

An Empirical Study On Role Of Consumer's Need Hierarchy In Choice Of Cognitive Biases To Be Used In Marketing

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ABSTRACT: The human mind is very sensitive to what information it receives and how it interprets this information. We like to think that we are logical, objective, rational and reasonable in our decision making even when we are strongly affected by our own personal feelings. Cognitive biases represent the methodical way a person justifies an illogical way of thinking. Individual cognitive biases influence decision making. Clever marketers use their understanding of cognitive biases to convince people to make purchases. Understanding cognitive biases can help marketers impact how we buy, sell, feel, think and interact. There are numerous articles, research papers, and white papers discussing how marketers make use of cognitive biases, but there are no studies to demonstrate, which cognitive bias which is guided by individual need that may further result in the purchase decision. The present study is based on the presumption that purchase decisions for the products satisfying needs at various levels of Maslow's need hierarchy will be guided by different cognitive biases. To check this presumption the present study is conducted to map which cognitive biases used by marketers in advertisements of products satisfying various needs of an individual got converted in purchase of the product. The results of the study suggest which cognitive biases should be used for products at various need hierarchy levels for effective marketing.

Keywords: Cognitive Biases, Purchase Decisions, Physiological Needs, Safety Needs, Esteem Needs

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I. INTRODUCTION

It is unbelievably true that the human brain works in the opposite direction. As it turns out to be, few mental shortcuts and thought processes used by people to make better decisions can go against. This tends to irrational behavior. And the worst part is that not many people are aware of these tricky cognitive processes. Those who are aware of these cognitive processes are at a greater advantage over the decision of others and their own. Tversky and Kahnemann (1972) gave these self sabotaging thought patterns a name, termed as cognitive bias which they defined as "a systematic error in mental processing that causes us to exercise poor judgment." It is argued that every person is likely display cognitive biases. This is not because of lack of awareness or intelligence, but only because the human brain is cabled in miraculous form. Marketers make use of these cognitive biases in their advertisements to attract target audience. Few of the most common biases used by marketers are Anchoring Bias, Availability Heuristic, Bandwagon Effect, Conservatism and so on. Anchoring Bias for example occurs when people over rely on the first piece of information they hear and marketers use this by presenting discounted prizes in big fonts.

Another well known and established psychological relationship is that our decisions are often weighed against a set of needs and fueled by individual preferences. These set of needs and individual preferences gets converted in to drive to do something better known as 'motivation'. Maslow's need hierarchy presents one of the most influential framework of motivation to understand how our different level of needs governs our behavior. These needs are classified in marketing as functional and psychological needs. Researchers and practitioners equally emphasize that to increase sales, one must focus on the type of need catered by product (Cui, 2013). Lee (2015) has emphasized that by applying Maslow's need hierarchy, we can better understand consumer behavior and can have a greater understanding of why marketers need different tactics to reach customers. He further explained how marketers can develop marketing strategy according to need hierarchy for example safety needs contains the needs such as personal/financial security, health/well-being and safety against accidents. For such needs if health companies advocates immunizations, they are appealing to safety motivation of customer.

Psychology is one of the most influential forces in marketing. The recent changing trends in neuroscience have paved a different view for marketing. A deep analysis of human brain will drastically effect

organizations marketing success. Careful understanding of the cognitive biases vis-a-vee need hierarchy can strengthen organizations marketing strategies as this will aid in supporting arguments and anticipate consumer reactions. With this premise the present study is conducted to see what are the expectations of the customers from products at different levels of need hierarchy?, Which cognitive biases are used by marketers for the products lying at different levels of need hierarchy and identifying the link pins between cognitive biases and need hierarchy for marketers.

II. LITERATURE REVIEW

Many researchers have contemplated that psychology plays a major role in marketing. As purchase decisions are largely influenced by the needs and preference of the customers. Marketers use a number of cognitive biases to attract customers. Burow and Byrne(2014); Hanne (2010) highlighted that the type of product and its complexities define paths for cognitive biases to be used by marketers. In addition there are some groups of customers which are more manipulative than others to impact that activates certain cognitive biases (Hanne, 2010; Krantz and Hammen, 1979; Moses and Baldwin, 2005; Tversky and Kahnemann, 1987; Wartella, 1984).

Gurãu (2015) conducted a qualitative exploratory study on 97 customers of Montpellier, France to identify the effect of promotional marketing messages on the cognitive biases as per their experience in the market. The results of the study revealed that there is an effect of gender and age on the type of induced cognitive biases and showed the effect of these biases on the messages of promotional marketing.

Thompson (2018) construed that marketers can effectively persuade the customers to purchase their product or service by directly appealing to their one of more than one basic needs identified by Maslow. Maslow contemplated that human behavior and decision making is highly influenced by one of the five needs from the hierarchy of needs. With the difference in the level of need of the target customers, marketers need to understand and then come up with a campaign to successfully attract customers to make purchases (Medhora, 2017).

Hanson and Kysar (1999) also supported that cognitive biases can be used to take advantage and increase the competitive advantage and profitability of the organization. Cognitive biases aids in influencing the behavior of the customers and also has an impact on subsistence and power of cognitive biases. They also proposed that marketers can alter the customer's risk perception by using different marketing techniques like promotion, advertising and price setting.

Marketer (2016) conducted a study on chief marketing officers and concluded that marketers need a base come up with new ideas and confront the thinking of customers. He also highlighted that changing customer behavior, purchase behavior and positive word of mouth about a brand as the best outcomes that a marketer would expect out of a campaign. But, to achieve all these outcomes they should focus on the psyche and needs of the target customers, according to which the campaign can be molded.

Hanne (2010) argued that marketers which knowingly craft promotion campaigns can persuade the target customers to behave in the desired manner. They increasingly induce emotions which affect the subconscious mind of the customers, manipulate customer's action by way of reciprocity, affect the self image, ego and confidence of the people.

Homburg, Wieseke and Bornemann (2009) conducted a study to identify the base of marketing as customer needs. They coined the term "Customer Need Knowledge" which means the extent to which front line employees should be aware of the customer's need in the hierarchy of need given by Maslow. They conducted a multilevel study wherein they took responses from customers, employees and managers and concluded that customer need is knowledge important for customer satisfaction and customer value.

Van Dolen et al. (2002) construed that customer needs are diverse, and it is very important for the marketers to address each of the needs of specific customer. The focus should be on customer outcomes based on customer needs. The the insight of customer needs satisfaction and value to customers (**Day 1994; Kotler and Armstrong 2004**).

III. RESEARCH METHODOLOGY

OBJECTIVES

1. To understand the Cognitive Biases used by Marketers in the advertisements of their products falling on different levels of need hierarchy
2. To understand the Cognitive Biases that motivate consumers for products falling on different level of need hierarchy.

SAMPLE

This study was conducted on people from different background in national capital region of India. Responses were collected from 129 respondents. These people were from different background such as working

professionals, home makers and students. The demographic profile of the respondents is as mentioned in Table 1. The sample consists of 81 Males and 48 Females. Age wise, there are 108 respondents in the age range of 18-35 years termed as Young Adults and there are 21 respondents in the age range of 36-55 years termed as Mid Age Adults. Marital status wise there are 102 respondents who are Unmarried and 27 respondents who are Married. According to Family type 57 respondents have Joint Family and 72 respondents have Nuclear Family. Socio Economic status of 6 respondents is High, 114 have Middle Socio Economic Status and 9 respondents have Low Socio Economic Status.

Table 1: Showing Demographic Profile of the Respondents

Gender	Males	Females		
	81	48		
Age	Young Adults (18-35 Years of Age)	Mid Age Adults (36-55 years of Age)		
	108	21		
Marital Status	Unmarried	Married		
	102	27		
Family Type	Joint Family	Nuclear Family		
	57	72		
Socio Economic Status	High SES	Middle SES	Low SES	
	6	114	9	

TOOL USED

To understand what motivates consumers to buy products lying on different levels of need hierarchy, A questionnaire was developed with statements on 20 most commonly used biases by marketers to advertise products lying on different levels of need hierarchy. Table 2 shows the basic description of 20 biases and how it is used in marketing. The respondents were asked to mark question related to each bias with a 'X' if it does not motivate them to buy the product, '1' if it motivates 'Slightly', '2' if it motivates 'Moderately', and '3' if it motivates 'Highly' to buy the product.

Table 2: Showing Basic Description of Twenty Biases and How it is used in Marketing

	Biases	Description of the Bias	Usage in Marketing
1	Anchoring	People over rely of first piece of information they receive	Discounts
2	Availability Heuristic	People overestimate the importance of information that is available to them	Presenting product as solution to a problem
3	Bandwagon Effect	Adoption of a belief because many people hold that belief	Best Selling, Best Rated, Used by Everyone
4	Blind-spot	Where your particular bias such as stereotype work as bias.	Showing product like you, and especially for a section of society to which you belong
5	Choice Supportive	Choosing something because of your positive feeling towards it no matter your choice may be wrong	Justifying purchase based on previous purchase
6	Clustering Illusion	Tendency to see patterns in random events	Presenting a product as perfect fit to set of needs
7	Confirmation	Tendency to listen to information which fits our preconceptions	Product shown as matching expectations through 'Positive Test' or 'Negative Test'
8	Conservatism	Tendency to believe in prior evidence more than new evidence or information	Shown as befitting traditional, long-held beliefs
9	Information	Tendency to seek information where affect does not work	Providing lot of information
10	Ostrich Effect	Tendency to ignore dangerous and negative information	Not communicating potential risks or downsides
11	Outcome	Tendency to judge something based on outcomes	Focusing on benefits of products rather than product
12	Overconfidence	Tendency of overconfidence in self-abilities and thus taking greater risks	Presenting a product helping in attaining unlikely, desired goals and best performance
13	Placebo Effect	Tendency to have effect by simply believing that something will effect you.	Presenting product as costly because it is premium and niche
14	Pro-Innovation	Tendency to over value innovation and undervaluing limitations	Presenting product as innovative, new-age and trendsetting
15	Recency Effect	Tendency to weigh latest information more heavily than older information	Controlling the last message seen by consumer, For example x% extra labels on packaging
16	Saliency	Tendency to focus on most easily recognizable features	Using stand-out associations
17	Selective Perception	Tendency to permit our expectations to influence our perception of something for example 'something is good for me because it	Showing existing satisfied customers

		meets my expectation'	
18	Stereotyping	Tendency to attribute qualities to people, things of a particular clan they belong to without having real information about the same.	Matching to cultural stereotypes
19	Survivorship	Tendency to focus only on surviving examples, causing to misjudge a situation	Focusing on positive outcomes for example showing a celebrity using a product.
20	Zero-Risk	Tendency to see certainty even if it is counterproductive	Presenting a product or service risk free

HOW PRESENT STUDY IS CONDUCTED WITH RESULTS AND DISCUSSIONS

In order to conduct this study, firstly products were identified lying on different levels of need hierarchy. Table 3 shows the identification of products on various levels of Maslow's Need Hierarchy.

Table 3: Showing the Description of Maslow's Need Hierarchy with Products from Marketing Perspective.

	Need	Description
1	Physiological Needs	Physiological needs in this study are taken as most basic food items necessary for survival and growth i.e Milk and Flour
2	Safety Needs	Need for safety are divided in two types. Self-Safety and Safety of Property. In the Self-Safety, health supplements are taken and in Safety of Property, products like Video home security systems, Safe for valuables are taken
3	Social Needs	Social needs are linked with connecting socially. This is assumed to be done through two mediums. One is connecting through mobiles and second going out together for eating and enjoying. Therefore Mobile Services and Eating Joints like Dominos, Pizza Hut and McDonalds are taken here
4	Esteem Needs	Esteem needs are need for recognition. This includes individual's desire to be noticed by others for which one may wear branded clothes, carry high end mobile phone, drive costly cars etc. For this study the mobile phone brands are taken
5	Self-Actualization Needs	Self-Actualization is identifying the purpose of self, finding self-satiation. This is assumed to be done through two things. Firstly, through donating for social cause or working on social cause projects. Secondly, through going on dream holidays as we go on holiday to relax and reflect.

These needs are similarly presented in an article published by Oxford Royal Academy in October 2017. In the esteem needs they have mentioned one more distinction suggested by Maslow i.e. Cognitive Needs- need to enhance knowledge. The article also reports Maslow's further description that Self Actualization can be achieved by Self-transcendence, which involves altruistically helping others.

Then the advertisements related to products on various levels of need hierarchy were analyzed for their content and cognitive biases used in these advertisements were identified. Table 4 shows the assessment of various advertisement for cognitive biases used and identification of common biases on various levels of need hierarchy.

Table 4: Showing Identification of Biases in Advertisements of Various products at different levels of Need Hierarchy.

Physiological Need Products- Milk and Flour				
Amul Milk - Bandwagon - Overconfidence - Recency - Blindspot	Mother Dairy Milk - Survivorship - Conservatism	Vita A2 Milk - Stereotype - Conservatism	Kwality - Overconfidence - Survivorship - Outcome	Common Biases - Overconfidence - Bandwagon - Conservatism -Outcome
Shaktibhog Flour - Bandwagon - Conservatism - Salience - Outcome - Overconfidence	Ashirwad Flour - Bandwagon - Information - Racency - Blindspot	Hathi Flour - Conservatism - Outcome		
Safety Needs- Health Supplements, Pepper Spray, Video Security Systems, Homesafe				
Revital Health Supplement - Information - Survivorship - Outcome	Ceat Pepper Spray Scooter grips - Information - Availability - Clustering Illusion - Outcome	Godrej Video Home Security System - Information - Pro-Innovation - Clustering Illusion	Goldi Locks Home Safe - Pro-Innovation - Clustering Illusion	Common Biases - Information - Clustering Illusion -Outcome

		-Outcome		
Social Needs- Mobile Services, Fastfood Outlets				
Airtel - Selective Perception - Availability Clustering - Illusion	Vodafone - Selective Perception - Overconfidence -Outcome	Jio - Anchoring - Band wagon -Pro-Innovation	Idea -Survivorship - Overconfidence -Availability	Common Biases -Selective Perception -Availability -Overconfidence
Dominoes -Anchoring -Outcome - Ostrich Effect	Pizza Hut -Recency Effect -Placebo Effect -Ostrich Effect	McDonalds -Clustering Illusion -Conservatism -Ostrich Effect		Common Biases -Ostrich Effect
Esteem Needs- Mobile Phones				
Apple Phone -Blind Spot -Stereotype -Placebo Effect -Salience -Confirmation -Pro-Innovation	Samsung -Anchoring -Information -Pro-Innovation	MI -Bandwagon -Anchoring -Ostrich Effect		Common Biases -Anchoring -Pro-Innovation
Self Actualization Needs- Social Work and Toursim Services				
NGO Nanhi Kali -Availability Heuristic -Clustering Illusion -Confirmation Bias	Swachh Bharat Abhiyan -Availability Heuristic -Survivorship			Common Biases -Availability Heuristic
MakeMy Trip -Anchoring -Outcome - Survivorship	Go-Ibibo -Recency -Outcome			Common Biases -Outcome

The common biases used by marketers in the advertisements of products related to Physiological needs are 'Overconfidence', 'Conservatism', 'Bandwagon', and 'Outcome'. The common biases used in products related to Safety needs are 'Information', 'Clustering Illusion', and 'Outcome' biases. The common biases used in products related to Social needs are 'Selective Perception', 'Availability', 'Overconfidence', and 'Ostrich Effect'. The common biases used by marketers in products related to Esteem needs are 'Anchoring' and 'Pro-Innovation'. For Self Actualization needs common biases used are 'Availability' Heuristics' and 'Outcome' biases (Table 4).

Further 129 respondents were asked 'What motivates them to buy the product?' with respect to the questions related to biases for these different category of products and were asked to 'X' on question which does not motivate them at all to buy a product, 1 for slight motivation, 2 for moderate motivation, and 3 for high motivation. Thus, the responses were taken on each bias for every product. The techniques of Multi-criteria Decision Modeling was applied to draw the results by using Weighted Sum and Stochastic modeling. The frequency so obtained for each bias was converted in to a single score by Weighted sum with the following formula

$$\text{Score} = (3x_1 + 2x_2 + 1x_3 + 0x_4)$$

Wherein x_1 is frequency of Highly motivating response

x_2 is frequency of Moderately motivating response

x_3 is frequency of Slightly motivating response

x_4 is frequency of 'X' response

The scores thus achieved are presented in the Table 5. Further the probabilities were calculated for each product with 95% success confidence and the biases lying above these probabilities are highlighted (Table 5). The results show that for products based on physiological needs, customers are driven by Choice –Supportive, and Clustering Illusion. This means customers are motivated to buy these products based on previous purchase experiences and what fits best to their needs. The biases governing customers for Safety needs are again Choice Supportive and Clustering Illusion. There is one single bias which govern consumer's purchase for social needs is Anchoring means pricing and discounts are most important here. The bias working at Esteem needs level for customers is Selective Perception. This means customers but such products based on the assumption that a product is good for me if it meets my expectations and therefore showing satisfied customers may boost purchase of such products. For self actualization needs there are services and the biases that works here are Selective Perception and Stereotyping. This means these services shall be shown to meet customer's expectations and cultural belongingness (Table 5).

Table 5: Showing the Weighted Sum response of all the respondents on each bias for each product

		Products to satisfy Physiological Needs	Products to satisfy Safety Needs like Health, ,Self, Home etc		Products to satisfy Social Needs like mobile services to connect with others, Food outlets to enjoy with Family Friends		Products to satisfy Self Esteem Needs (which gives recognition)	Products satisfying Self Actualization needs (like working or donating for social cause, going on tourism for self-satiation)	
		Daily need Products such as Milk, Flour	Health Supplements like Revital	Safety Products like Godrej Video Security System, Homesafe	Mobile Services like Airtel, Jio, Vodafone	Food Outlets like Dominos, Pizza Hut etc	Mobile Phones like Apple, Samsung or Cars like Maruti, Highend brands	Donating to NGO's or Social Cause Like NGO or Government Missions	Tourism services like Make MY Trip, Adventure Tourism
1	Anchoring	231	129	252	348	44	60	29	217
2	Availability Heuristic	213	156	222	270	38	49	32	209
3	Bandwagon Effect	285	162	240	273	43	46	24	215
4	Blind-spot	240	132	156	252	27	32	33	190
5	Choice Supportive	339	177	255	303	41	50	14	206
6	Clustering Illusion	345	156	273	306	43	55	33	194
7	Confirmation	288	145	258	285	45	52	30	204
8	Conservatism	219	131	159	144	15	20	24	106
9	Information	273	163	216	273	32	52	31	182
10	Ostrich Effect	303	164	183	207	39	36	22	164
11	Outcome	294	153	240	258	31	39	26	174
12	Overconfidence	195	133	171	165	16	31	25	130
13	Placebo Effect	180	100	204	37	33	37	91	156
14	Pro-Innovation	198	120	219	41	22	44	88	143
15	Recency	222	138	204	37	32	35	115	159
16	Saliency	273	156	225	49	39	48	142	204
17	Selective Perception	216	160	258	53	41	66	123	229
18	Stereotyping	162	99	141	20	15	19	147	115
19	Survivorship	141	129	150	25	22	23	100	135
20	Zero-Risk	240	174	217	32	32	31	125	159
	Highest	345	177	273	348	45	66	147	229
	Lowest	141	99	141	20	15	19	14	106
	95% probability w.r.t Highest and Lowest score of the range	334.8	173	266.4	331	43.5	63.6	140.35	222.85

Further the comparison was done to see which all biases used by marketers and customers are common for products on various need hierarchy levels. Table 6 shows the list of common biases used by marketers and biases used by customers. It is interesting to note here that for customers the biases used for Physiological and Safety needs are common and for Esteem and Self Actualization needs are common. These results indicate that these needs can be clubbed according to Adlerfer's ERG (Existence, Relatedness, and Growth Need) theory. Further marketers and customers are on common platform only on Clustering Illusion bias for Safety needs, rest all are different. Further the scrutiny of Table 4 for biases used in advertisement of individual products shows that Jio and Dominoes are using Anchoring Bias under the social need section, and it is pertinent to mention here, that Jio is the market leader in mobile services and Dominoes is the market leader in Pizza Outlets in India. This clearly indicates that if right biases are tapped by marketers, probably this may convert in to higher sales.

Table 6 : Showing the difference/similarities in Biases used by Marketers and by Consumers for products at various need Hierarchy Levels

	Need Hierarchy	Common Biases used by Marketers	Biases effecting Customers
1	Physiological Needs	Overconfidence Bandwagon Conservatism Outcome	Choice Supportive Clustering Illusion
2	Safety Needs	Information Clustering Illusion Outcome	Choice Supportive Clustering Illusion
3	Social Needs	Selective Perception Availability Overconfidence Ostrich Effect	Anchoring
4	Esteem Needs	Anchoring	Selective Perception

		Pro-Innovation	
5	Self Actualization Needs	Availability Heuristic Outcome	Selective Perception Stereotyping

IV. CONCLUSION

Cognitive Biases effects the way we take decisions and Marketers are using these cognitive biases in advertisement to attract customers. Another analogy in marketing world is that by applying Maslow's need hierarchy, we can better understand consumer behavior and can have a greater understanding of why marketers need different tactics to reach customers. If these two are combined together, marketers can create win win advertisements to attract customers and be the market leaders. As is evident from the result of this study, there are differences in the common biases used by marketers for advertising products and customers for purchasing products. The only commonality is Clustering Illusion in case of safety needs where a product is shown as perfect fit to specific needs. Also, individual companies using biases preferred by customers are doing better, for example Reliance Jio and Dominoes Pizza are using Anchoring Bias in social needs category where the customers are also driven by Anchoring bias. It is well known through market data that Reliance Jio is market leader in mobile services and Dominoes is market leader in Pizza outlets section in India. Further the results show that the biases effecting customers for physiological needs and safety needs are common and for esteem and self actualization needs are common, thus, indicating that Adelfer's ERG (Existence, Relatedness, and Growth need) framework can be better used to classify needs.

V. LIMITATIONS

Since this study is conducted on limited number of products and on a small sample size, so results of the study are to be used judiciously, but these results definitely indicates for lot of research scope in this area.

REFERENCES

- [1]. Burow, P. and Byrne, M. (2014). Behavioural Economics and Cognitive Bias. [Online] Available from: <http://strategicmomentumgroup.com/wordpress/wp-content/uploads/2014/07/Burow-Byrne-2014-Ethical-conduct.pdf> [Accessed 14 November 2014].
- [2]. Christian Homburg, Jan Wieseke, & Torsten Bornemann(2009). Implementing the Marketing Concept at the Employee–Customer Interface: The Role of Customer Need Knowledge. *Journal of Marketing* Vol. 73, 64–81.
- [3]. Cui, H. (2013). Psychological needs vs. functional needs. Retrieved from <https://blogs.ubc.ca/katherinecui/2013/11/07/psychological-needs-vs-functional-needs/> Retrieved on April 10, 2018.
- [4]. GURÄU, C (2015), Montpellier Business School, France. The Effect of Marketing Promotions on Customers' Cognitive Biases. International Conference "Marketing – from information to decision" 8th Edition 2015. Page No. 48-54.
- [5]. Hanne, H. (2010). Behavioural Economics and Consumption. Directorate General for Competition Policy, Consumer Affairs and Fraud Control. [Online] Available from: http://www.economie.gouv.fr/files/directions_services/dgccrf/documentation/dgccrf_e_co/english/DGCCRF_eco10_behavioural_economics_consumption.pdf. [Accessed 3 March 2014].
- [6]. Hanson, J. D. and Kyasar, D. A. (1999). Taking Behavioralism Seriously: The Problem of Market Manipulation. *New York University Law Review*, 74: 630-749.
- [7]. Krantz, S. E. and Hammen, C. (1979). Assessment of cognitive bias in depression. *Journal of Abnormal Psychology*, 88: 611-619.
- [8]. Lee, D. (2015). Maslow's Hierarchy of Needs and Marketing. Retrieved from <http://doreydesigngroup.com/blog/maslows-hierarchy-needs-marketing> Retrieved on April 10, 2018.
- [9]. Marketer, Secret (2016). Secret Marketer: A CMO's 'Hierarchy of needs'. *Marketing week*(Online Edition) p1-1. 1p.
- [10]. Moses, L. J. and Baldwin, D. A.. (2005). What Can the Study of Cognitive Development Reveal About Children's Ability to Appreciate and Cope with Advertising. *Journal of Public Policy and Marketing*, 24(2): 186-201.
- [11]. Tversky, A. and Kahneman, D. (1987). Rational Choice and the Framing of Decisions. In Robin M. Hogarth and Melvin W. Reder (eds.), *Rational Choice: The Contrast Between Economics and Psychology*, 67: 90-91.
- [12]. Van Dolen, Willemijn, Jos Lemmink, Ko de Ruyter, and Ad de Jong (2002), "Customer-Sales Employee Encounters: A Dyadic Perspective," *Journal of Retailing*, 78 (4), 265–79.
- [13]. Wartella, E. (1984). Cognitive and Affective Factors of TV Advertising's Influence on Children. *Western Journal of Speech Communication*, 48(2): 171-183. Wikipedia (2015). List of Cognitive Biases. [Online] Available from: https://en.wikipedia.org/wiki/List_of_cognitive_biases [Accessed 12 October 2014].
- [14]. Weitz, Barton A. (1978), "The Relationship Between Salesperson Performance and Understanding of Customer Decision Making," *Journal of Marketing Research*, 15 (November), 501–516.
- [15]. Oxford Royal Academy (2017). The 5 levels of Maslow's hierarchy of needs and how they affect your life. Retrieved from <https://www.oxford-royale.co.uk/articles/5-levels-maslows-hierarchy-needs-affect-life.html>

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