs when introduced stimuli (below the threshold or limen of consciousness) influence thoughts, feelings, behaviour or actions (Dixon, 1971).

Subliminal perception refers to capturing a stimulus that, for various reasons such as low volume, lack of attention or short duration, does not reach conscious representation. Nevertheless, it determines a person's behaviour at the edge of their conscious will (Moore, 1982). The term subliminal perception was originally used to describe situations in which weak stimuli were perceived unconsciously (Dixon, 1971). A number of psychological studies at the end of the nineteenth century and the beginning of the twentieth showed interest in subliminal perception (Barthol & Goldstein, 1959; Bruner & Postman, 1947; Dijksterhuis, Aarts, & Smith, 2012).

Over the next several years, hundreds of related experiments were conducted by psychologists (Dijksterhuis et al., 2012; Karremans, Stroebe, & Claus, 2006). These studies demonstrate that relevant information capable of determining and driving our decisions can be perceived, including when we have not consciously experienced its perception (Klass, 1958). Another method through which subliminal perception has been demonstrated is in controlled laboratory studies, in which the stimulus can be perceived even when it is introduced under conditions that make it almost impossible to distinguish one stimulus from another. Classic studies of this type were conducted in the seventies by the British psychologist Anthony Marcel, for example. These studies were based on previous discoveries that indicated that a decision regarding a stimulus was facilitated, or anchored, when the stimulus followed another related stimulus (Marcel, 1983).

Based on theories related to psychoanalysis and neurolinguistics (Tripathi, 2012), advertising has used various types of symbology. The most frequently used type is sexual, referring to phallic or pelvic symbols in addition to the use of sexually attractive images inserted indiscernibly in visual, theatrical and textual material, and consciously in print material (Broyles, 2006; Karremans et al., 2006). These

theories suggest that this type of persuasion (called subliminal) can influence the creation of and/or a change in beliefs, attitudes and behaviour, particularly in adolescents (Gross & Hardin, 2007). However, there are few studies on subliminal messages and their effects, in particular among young people in generation 'Z'. Moreover, there is considerable evidence on the indiscriminate use of subliminal messages in films, music, audio, visual and print advertising material with the aim of changing consumption decisions, despite the lack of empirical studies validating the intent of manipulation with commercial purposes and the real effect of the subliminal impact on behaviour (Broyles, 2006; Dijksterhuis et al., 2012; Smarandescu & Shimp, 2015).

Therefore, the relevance of this study resides in the scarcity of knowledge regarding the precise impact on behaviour of people subjected to these subliminal messages. Specifically, this study focuses on extending research whose theme is subliminal messages (Varón et al., 2001) by considering several questions with respect to subliminal messages: What are their levels of impact? What is the impact according to the mean? What are their levels of intensity? Finally, what is the susceptibility of the impacted population according to age range?

Therefore, the general objective of this study is to verify if advertising's subliminal messages influence behaviour subsequent to reception by young people in generation Z, who represent the largest group of potential consumers in the coming years.

## **THEORETICAL AND CONCEPTUAL FRAMEWORK**

Theory of mind acts as a cognitive ability that operates prior to any particular cognition (conscious or unconscious) and supplies the framework of human interpretation. This production process is unconscious, in a particular way. The majority of unconscious processes perform, more or less, the same functions as corresponding conscious processes, but they do so more efficiently. This is the appeal of modern research on the unconscious. It demonstrates that a large number of things fall below the threshold of sensitivity, similarly to what occurs above the threshold of sensitivity, meaning that theory of mind is a combination of information that frames all perceptions that reach the brain (Hassin, Uleman, & Bargh, 2012).

Human cognition is known to depend in large part on associational structures, such as diagrams and command sequences that simplify encounters with complex stimuli (Fiske & Taylor, 1991), but these structures are a form or process of representation that is generally so applicable that it does not limit the content it represents. The unconscious is a psychological entity, with an important role in the history of psychology prior to substantial development of the concept by Freud (Freud, 1905). However, in recent years, the unconscious has been the focus of extensive studies in conventional experimental psychology, including cognition,

perceptual and social behaviour, in addition to cognitive neuroscience, the economics of behaviour and other fields (Table 1).

Line of research	Definition / Marketing studies	Sources
Motivational	<p>Motivational research studies the reasons that prompt us to choose. It uses techniques designed to reach the subconscious because preferences are generally determined by factors of which the individual is not consciously aware. Freud (1927 – 1931) suggests that the real psychological forces that shape human conduct belong largely to the unconscious. He considers that people repress many needs in their process of growth and acceptance of social rules. These needs are never completely eliminated or controlled; they emerge in dreams or neurotic behaviour. Therefore, people cannot completely understand their own motivations, which is advantageous for unconscious manipulation of the mind through subliminal messages.</p> <p>This research method took hold in the forties and fifties and was used to discover consumers' hidden needs. Its authors argued that advertising manipulates human beings' desires and motivations and develops or creates needs for goods that were previously unknown to consumers or had not been included in their purchase options.</p>	<p>(Collins &amp; Montgomery, 1969; Schwarzkopf &amp; Gries, 2010)</p>
Subliminal and subliminal persuasion	<p>Subliminal perception, or subliminal stimulus, is considered to be any text (image, sound, or word) that is not perceived in the normal range of consciousness or threshold of consciousness, which is also known as the limen of consciousness. Over time, this definition has included elements such as suggestive phrases and suggestive scenes, among others. It has ensured that the advertising world has made considerable efforts to understand purchasing habits and decisions. These processes occur below the level of consciousness, so the reasons that persuade people to buy are somehow hidden. For example, James Vicary, cited by Karremans et al. (Karremans et al., 2006), conducted motivational studies of various purchasing groups, attracting the attention of many due to his studies of women's rate of blinking while shopping.</p>	<p>(Broyles, 2006; Peacock, 2016; Samuel, 2016; Smarandescu &amp; Shimp, 2015)</p>
	<p>The information processing theory states that the brain receives all stimuli originating from the environment in the pre-attention phase. It further states that for the brain to consciously transform the stimuli it receives into meaningful or perceptible information, the stimuli must arrive at the</p>	

Information processing theory	cerebral cortex. The authors conclude that once the consumer has received information, the brain sets out to consciously develop a response that will subsequently be executed by the organism. This information processing system is called conscious ' <i>perceptual processing</i> ' and is based on selection of stimuli, which seeks to prevent the brain from being paralyzed because it does not know what to respond to. This selection, or filtering process, is performed in the ' <i>reticular</i> ' substance of the brain, which directly influences selective attention and reflective orientation.	(Rivera Camino & Sutil Martín, 2004)
-------------------------------	---	--------------------------------------

Table 1. Experimental psychology research applied to marketing  
 Source: Own Elaboration

## METHODOLOGY AND SAMPLE

The study was based on experimentation following the same line as previous studies (Karremans et al., 2006). Therefore, it was developed in two stages: in the first (pre-test) stage, seven group sessions and projective techniques were conducted to determine pre-existing beliefs, attitudes and behaviours towards specific products and to determine the type of product to use in the second stage, that is, in the experimental treatment test.

Moreover, to obtain a representative sample of the study population, its respective statistical estimation was completed using a population with statistical normality, which was composed of the population between 15 and 19 years old of the city of Cali, Colombia, in 2012, resulting in an acceptable statistical sample of 169 people with an error rate of 5% (Table 2).

Population segment	Cali quantity
Older adults: over 60 years old	257,481
Adults: between 40 and 59 years old	549,286
Young adults: between 20 and 39 years old	740,340
Young people: between 15 and 19 years old	202,169
Adolescents: between 10 and 14 years old	190,686
Children: between 5 and 9 years old	178,066

Table 2. Total population  
 Sourced from the 2012 Population Figures Projection by the National Administrative Department of Statistics (DANE).

The sample was divided into 4 groups, in accordance with Solomon's group design method (McDaniel and Gates, 2006). Two of the groups served as control groups, and the other two as treatment groups. The treatment and control groups were exposed to audiovisual material consisting of commercial media or television spots and a film selected based on the study population's preferences. For the control groups, the media was displayed as it was originally disseminated. For the treatment group, it was first altered with the insertion of subliminal audio and video messages, connecting pleasure, sexual desire, and sexual relationships with the brand.

## **EXPERIMENT**

The experimental method, employed in market research, was used from a qualitative and quantitative perspective (McDaniel and Gates, 2006).

First, seven group sessions (Qualitative Exploratory Study) were conducted in order to specify pre-existing beliefs, attitudes and behaviours towards specific products and to obtain data to determine the sample size that should be selected from the population, using drink preference and taste for a genre and/or particular film as criteria. These sessions were conducted by a psychologist specialized in strategic marketing.

Then, the experiment was designed following the steps below:

1. The subliminal material was produced, based on the group session findings. Material comprising a commercial strip followed by a film was assembled. The treatment material was altered with subliminal inserts of images and audio, according to the applicable theory and preferences identified by the study population in the qualitative phase.
2. A representative sample from the chosen population was selected and convened for the experiment.
3. The sample was divided into 4 equal subgroups, chosen at random and following Solomon's group design method (McDaniel and Gates, 2006): two as control groups and two as treatment groups. They were called 'A' for treatment and 'B' for control. Among them, 2 'A' treatment groups and 2 'B' control groups were established. A commercial strip with visual and audio inserts in the commercials corresponding to the hidden product was used. Then, a selected film altered with both audio and visual inserts throughout the feature was shown. The control groups viewed the same media without the subliminal inserts.
4. Material designed without subliminal inserts was shown to the control groups, and material designed with subliminal inserts was shown to the treatment groups.
5. A measuring tool was applied before and after the showing.

## **RESULTS**

### **Qualitative phase**

The constructs (according to the study population's responses) were defined by developing the 7 group sessions and applying the projective techniques (personification, association and brand celebration). These steps were conducted by a psychology professional. This made it possible to acquire adequate input to generate a measuring tool in accordance with reality. In addition, the characteristics required to develop the experiment's material (Appendix 1) were identified.

### **Construct identification**

Regarding the adequate identification of delivery media and brand to manipulate, it was discovered that the sample of young people preferred the action film genre, whose content is imaginative, involves heroes who save a country, region or the world, and includes speed and non-excessive violence. With regard to the product, the students were asked about soft drinks. As a result, the beverages identified and named in the projective techniques were, in order, dark sodas, sodas of other colours, drinks with tea and artificial fruit drinks. Regarding soft drink brand preference, the most-named brands were, in order: 'Coca-Cola', 'Manzana Postobon', 'Sun Tea', 'Mr. Tea', 'Del Valle' juices and 'Natural Juices'.

Based on these findings, the film and brand to be used in the experiment were selected. Because soft drinks (particularly Coca-Cola) have a very high ranking in the sample and given previous studies showing that the Coca-Cola brand creates selection preference effects over competitors (Karremans et al., 2006), tea drinks were chosen, with Sun Tea as the selected brand. Finally, according to the sample's preferred genre and characteristics, the film 'Jack Reacher' was selected because it met the sample's interest criteria.

### **Quantitative phase**

The experiment and its corresponding material were prepared in the following manner:

1. With the constructs operationally defined, a measuring tool was constructed, consisting of a survey and a response card (see Appendix 1).
2. Television commercials for Sun Tea and their competitors were selected, and a strip approximately 7 minutes long was assembled.
3. After the commercial strip, the Spanish-language film was prepared.
4. A copy of the material to be shown to the control groups was assembled.
5. Another copy of the material was assembled to be altered with subliminal inserts and shown to the treatment groups.
6. The subliminal material was inserted throughout the film and in the commercials for the selected brand. This material included 21 photographs with explicit sexual content involving the associated brand and 3 inserts of audio material recorded in reverse at minimum volume with phrases alluding to the connection between sex and the drink's brand: 'Sun Tea gives you pleasure, drink Sun Tea', 'Do you want to have sex, do you want Sun Tea?' and 'Sun Tea is 100% passion, drink Sun Tea'.
7. The material without inserts was shown to the two 'B' groups including 115 people in total, and measurements were taken before and after the showing.
8. The material with inserts was shown to the two 'A' groups including 115 people in total, and measurements were taken before and after the showing.

### **Analysis of variance (ANOVA)**

As the goal of the experimental test was to establish changes in attitudes and beliefs among the study population regarding different types of drinks, particularly Sun Tea brand tea, ANOVA was performed using the measurements obtained.

According to the theory described above, the data met the normality criterion, and therefore, ANOVA was applied to determine whether there were differences in the analysed groups; the established null hypothesis was rejected if the significance level, through the F test in the ANOVA, was less than 0.05 (Pituch & Stevens, 2016).

First, the symbolic association of the Sun-Tea drink was analysed in terms of concepts linked to the subliminal messages. The results demonstrated that ANOVA does not accept the equality of means in the measurements for passion, cold, luxury, refreshing and social (Table 3). However, in an a posteriori analysis, the homogenous subsets do not exhibit significant differences among the different groups and tests (Table 4).

		Sum of	gl	Half	F	Sig.
Sun Tea - Passion	Inter-	.805	5	.161	2.299	.043*
	Intra-	65.703	938	.070		
	Total	66.508	943			
Sun Tea - Tranquility	Inter-	1.619	5	.324	2.347	.039*
	Intra-	129.242	937	.138		
	Total	130.861	942			
Sun Tea - Excitement	Inter-	.203	5	.041	.914	.471
	Intra-	41.746	938	.045		
	Total	41.949	943			
Sun Tea - Social	Inter-	1.123	5	.225	2.623	.023*
	Intra-	80.297	938	.086		
	Total	81.419	943			
Sun Tea - Refinement	Inter-	.225	5	.045	2.417	.034*
	Intra-	17.432	938	.019		
	Total	17.657	943			

Table 3. ANOVA - Attributes associated with the drink Sun-tea.  
 Source: Own Elaboration

Dependent variable			Difference of means (I-J)	Standard error	Sig.	Confidence Interval	
						Inferior	Superior
Sun Tea -	Treatment 1	Control 1	-.051	.034	.413	-.14	.04
Sun Tea -	Treatment 1	Control 1	.076	.048	.351	-.04	.20
Sun Tea -	Treatment 1	Control 1	0.000	.027	1.000	-.07	.07
Sun Tea -	Treatment 1	Control 1	-.119	.038	.008	-.21	-.02
Sun Tea -	Treatment 1	Control 1	-.008	.018	.983	-.05	.04

Dunnett's t-tests treat a group as a control and compare it to all other groups.

Table 4. Post-hoc Dunnett t-test - Attributes associated with the drink Sun-tea.  
 Source: Own Elaboration



Next, the affirmations of preference for tea and Sun-Tea beverages for both groups were analysed. A change in preferences regarding tea consumption was evident, with differences in the control and treatment groups for certain responses (Table 5). There were positive differences in favour of the 'Sun Tea' brand among the control groups compared with the results obtained in the treatment groups (Table 6).

		Sum of	gl	Half	F	Sig.
I think drinks like tea are better than soft drinks	Inter-	13.092	5	2.618	1.360	.237
	Intra-	1805.627	938	1.925		
	Total	1818.719	943			
I feel that drinks like tea taste better than artificial juices	Inter-	8.660	5	1.732	1.034	.396
	Intra-	1568.288	936	1.676		
	Total	1576.948	941			
I think drinks like artificial juices are more nutritious than tea	Inter-	7.713	5	1.543	1.146	.334
	Intra-	1260.152	936	1.346		
	Total	1267.865	941			
When I'm thirsty and I drink Sun Tea, my thirst is gone	Inter-	4.563	5	.913	.557	.733
	Intra-	1527.609	932	1.639		
	Total	1532.172	937			
I feel that Sun Tea is the preferred brand in my house	Inter-	18.832	5	3.766	2.411	.041*
	Intra-	1586.290	931	1.704		
	Total	1605.123	936			
I think drinks like tea are appropriate for any time of the day	Inter-	2.405	5	.481	.278	.925
	Intra-	1616.186	934	1.730		
	Total	1618.591	939			
I think that if there were no drinks of any kind and there was only Sun Tea, I would drink it	Inter-	6.042	5	1.208	.833	.526
	Intra-	1352.693	933	1.450		
	Total	1358.735	938			
I feel it is better to drink Sun Tea in a large glass with ice	Inter-	6.537	5	1.307	.816	.538
	Intra-	1494.211	933	1.602		
	Total	1500.748	938			
I think I prefer to drink Sun Tea rather than Mr Tea because it tastes better	Inter-	6.891	5	1.378	.941	.453
	Intra-	1366.057	933	1.464		
	Total	1372.948	938			
I think I prefer to drink Sun Tea rather than Lipton because it's more refreshing	Inter-	3.861	5	.772	.474	.796
	Intra-	1519.911	933	1.629		
	Total	1523.772	938			

Table 5. ANOVA - preferences Sun-Tea  
 Source: Own Elaboration

Dependent variable			Difference of means	Typical error	Sig.	95% confidence	
						Lower	Upper
I think drinks like tea are better than soft drinks	Posttest treatment	Control 1 post	.263	.181	.427	-.19	.71
I feel that drinks like tea taste better than artificial juices	Posttest treatment	Control 1 post	-.078	.169	.986	-.50	.34
I think drinks like artificial juices are more nutritious than tea	Posttest treatment	Control 1 post	-.107	.151	.917	-.48	.27
I feel that drinks like tea taste better than artificial juices	Posttest treatment	Control 1 post	-.028	.167	1.000	-.45	.39
I feel that Sun Tea is the preferred brand in my house	Posttest treatment	Control 1 post	.096	.172	.967	-.33	.52
I think drinks like tea are appropriate for any time of the day	Posttest treatment	Control 1 post	-.013	.172	1.000	-.44	.42
I think drinks like artificial juices are more nutritious than tea	Posttest treatment	Control 1 post	-.133	.158	.848	-.53	.26
I feel it is better to drink Sun Tea in a large glass with ice	Posttest treatment	Control 1 post	.066	.166	.992	-.35	.48
I think I prefer to drink Sun Tea rather than Mr Tea because it tastes better	Posttest treatment	Control 1 post	.171	.159	.691	-.22	.57
When I'm thirsty and I drink Sun Tea, my thirst is gone	Posttest treatment	Control 1 post	-.155	.167	.794	-.57	.26

Dunnett's t-tests treat a group as a control and compare it to all other groups.

Table 6. Post-hoc Dunnett t-test - preferences Sun-Tea  
 Source: Own Elaboration

## **CONCLUSIONS**

The results are inconclusive because the two post-test treatment groups exhibit significant differences from the other groups. However, the second post-test treatment group has a mean that is homogenous with the means of the pre-test treatment and control groups.

In the qualitative phase, the most suitable type of product to investigate the objective of this study was a non-alcoholic beverage because young people prefer these drinks to others. Moreover, the preferred film genre was action, whose content is imaginative; involves heroes who save a country, region or the world; and includes speed and non-excessive violence.

Among the changes observed, partial rejection of a state of indifference can be highlighted within the treatment groups, thus improving the attitude towards the brand. Similarly, for the treatment groups, there were differences in measurements regarding cold, luxury, refreshing, social, importance of the drink, excitement, social acceptance and passion, in particular. The attributes that presented important differences were passion, refreshing, emotion, refinement, excitement, social, coldness and freedom.

However, the homogeneous subsets created by subsequent analysis with all groups, in most cases, show a similar distribution, which indicates that exposure to subliminal messages does not affect the respondents' beliefs and/or attitudes regarding decision-making in choosing a brand.

Finally, it should be noted that in the analysis of different variables, the population sample was not the same size for each group, for which the post hoc analysis used the harmonic mean, which in turn does not guarantee that type I statistical errors were not committed. In addition, the environmental conditions of the experiment were not taken into account, such as weather, time, or other factors that may have affected the course of the test. The definition of the means of delivering the messages or the audio and video equipment used was not controlled either, seeking to be homogenous conditions in all cases.

Future studies are advised to measure whether there is a relationship between the number of inserts and the impact and to measure the impact of the subliminal message to provide evidence of physiological reactions that demonstrate the existence of an impact.

## **ACKNOWLEDGEMENTS**

This study was funded by the University of Valle (Project 8108 of Internal Call 2 – 2012).

## REFERENCIAS

- Barthol, R. P., & Goldstein, M. J. (1959). Psychology and the Invisible Sell. *California Management Review*, 1(2), 29–35. <https://doi.org/10.2307/41165344>
- Broyles, S. J. (2006). Subliminal advertising and the perpetual popularity of playing to people's paranoia. *Journal of Consumer Affairs*, 40(2), 392–406. <https://doi.org/10.1111/j.1745-6606.2006.00063.x>
- Bruner, J. S., & Postman, L. (1947). Tension and tension release as organizing factors in perception. *Journal of Personality*, 15(4), 300–308. <https://doi.org/10.1111/j.1467-6494.1947.tb01070.x>
- Collins, L., & Montgomery, C. (1969). The origins of motivational research. *European Journal of Marketing*, 3(2), 103–113. <https://doi.org/10.1108/EUM0000000005211>
- Dijksterhuis, A., Aarts, H., & Smith, P. K. (2012). The Power of the Subliminal: On Subliminal Persuasion and Other Potential Applications. In *The New Unconscious*. <https://doi.org/10.1093/acprof:oso/9780195307696.003.0005>
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition (2nd ed.)*. McGraw-Hill series in social psychology. Retrieved from <http://0-content.ebscohost.com.library.unl.edu/ContentServer.asp?T=P&P=AN&K=abn-104-2-364&S=R&D=pdh&EbscoContent=dGJyMNLe80SeqLI4y9f3OLCmr0qep7FSs6y4SbSWxWXS&ContentCustomer=dGJyMPGrsEmvrbVQuePfgex7ov33%2Bx%2B7QAA%5Cnhttp://0-search.ebscohost.com.library>
- Freud, S. (1905). Jokes and their Relation to the Unconscious. *The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume VIII*. <https://doi.org/10.1521/prev.2010.97.3.469>
- Gross, E. F., & Hardin, C. D. (2007). Implicit and explicit stereotyping of adolescents. *Social Justice Research*, 20(2), 140–160. <https://doi.org/10.1007/s11211-007-0037-9>
- Hassin, R. R., Uleman, J. S., & Bargh, J. A. (2012). *The New Unconscious. The New Unconscious*. <https://doi.org/10.1093/acprof:oso/9780195307696.001.0001>

- Karremans, J. C., Stroebe, W., & Claus, J. (2006). Beyond Vicary's fantasies: The impact of subliminal priming and brand choice. *Journal of Experimental Social Psychology, 42*(6), 792–798. <https://doi.org/10.1016/j.jesp.2005.12.002>
- Klass, B. (1958). The Ghost of Subliminal Advertising. *Journal of Marketing, 23*(2), 146. <https://doi.org/10.2307/1247831>
- Marcel, A. J. (1983). Conscious and unconscious perception: Experiments on visual masking and word recognition. *Cognitive Psychology, 15*(2), 197–237. [https://doi.org/10.1016/0010-0285\(83\)90009-9](https://doi.org/10.1016/0010-0285(83)90009-9)
- Moore, T. E. (1982). Subliminal advertising: What you see is what you get. *Journal of Marketing, 46*(2), 38–47. <https://doi.org/10.2307/3203339>
- Peacock, M. (2016). Cold War consumption and the marketing of childhood in the Soviet Union and the United States, 1950-1960. *Journal of Historical Research in Marketing, 8*(1), 83–98. <https://doi.org/10.1108/JHRM-05-2015-0015>
- Pituch, K. A., & Stevens, J. P. (2016). *Applied Multivariate Statistics for the Social Sciences*. Routledge. <https://doi.org/10.1017/CBO9781107415324.004>
- Rivera Camino, J., & Sutil Martín, D. L. (2004). *Marketing y publicidad subliminal : fundamentos y aplicaciones*. ESIC.
- Samuel, L. R. (2016). Distinctly un-American: subliminal advertising and the Cold War. *Journal of Historical Research in Marketing, 8*(1), 99–119. <https://doi.org/10.1108/JHRM-08-2015-0030>
- Schwarzkopf, S., & Gries, R. (2010). *Ernest Dichter and motivation research : new perspectives on the making of post-war consumer culture*. Palgrave Macmillan.
- 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. <https://doi.org/10.1007/s11002-014-9294-1>
- Sur, R. (2015). Impact of Subliminal Messages on Consumer Behavior: A Fresh Look into the Future. Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2638633](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2638633)
- Tripathi, S. S. (2012). Neuro-linguistic programming: A tool for developing behavioral skills and competencies. *IUP Journal of Soft Skills, 6*(1), 16–28. Retrieved from <http://login.library.sheridanc.on.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=78153530&site=ehost-live&scope=site>