

INFLUENCE OF COGNITIVE BIASES ON CONSUMER BUYING BEHAVIOUR

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ABSTRACT

All human beings without exception, are in some way or the other, consumers of goods & services. Thus, a day in the life of a person is full of consumer decisions. Cognitive bias can have a significant impact on the decisions and judgments people make, often resulting in deviations from rational thinking and decision making. This applies to consumer decisions as well. Marketing literature mentions cognitive biases that influence consumer decision making. The present paper focuses on six cognitive biases that affect decision making of consumers & tries to study their influence on a consumers across demographic factors. It also investigates which bias / biases exert the major influence on the buying process, how consumers view their own buying behaviour & how marketers use the cognitive biases for their advantage. The paper is based on empirical research.

Keywords: *Cognitive bias, consumer buying behaviour, confirmation bias, anchoring effect, loss aversion*

INTRODUCTION

Human beings are considered as the most intelligent & superior living species. They have the power of thinking which has been the mother to varied inventions & discoveries. It is the creativity & the inquisitive nature of man that has led the cave dwellers transition to luxurious pent houses & sky rises. Endowed with innumerable strengths, we tend to think we are perfectly rational beings. This is perhaps the greatest perceptual bias which we nurture.

Cognitive research spanning over decades has shown that more than often, we value perception or beliefs over reality which creates common mistakes in reasoning & hence we no longer remain rational beings.

COGNITIVE BIAS

The Collins Dictionary defines cognitive as “relating to the mental process involved in knowing, learning, and understanding things” and bias as “to prefer one person or thing to another, and to favour that person or thing.” When people process and interpret information in the world around them, an error occurs in their thinking which affects the decisions

and judgments that they make. This error is known as cognitive bias. Cognitive biases force the decision maker to take non-rational and suboptimal decisions for themselves or other individuals influenced by the decision (Kahneman and Tversky 1973).

This happens because often, we do not have the time or willingness or both, to passionately and delicately evaluate every piece of information available to us before taking a decision and implementing it. We, thus operate on the default thinking mode heavily basing our decision on cognitive cues and shortcuts. Jonathan (2008) calls this type of thinking as “fast and loose” though it should be “slow and deliberate”. A lot of importance is placed on being aware about the cognitive biases because they have a considerable impact on a person’s decision making. In fact, they pervade all levels of our thinking shaping many real-world decision-making contexts, so their understanding is important for taking informed and rational decisions.

COGNITIVE BIAS IN CONSUMER BUYING BEHAVIOUR

A very prominent influence of cognitive biases on real world decision making has been observed in the context of consumer buying behaviour. Several cognitive biases impact our rational decision making. As consumers, however, we may like to believe that our purchase decisions are taken after a very careful and rational thought, but the hard reality is that we all are too often irrational in practice. Since cognitive frames create simplified mental models of choices (Houdek, 2016), customer decision making process becomes less complex & less

time taking, so the customer does not mind. They actually act as mental shortcuts in making a choice because it is practically impossible for the customer to process all the information available for various alternatives while taking a decision.

Kovic and Laissue (2016) point out that marketing efforts, specifically promotion, do not create a tendency of irrational decision making in a consumer, which is actually their inherent trait; they only aggravate it. These biases in customer decision making not only aid in directing the marketing efforts towards a customer, but also increase the customer’s vulnerability towards irrational decision making. In other words, marketing has the ability to increase the customer’s tendency of making errors in decisions but it cannot create cognitive biases. Their impact on consumer behavior is inevitable.

Marketing efforts do not compel a customer to make a choice. Our freedom to choose the product or service in question remains unchanged before and after exposure to marketing efforts. Marketing affects us in more finer and subdued ways to take us along the journey from a prospective customer to an actual customer. Marketing, according to Thaler and Sunstein (2009) can be seen as a nudging mechanism. According to them, “nudging is the idea that cognitive biases can be exploited through choice architecture”. Wilkinson (2003) describes nudging as a form of manipulation because by changing certain aspects of a choice situation, people are clearly coaxed into taking decisions that are not only governed but also desired by external actors. Eventually, customers pick options which many times are contradictory to their real, rational preferences.

According to Kovic and Laissue (2016), there are two dimensions along which cognitive biases affect consumer behaviour; they can create preferences, or they can alter the order of existing preferences. Customers interpret an alternative or consider a choice based on their expectations about prominent attributes of a product, or consideration sets (Roberts & Lattin, 1997). In this process, other dimensions of an option are either completely or partially overlooked leading to consumers, generally ignoring or giving up on better products from their consideration sets.

Some of the biases which affect consumer buying behaviour and how a business uses them to increase its conversions have been discussed below:

Confirmation Bias

The phrase coined by English psychologist Peter Wason in 1960 refers to our tendency to interpret information in such a way that conforms to our existing ideas beliefs. We are likely to favour any information that supports our point of view and shun options that go against it. Though we feel our thought process is very rational, the truth is that this bias causes us to hear what we want to hear making us excessively adamant on our view.

Anchoring effect

First discussed by Tversky and Kahneman (1974), anchoring bias occurs when people place more significance on the first piece of information they receive. Wickens and Hollands (2000), have pointed out that new information is processed on the basis of one's prior belief and it also shapes future beliefs.

Loss Aversion

It refers to our tendency to give more weight to avoiding losses than receiving gains when

making a decision. Research reveals that the reason behind this that the psychological value of loss is twice as more as gain.

Halo Effect

Halo effect arises when one characteristic of a person overshadows his other characteristics. We fall prey to this bias when we determine specific personality traits of someone by generalizing their overall impression. Halo effect can make us develop either negative or positive bias. Disliking a certain aspect of something predisposes us to think negatively about every other thing related to it. Likewise liking a certain aspect makes us view every other thing in a positive light.

This explains a customer's irrational preference for German brands while buying cars, knowing fully well that the country of origin is not the actual utility which he wants to maximize. Similarly organic labels can impact preference order by creating a misperception about quality or taste (Lee, et al., 2013).

The Mere Exposure Effect

Also known as the familiarity principle, it refers to the tendency to get induced to acquire a good or service by merely being exposed to that good or service. Exposure thus, develops a preference for a good or service.

Risk Compensation Effect

Also known as Peltzman Effect, it is based on a study conducted by Professor Sam Peltzman and refers to our tendency to adjust our behavior based on the level of perceived risk. In his study Peltzman (1975) found out that people believe they can afford to be reckless when they are mandatorily using seatbelts and other safety devices. It implies that we tend to take more risks when we feel protected and safe.

OBJECTIVES

The paper aims to:

- Analyse the influence of cognitive biases on decision making of consumers across age, gender and level of education.
- Investigate which bias / biases exert the major influence on the buying process.
- Understand how consumers view their own buying behaviour
- Study how marketers use the cognitive biases for their advantage.

METHODOLOGY

Research Design: This research design for the study was descriptive. Primary data were collected through a Questionnaire. For the analysis of data, Descriptive Statistics and Cross Tabulation were used, in AMOS 23.0.

Development of Questionnaire: A multi-item approach was used to design the survey. To improve validity and reliability, each construct

was measured by several items. Previous literature was used to borrow items of the variable. All the variables were rated by using a five-point Likert scale ranging from totally disagree (1) to totally agree (5). An online self-reported questionnaire was developed having questions divided into three segments. The first segment included demographic features of the respondents (Age, Gender, City, Highest Qualification, Professional Qualification (if any), and Income). The second section revolved around cognitive biases related dimension questions (Confirmation Bias, Anchoring Effect, Loss Aversion, Halo Effect, The Mere Exposure Effect, and Peltzman Effect). The third section was meant to collect consumers' view towards their own buying behaviour. The development of the measurement items was guided by the objectives of the study. Two items each were used to assess the impact of each of the six biases under study. The measurement items of all the constructs are mentioned in Table 1.

Table 1: Measurement Items.

Cognitive Biases	Measurement items for each Bias
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.
	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.
	6. I am most likely to buy a product/service if I am informed that
	an attractive offer related to it is expiring in a few hours.

Halo Effect	7. I check the claims of a product of being organic before buying them.
	8. If I am satisfied with a company's current products, I will buy its new products also.
Exposure Effect	9. I have gone for sudden, unplanned purchases.
	10. I have bought some products after seeing them in the cart of others.
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.

Sample and Data Collection: Secondary data has been gathered from journals, articles, books, blogs and websites. The target population for this study was individuals involved in shopping. Primary data was gathered using a self-administered questionnaire. The sampling method used in the study was convenience sampling. This was an online study conducted through google form. Snowball sampling technique was also used. The respondents were motivated to circulate the survey to a maximum number of respondents. The questionnaire was shared with a total of 200 respondents. 181 completed questionnaires were received, with a response rate of approx. 90.5%. After removing outliers and incomplete responses, data from 153 responses were used for the final analysis. As mentioned by Kline (2011) the rule of thumb regarding the sample size and model parameter is 10:1 i.e., a minimum of 10 responses per item. In this study, a minimum of 120 samples was required as the study has 12 parameters/items.

Data Analysis:

Data collected through online survey was analyzed with the help of SPSS statistics software. The tools which were used for analysis were descriptive statistics and cross tabulation.

Table 2: Demographic Characteristics

Items		Total population (153)	Percentage (%)
Age	20 years & below	6	3.9
	21-30 years	43	28.1
	31-40 years	56	36.6
	41-50 years	41	26.8
	51-60 years	4	2.6
	61-70 years	3	2.0
Gender	Male	108	70.6
	Female	45	29.4

Family income	up to Rs. 5 Lakhs	55	35.9
	Rs. 5 - 10 Lakhs	38	24.8
	Rs. 10 - 15 Lakhs	25	16.3
	Rs. 15 -20 Lakhs	12	7.8
	Rs. 20 - 25 Lakhs	5	3.3
	above 25 Lakhs	18	11.8
Highest qualification	High School	1	0.7
	Intermediate	5	3.3
	Graduation	27	17.6
	PG	120	78.4

Table 2 describes the demography of the respondents. In the sample, majority of respondents are between 20 to 50 years, are males, are post graduates, more than 50% lie in the annual family income of greater than 5 lakhs.

Table 3: Analysis of the influence of cognitive biases on decision making of consumers across age.

Cognitive Biases	Variables for each Bias	Consumer's Agreement according to Age					
		20years & below	21-30 years	31-40 years	41-50 years	51-60 years	61-70 years
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website	3.26%	21.56%	28.10%	20.26%	1.96%	0%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it	3.92%	22.22%	24.83	20.9%	2.61%	1.30%
Average influence of Confirmation Bias across the Age		3.59%	21.89%	26.46%	20.58%	2.28%	0.43%
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	3.26%	23.52%	26.79%	23.11%	1.96%	0.65%
	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.						
Average influence of Anchoring Effect across the Age		2.93%	19.92	23.52%	19.72%	1.96%	0.97%
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.	3.92%	23.52%	27.45%	22.87%	2.61%	1.30%

	6. I am most likely to buy a product/ service if I am informed that an attractive offer related to it is expiring in a few hours.	3.26%	11.11%	15.03%	7.18%	1.30%	0%
Average influence of Loss Aversion across the Age		3.59%	17.31%	21.24%	26.46%	1.95%	0.65%
Halo Effect	7. I check the claims of a product of being organic before buying them.	3.26%	18.95%	26.14%	18.95%	2.61%	0.65%
	8. If I am satisfied with a company's current products, I will buy its new products also.	3.26%	25.49%	31.37%	22.22%	2.61%	0.65%
Average influence of Halo Effect across the Age		3.26%	22.22%	28.75%	20.58%	2.61%	0.65%
Exposure Effect	9. I have gone for sudden, unplanned purchases.	1.96%	15.03%	17.64%	9.15%	1.30%	0.65%
	10. I have bought some products after seeing them in the cart of others.	1.30%	6.53%	10.5%	5.22%	0.65%	0.65%
Average influence of Exposure Effect across the Age		1.63%	10.78%	14.07%	7.18%	0.97%	0.65%
	11. One of the important criteria for choosing a brand is the after sales service offered by it	2.61%	22.22%	30.71%	22.22%	2.61%	1.30%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	2.61%	12.41%	20.26%	11.76%	1.96%	0.65%
Average influence of Peltzman Effect across the Age		2.61%	17.31%	25.48%	16.99%	2.28%	0.97%

From Table 3 it is clear that all the biases impact the decision making of those consumers whose age is mostly between 20 years to 50 years.

Table 4: Analysis of the influence of cognitive biases on decision making of consumers across gender.

Cognitive Biases	Variables for each Bias	Consumer's Agreement(%) according to Gender	
		Male	Female
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.	50.98%	24.18%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.	52.94%	22.87%
Average influence of Confirmation Bias across the Gender		51.96%	23.52%
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	52.94%	22.22%

	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.	44.44%	14.37%
Average influence of Anchoring Effect across the Gender		48.69%	18.29%
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.	58.16%	23.52%
	6. I am most likely to buy a product/service if I am informed that an attractive offer related to it is expiring in a few hours.	26.79%	11.11%
Average influence of Loss Aversion across the Gender		42.47%	17.31%
Halo Effect	7. I check the claims of a product of being organic before buying them.	50.98%	19.60%
	8. If I am satisfied with a company's current products, I will buy its new products also.	57.51%	28.10%
Average influence of Halo Effect across the Gender		54.24%	23.85%
Exposure Effect	9. I have gone for sudden, unplanned purchases.	28.10%	17.64%
	10. I have bought some products after seeing them in the cart of others.	18.30%	6.53%
Average influence of Exposure Effect across the Gender		23.20%	12.08%
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it	56.86%	24.83%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	32.67%	16.99%
Average influence of Peltzman Effect across the Gender		44.76%	20.91%

Table 4 suggests that decision making of females are more influenced by these biases in comparison to males because in the sample there are 70.6% male respondents and 29.4% female respondents, so the ratio of influence is more in females.

Table 5: Analysis of the influence of cognitive biases on decision making of consumers across income.

Cognitive Biases	Variables for each Bias	Consumer's Agreement (%) according to Income					
			Rs. 5-10 Lakhs	Rs. 10-15 Lakhs	Rs. 15-20 Lakhs	Rs. 20-25 Lakhs	Above Rs 25 Lakhs
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.	29.41%	16.33%	11.76%	5.22%	2.61%	9.80%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.	28.10%	16.99%	15.03%	5.22%	2.61%	7.84%

Average influence of Confirmation Bias across the Income		28.75%	16.66%	13.39%	5.22%	2.61%	8.82%
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	29.41%	16.33%	14.37%	5.88%	2.61%	6.53%
	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.	19.60%	14.37%	11.11%	3.26%	2.61%	7.84%
Average influence of Anchoring Effect across the Income		24.50%	15.35%	12.74%	4.57%	2.61%	7.18%
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying It.	26.79%	20.26%	15.03%	5.88%	3.26%	10.45%
	6. I am most likely to buy a product/ service if I am informed that an attractive offer related to it is expiring in a few hours.	18.95%	7.18%	6.53%	1.96%	1.30%	1.96%
Average influence of Loss Aversion across the Income		22.87%	13.72%	10.78%	3.92%	2.28%	6.20%
Halo Effect	7. I check the claims of a product of being organic before buying them.	26.79%	13.72%	15.03%	3.92%	2.61%	8.49%
	8. If I am satisfied with a company's current products, I will buy its new products also.	31.37%	20.91%	14.37%	6.53%	2.61%	9.80%
Average influence of Halo Effect across the Income		29.08%	17.31%	14.7%	5.22%	2.61%	9.14%
Exposure Effect	9. I have gone for sudden, unplanned purchases.	9.80%	10.45%	6.53%	3.92	1.96%	6.53%
	10. I have bought some products after seeing them in the cart of others.	11.11%	4.57%	4.57%	1.96%	0.65%	1.96%
Average influence of Exposure Effect across the Income		10.45%	7.51%	5.55%	2.94%	1.30%	4.24%
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it	26.79%	20.26%	15.03%	6.53%	2.61%	10.45%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	19.60%	9.80%	9.15%	4.57%	1.30%	5.22%
Average influence of Peltzman Effect across the Income		23.19%	15.03%	12.09%	5.55%	1.95%	7.83%

According to Table 5, there is an inverted U shape curve (Graph 1) and the impact of biases are maximum on lower income levels and it decreases with increase in income, but again it raised with higher level of income.

Graph 1: Analysis of the influence of cognitive biases on decision making of consumers across Income.

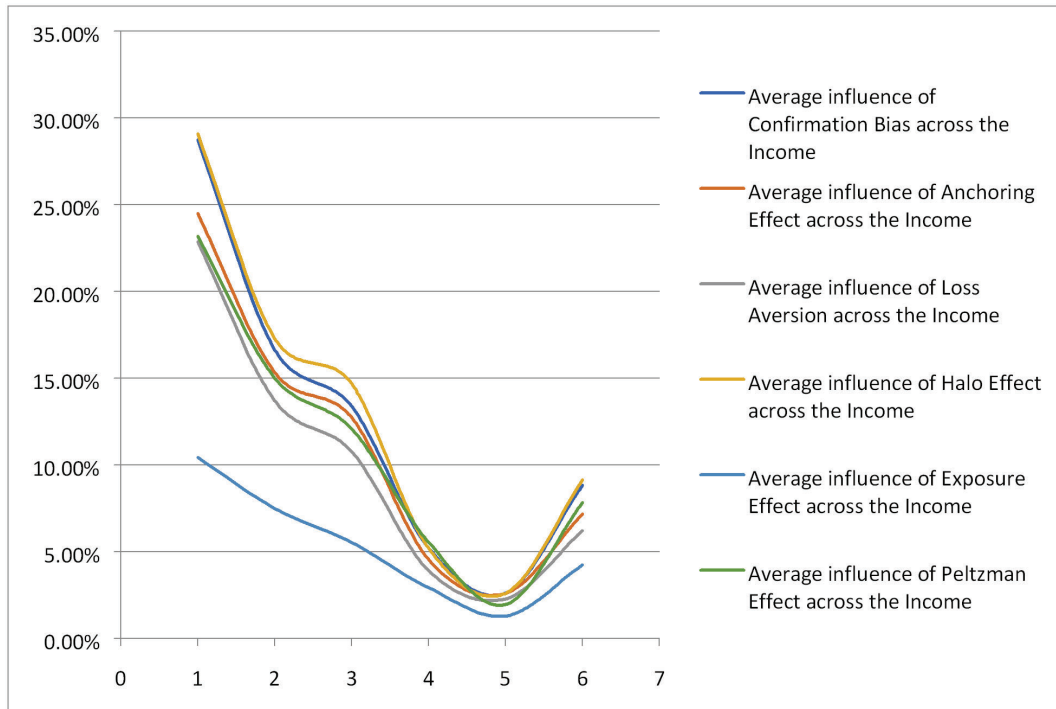


Table 6: Analysis of the influence of cognitive biases on decision making of consumers across Education.

Cognitive Biases	Variables for each Bias	Consumer's Agreement (%) according to Education			
		High school	Intermediate	Graduation	Post Graduation
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.	0%	1.96%	13.72%	59.47%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.	0.65%	2.61%	15.03%	57.51%
Average influence of Confirmation Bias across the Education		0.32%	2.28%	14.37%	58.49%
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	0.32%	2.28%	14.37%	58.49%

	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.	0.65%	1.30%	12.41%	44.44%
Average influence of Anchoring Effect across the Income Education		0.65%	1.95%	12.74%	51.63%
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.	0.65%	2.61%	14.37%	64.05%
	6. I am most likely to buy a product/service if I am informed that an attractive offer related to it is expiring in a few hours.	0.65%	2.61%	6.53%	28.10%
Average influence of Loss Aversion across the Education		0.65%	2.61%	10.45%	46.07%
Halo Effect	7. I check the claims of a product of being organic before buying them.	0.65%	2.61%	9.80%	57.51%
	8. If I am satisfied with a company's current products, I will buy its new products also.	0.65%	1.96%	13.72%	57.51%
Average influence of Halo Effect across the Education		0.65%	2.28%	11.76%	57.51%
Exposure Effect	9. I have gone for sudden, unplanned purchases.	0.65%	0.65%	8.49%	35.94%
	10. I have bought some products after seeing them in the cart of others.	0%	0.65%	6.53%	17.64%
Average influence of Exposure Effect across the Education		0.32%	0.65%	7.51%	26.79%
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it	0.65%	1.96%	13.07%	66.01%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	0.65%	0.65%	9.80%	38.56%
Average influence of Peltzman Effect across the Education		0.65%	1.30%	11.43%	52.28%

According to Table 6, all biases have almost equal impact on respondents irrespective of their educational background. The ratio of different level of education of respondents and impact of biases are majorly same.

Table 7: Influence of Cognitive Biases on Consumer Buying Behaviour.

Cognitive Biases	Measurement items for each Bias	Average Agreement of Consumers	
Confirmation Bias	1. I feel great after buying a product when I see testimonials of satisfied customers on the company's website.	75%	75.4%
	2. I am driven to buy a product when I am assured of money back guarantee from the seller, in case I am not satisfied with it.	75.8%	
Anchoring Effect	3. It feels great to know about the original higher price of a product & then to buy it at a discounted price.	75.1%	66.95%
	4. I go for annual plans rather than monthly plans for a service because it allows me to save more.	58.8%	
Loss Aversion	5. I would be happy if a product is first offered for free trial & then, if satisfied, I spend money on buying it.	81.7%	59.8%
	6. I am most likely to buy a product/service if I am informed that an attractive offer related to it is expiring in a few hours.	37.9%	
Halo Effect	7. I check the claims of a product of being organic before buying them.	70.6%	78.1%
	8. If I am satisfied with a company's current products, I will buy its new products also.	85.6%	
Exposure Effect	9. I have gone for sudden, unplanned purchases.	45.7%	35.25%
	10. I have bought some products after seeing them in the cart of others.	24.8%	
Peltzman Effect	11. One of the important criteria for choosing a brand is the after sales service offered by it	81.7%	65.65%
	12. I am influenced to buy a car which has great safety features because it will allow me to drive much faster.	49.6%	

From Table 7, it is clear that all cognitive biases under study influence consumer's buying behavior. Halo effect has the maximum impact, followed by confirmation bias. Anchoring effect, peltzman effect & loss of aversion occupy the third, fourth & fifth position respectively. The mere exposure effect lies at the last in terms of its influence on buying behaviour.

Table 8: How consumers view their own buying behaviour?

Parameters		Consumer's Response (%)
1. I am most likely to buy a product of a particular brand when	I am convinced about its quality.	53.6
	I am impressed by its promotion.	2.0
	I go through the feedback of a satisfied customer.	39.2
	It is offered at a discount.	5.2

2. I buy a product when it is offered at a discount because	I am attracted by the huge difference between its original & discounted price.	45.8
	There is lot of advertising related to the offer.	5.2
	My friends bought it & I do not want to lose the chance.	8.5
	Do not want to buy it at high price when I may require it.	40.5
3. My willingness to buy a new product will be the highest when I am offered	discount	22.9
	free trial	25.5
	great sales pitch	5.9
	great deals	45.8
4. I choose to buy new products of a company mainly because	Its earlier products are good	43.1
	It has a great promotion strategy	5.2
	Quality of the new products is very good	50.3
	Others are buying it	1.3
5. Many times, I end up buying products not mentioned in my shopping list because	I am forgetful & thus unable to write all the products required in my shopping list.	26.1
	When I see a product in the store, I develop an urge to buy it	40.5
	Looking for products is a good way to pass time while standing in the billing queue & I end up buying some of them.	22.2
	I want to surprise my family	11.1
6. I prefer a well known brand because	It enhances my status in the society	5.2
	I feel that it is less risky in terms of quality to spend on it	71.2
	I am very brand conscious	12.4
	It is always very socially responsible	11.1

The outlook of consumers towards their own buying behavior is analyzed in Table 8. Data suggests that consumers are most likely to buy a product of a particular brand when they are convinced about its quality. They buy a product when it is offered at a discount because they are attracted by the huge difference between its original & discounted price. Consumer's willingness to buy a new product will be the highest when they are offered with great deals. Consumer chooses to buy new products of a company mainly because quality of the new product is very good. Many times, consumer end up buying products not mentioned in their shopping list because when they see a product in the store and develop an urge to buy it and data also suggest that consumer prefer a well-known brand because they feel that it is less risky in terms of quality to spend on it.

The last objective was studied with the help of secondary data. As mentioned in the literature review, marketing is a nudging mechanism because marketing efforts neither create cognitive biases in customers

or force them to make a choice; the freedom of choice still rests with the customer. Marketing efforts create incentives that potential customers respond to not only when they are making rational decisions but also when they act irrationally under the influence of cognitive biases. Since human beings possess bounded rationality & not perfect rationality they have their own set of preferences & thus, are susceptible to marketing nudges via their cognitive biases.

Marketers use the anchoring effect by displaying the original price first and then the discounted price or comparing monthly and annual plan charges or displaying expensive products first, to convince customers that they are getting a better bargain. When customers want to “confirm” that they made the right decision, marketers give them this confirmation through customer reviews, testimonials, money-back guarantees and lists of best clients can have such a drastic impact on conversions, thus making use of the confirmation bias.

Marketers use the loss aversion bias to enhance their conversion rates by offering free trials and samples. A very similar nudge are time-limited offers (Aggarwal & Vaidyanathan, 2003) which convince us that if we do not buy immediately, the price for the item will rise and we will indirectly lose money in the future.

From a marketing perspective, halo effect can be a very good or bad thing, depending on the opinion people form a brand. Companies utilise halo effect to their advantage by leading with their star product, delivering the right kind of user experience and displaying evidences of it. Marketers use the mere exposure bias, prompting customers to go for spontaneous, unplanned consumption or impulse buying (Stern,1962)

by placing certain products near checkout area of supermarkets. Marketers leverage Peltzman Effect to their advantage by offering “no questions asked” return/refund/replacement policy, “try and buy” offers, quick and reliable service, etc.

FINDINGS

The following main findings can be drawn from the data analysis:

- Cognitive biases exercise a huge influence on consumer buying behaviour.
- The influence of cognitive biases on decision making varies across consumer demography. These biases have the maximum impact on consumers between 20–50 years. The impact on gender could not be clearly derived from the analysis.
- Influence of cognitive biases is greatest on consumers of either very high or low-income levels. This influence does not vary across the educational levels of the customers.
- Of all the cognitive biases, halo effect exerts the major influence on the buying process & mere exposure effect has the least impact.
- Consumers’ decision to buy a product is based on their conviction about its quality, discounts & offers associated with it & its brand.
- Majority of the consumers make impulse purchases.

CONCLUSION

Cognitive biases are undesirable & to a great extent unavoidable errors in our thinking. They influence all our decisions, including our decisions as a consumer. They assume significance not merely because they exist but because our thinking is systematically riddled

with cognitive biases. They cannot be ignored or overlooked as a borderline phenomenon. The errors in our thinking make us susceptible to marketing efforts, and marketing efforts

increase the probability that, as consumers, we make irrational decisions. Thus, these biases need to be understood both by the consumer & the marketer.

References

1. Aggarwal, P. & Vaidyanathan, R. "Use it or lose it: purchase acceleration effects of time-limited promotions". In: *Journal of Consumer Behaviour* 2.4 (2003), pp. 393–403. DOI: 10.1002/cb.116.
2. Houdek, Petr. (2016). A Perspective on Consumers 3.0: They Are Not Better Decision-Makers Than Previous Generations. *Frontiers in Psychology*. 7. 10.3389/fpsyg.2016.00848.
3. Jonathan St B. T. Evans. "Dual-Processing Accounts of Reasoning, Judgment, and Social Cognition". In: *Annual Review of Psychology* 59.1 (2008), pp. 255–278. doi: 10.1146/annurev.psych.59.103006.09362
4. Kahneman, D., and Tversky, A. 1973. "Availability: A Heuristic for Judging Frequency and Probability," *Cognitive Psychology* (5:2), pp. 207-233.
5. Kahneman, D., and Tversky, A. 1979. "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica: Journal of the Econometric Society* (47:2), pp. 263-291.
6. Kovic, M., Laissu, N. (2016) Consuming rationally: How marketing is exploiting our cognitive biases, and what we can do about it. *Swiss Skeptics Discussion Paper Series* 1 (3).
7. Kovic, Marko and Nathalie Laissu (2016): "Consuming rationally: How marketing is exploiting our cognitive biases, and what we can do about it." *Swiss Skeptics Discussion Paper Series* 1(3): 1-29.
8. Lee, W.J, Shimizu, M., Kniffin, K.M., & Wansink, B. "You taste what you see: Do organic labels bias taste perceptions?" In: *Food Quality and Preference* 29.1 (2013), pp. 33–39. DOI: 10.1016/j.foodqual.2013.01.010
9. Norton, Michael I., Daniel Mochon, and Dan Ariely. "The IKEA Effect: When Labor Leads to Love." *Journal of Consumer Psychology* 22, no. 3 (July 2012): 453–460.
10. Peltzman, Sam (1975), 'The Effects of Automobile Safety Regulation', *Journal of Political Economy*, 83 (4), 677-726.
11. Richard H. Thaler and Cass R. Sunstein. *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New York: Penguin Books, 2009. ISBN: 978- 0-14-311526-7
12. Roberts, J. H., and Lattin, J. M. (1997). Consideration: review of research and prospects for future insights. *J. Market. Res.* 34, 406–410. doi: 10.2307/3151902
13. Sam Peltzman, (1975), The Effects of Automobile Safety Regulation, *Journal of Political Economy*, 83, (4), 677-725
14. Simonson, I., & Tversky, A. (1992). Choice in Context: Tradeoff Contrast and Extremeness Aversion. *Journal of Marketing Research*, 29(3), 281-295. doi:10.2307/3172740
15. Stern, H.. "The Significance of Impulse Buying Today". In: *Journal of Marketing* 26.2 (1962). DOI: 10.2307/1248439.
16. Wilkinson, T. M. "Nudging and Manipulation". In: *Political Studies* 61.2 (2013), pp. 341–DOI: 10.1111/j.1467-9248.2012.00974

17. Tversky , A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124-1131.
18. Wickens, C.D., & Hollands, J.G. (2000). Decision Making. In *Engineering Psychology and Human Performance* (3rd ed., pp. 293-336). Upper Saddle River, NJ: Prentice Hall.
19. Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9 (2, Pt.2), 1–27. <https://doi.org/10.1037/h0025848>
21. <https://www.collinsdictionary.com/dictionary/english>