IMPACT OF COGNITIVE BIAS ON CONSUMER BUYING DECISIONS

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Abstract

In this study, we investigate the role that certain cognitive bias plays as a factor that influences the purchasing decisions made by consumers. The study includes the following biases: the confirmation &consistency bias, the anchoring bias, the paradox of choice, the Pygmalion effect, and the Barnum effect. With the use of the Likert Scale, the research requested 102 participants (N=102) to fill out a structured questionnaire with the intention of eliciting their thoughts on a variety of bias influences. The questionnaire was designed to collect their responses. Following the completion of the data collection process, a reliability study using Cronbach's Alpha and Maxwell's Omega was carried out. The findings of the study were found to be credible. After that, the Spearman Correlation and Ordinal Logical Regression statistical methods were utilized in order to determine the link between the variables and establish the level of influence that a specific bias would have on the purchasing decisions of consumers. This study found that there are three types of biases which influence the purchasing decisions of consumers. Steps were taken to mitigate errors and reduce bias. This study can be of interest to marketers, brand strategists, product managers, digital marketers, organizations, and those who wish to grow their client base.

Keywords:*Cognitive Bias; Consumer Buying Decision; Correlation; Regressions; Consistency Bias; Anchoring Bias; Paradox Of Choice; Confirmation Bias; Pygmalion Effect; Barnum Effect*

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Introduction

Consumers are frequently viewed as the economic system's king and principal decision-maker. A variety of choices are made by consumers, including the following like-i) whether to purchase a product they encounter in a store?ii) whether to be affected by marketing campaigns and advertisements for a company's products and services? iii) What to purchase and when to purchase it? iv) Which of several competitors to purchase from?

The ability to make choices is one of the most significant forms of authority granted to a customer. In point of fact, each individual will assume the role of a customer or client at some point in their lives. The determining factor in the consumer market is the fact that everyone has the right and the authority to choose how, when, why, on what, and where to spend their money. The Psychological Factors are those aspects of an individual's psychology that motivate his pursuit of satisfaction. These are the factors that evade the cognizant portion of the human mind and rely on the unconscious to drive purchasing behaviour. Psychological factors can significantly influence a consumer's purchasing decisions. Also included here are Cognitive Biases.

Cognitive bias is a type of systematic error in reasoning that occurs during the processing and interpretation of environmental information. This fallacy in reasoning affects the decisions and judgments people make in response to the information they absorb. If you were required to contemplate each and every conceivable alternative before making a decision, even the most elementary choice would require a significant amount of time and effort. Due to the complexity of the surrounding world and the abundance of information in the surrounding environment, it is sometimes necessary to rely on mental shortcuts that enable you to act swiftly. In this paper the following Cognitive Biases has been investigated:-

- Confirmation Bias
- Self-Consistency Bias
- Anchoring Bias
- Choice Overload Bias or Paradox of Choice
- Pygmalion Bias or Effect
- Barnum Effect

a. Confirmation Bias

It is a cognitive bias in which you give more weight to information that backs up your current beliefs or biases. For example, say someone thinks that left-handed people who are more artistic than right-handed ones. When this person come across someone who possesses both of these qualities, they give this "evidence" more weight because it backs up what they already think. This person might even try to find more evidence to back up this idea while ignoring things that don't fit with it.

b. Commitment or Consistency Bias

The commitment and consistency fallacy asserts that we behave similarly to before. The consistency bias is extremely intriguing. The consistency fallacy causes us to overestimate the degree to which our attitudes and perspectives have changed. We alter more than we believe. To make decisions and advance, the brain must establish and maintain a consistent sense of self. We must comprehend who we are in order to predict what will be beneficial or detrimental for us. Memory sustains our individuality and continuity. We are constantly in flux.

c. Anchoring Bias

An individual has an inclination to take the initial piece of information given to them as a benchmark for future decisions. This bias is called the anchoring bias and it refers to the inclination of the people to depend extensively on initial piece of information for making purchase decisions. The first item of information is used by decision-makers to make an estimate, with subsequent adjustments based on this initial estimate.

d. Choice Overload Bias/ Paradox of Choice

Choice overload bias is a cognitive prejudice that occurs when an individual is presented with an excessive number of options, which can lead to unfavourable outcomes. This bias is frequently associated with the decision-making process and can be observed in numerous contexts, such as consumer behaviour, personal finance, and healthcare. When individuals are presented with too many options, they may become overwhelmed, making it more difficult for them to make a choice.

e. Pygmalion Effect/Bias

According to the Pygmalion effect, which is often referred to as the Rosenthal effect, if you or other people believe that something is true about yourself, it will eventually become true. Therefore, if a teacher has high expectations for his or her pupils with the confidence that they are able to reach those expectations, the students will almost certainly have improved academic performance. The influence of this phenomenon can be observed in practically every area of our lives.

f. Barnum Effect

It is a typical cognitive bias that arises due to our inclination to give personal meaning to general words. This natural tendency is the root cause of the Barnum effect. There is a connection between the Barnum effect and subjective validation. Subjective validation is when one believes that the information is most likely true if it contains a personal meaning. This is something that we all do unconsciously when we find a relationship between two events that are not related to one another. The paper focuses on therole that certain cognitive bias plays as a determinant that influences the purchasing decisions made by consumers

Literature Review

Johnson, M., & Ghuman, P. (2020), delve deeply into the unexpected relationship that exists between minds and businesses using mind-blowing science, captivating stories, and astounding real-world examples. Blindsight is a documentary that explores the neurology of pain and pleasure, emotion and rationality, fear and safety, attention and addiction, and much more to demonstrate how marketing affects every aspect of our mental existence. Although we like to believe that we are autonomous individuals in complete control of our decisions, the reality is significantly more complex. Blindsight will provide you with the ability to perceive the intangible in terms of marketing, allowing you to consume on your own terms and without the constraints of others. You will acquire a superficial understanding of how the brain works and how businesses design for it. However, if you strip back one layer; your shopping habits will reveal a more distinct portrait of your personality. Blindsight is a comprehensive examination of how top brands infiltrate our minds and seize prime real estate.

Bunčić, S., Krstić, J., &Kostić-Stanković, M. (2021), mentioned thatthe formulation of communication messages according to cognitive ease principles encourages recipients' employment of cognitive heuristics while making a choice. In advertising, cognitive error-promoting content is prevalent, according to studies. 78.1 percent of advertisements used cognitive fallacies. The presentation and framing of promotional messages affected product propensity to pay in both experiments. Thus, a well-crafted message can considerably influence human behaviour by stimulating biases that, in some cases, can cause the recipient to overlook important product limitations or undermine its vitality. The limitations of the study are that the sample size was limited, and the conclusions are based on the direction of the observed changes rather than statistical significance. As such, this study could be used as an assessment study that informs the format and conduct of future research involving larger samples, more complex stimuli, and more complex methodologies.

Saeedi, M. T., Fatemi, F., & Nazari, M. A. (2021), looked at how this particular cognitive bias affectsconsumers' preferences. Buying choice of a consumer is heavily influenced by the product's aesthetics, but functional information might cause confusion and lead to a transaction being cancelled. Forty female undergraduates from Tabriz University were selected using a convenience sample strategy to examine this phenomenon. Participants in this study were exposed to 140 wearable devices, split evenly between "gorgeous" and "standard" goods, with both congruent and incongruent functional information. It has been measured that people make faster decisions when given with information that is consistent with their previous choices. This research shows that cognitive bias toward product appearance can be formed through information processing.

Leising, D. (2011), In his study found that, 108 participants first used adjectives to define their interpersonal dispositions, followed by brief recorded interviews. They used the same adjectives to evaluate the participants' behaviour during interviews. The consistency bias was also used for both the broad interpersonal aspects of Dominance and Affiliation and the average individual item. It was determined that neither of the two potential sources of the consistency bias (visual perspective and word frequency) could account for the effect. The consistency bias may stem from a stable self-concept.

Nickerson, R. S. (1998), concluded that our natural inclination is to seek evidence that explicitly supports hypotheses we favour and, in some cases, those we entertain but are indifferent about. We may search for evidence that is embarrassing to hypotheses we disbelieve or detest, but this can also be interpreted as searching for evidence that supports the complementary hypotheses. The point is that we rarely seem to pursue evidence that would prove a hypothesis to be false because we believe that doing so is an effective way to prove that it is correct if it is correct. The extent to which training can modify confirmation bias merits more investigation than it has received to date.

Furnham, A., & Boo, H. C. (2011), noted that it can be demonstrated across a wide range of decision-making tasks, with various groups and in a variety of contexts. In experimental settings, it is uncommon to be unable to demonstrate it. Different, but not contradictory, models exist to explain the process. Anyone working in the field should be aware that there are substantial individual distinctions in the extent to which anchors influence individual judgments. Consequently, an interest in the affective, contextual, motivational, and trait correlates of anchoring decisions.

Chernev, A., Böckenholt, U., & Goodman, J. (2015), explore that despitemany past studies studying whether and how large collections may or may not over loading of choices, there have been few attempts to establish a connected, encompassing model that describes the impact of collection size on choices overloading. This research adds to the existing body of knowledge by elucidating the theoretical underpinnings of the correlation between assortment size and decision fatigue. Till now, this is the only endeavour aimed at identifying the main causes of choice overload, doing empirical testing of their validity, and quantifying their relative consequences.

Rosenthal, R. (2010), discusses theterm "Pygmalion effect" andpoints to the positive effects of inter-personal expectations on a person's behaviour. This effect states that if a person's expectations for us are positive, it will start a cycle of positivity which would positively change our behaviour. Same goes for negative ones.

Objectives of the Study

- To examine the impact of confirmation and consistency bias as a cognitive bias on Consumer Buying Decisions.
- To study the impact of anchoring bias as a cognitive bias on Consumer Buying Decisions.
- To scrutinize the impact of the choice overload bias as a psychological factor on Consumer Buying Decisions.
- To observe the impact of the Pygmalion effects as a cognitive bias on Consumer Buying Decisions.
- To inspect the impact of Barnum Effect as a cognitive bias on Consumer Buying Decisions.

Research Methodology

The respondents who were asked to fill out questionnaires are the sampling units. They comprised of people from Delhi NCR, the capital of India.Quantitative research approach was chosen to conduct this research which is statistics based. Questionnaires/Google Forms were prepared to be filled out by consumer in India. The sampling technique used in the project is Convenience Sampling Technique. This method was selected to make the process of response collection less complicated and less time consuming.102 consumers were selected and were asked to fill out the questionnaire/google form. Quantitative analysis with bar graphs & pie charts. Statistical investigation of the information gathered from the questionnaires/Google form. Spearman's Rank Correlation and Ordinal Logical regression.

Cronbach's Alpha and Maxwell's Omega were used for reliability analysis.JAMOVI (for reliability analysis) and SPSS (for correlation and regression analysis).Section wised questionnaire was created to avoid monotonous responses.Outliers, if any found after data collection, were removed.

Data Analysis and Interpretation

Demographic Analysis

The demographic analysis of the respondents is presented in table below according to variables gender, age, educational qualification, of the respondents. According to the gender data, 58.8 % respondents were male and rest 41.2 % was female. Out of total respondents' majority of them comes in the category of age group between 21-25 years old which constitutes the 44.12% of the total respondents followed by the category of age group between 15-20 which constitute the 28.4 % and finally comes the category of age group 26-30 and above 31 constituting the 8.8% and 18.6 % respectively. The respondents were segregated in form of High School (10th), Senior Secondary (12th), Graduate, Postgraduate and Doctorate. The majority of respondents were forming 36.27 % of the total respondents. They were followed by Senior Secondary (12th) and Post Graduate constituting 25.49% and 34.31% respectively.

Table 1: Demographic profiles of the Respondents

Demographic factors		**Frequency**	**Percentage**
Gender	Male	60	58.8
	Female	42	41.2
Age	15-20	29	28.4
	21-25	45	44.12
	26-30	9	8.82
	Above31	19	18.63
Educational Qualification	High School(10th)	3	2.94
	Senior Secondary(12th)	26	25.49
	Graduate	37	36.27
	Post-Graduate	35	34.31
	Doctorate	1	0.98

To understand the overall picture of the respondents' buying behaviours and preferences, a survey has been conductedon 102 respondents. The majority of respondents (36.3%) stated that they do not go shopping on a weekly basis, followed by persons who just infrequently ventured through the aisles of the supermarket (34.3%) and (18.6%) of respondents mentioned that they are regular purchasers. We tried to examine whether consumers are rationale when it comes to buying a product or services only 51% of the respondents were supporting the statement. Further we try to investigate that whether People tend to buy those products they have tried and tested in the past, we found that majority, 84%, agreed with this statement and also it is believed that the products that are sold with discounts on their initial MRP attracts more buyers and the study outcomes reveal that 49% of respondents agreed to the statement.

The paradox of choice is that although we may believe that having more options will increase our level of happiness, in practice, this is not always the case. In spite of the increased feeling of liberty and autonomy that comes with having more option, we may become exhausted from always having to make decisions. Approximately forty-six percent of all respondents agree with this assertion, while twenty-two of them declined to lean in any one direction. 102 persons were polled, and 18 of them responded negatively to the remark.

It was found that motivational advertisements make the brand more preferable (39%).The Barnum effect occurs when a person believes that general information that applies to a large audience applies only to them. Businesses can use the Barnum effect to interact on a personal level with their customers. This increases customer loyalty and retention.

The Barnum Effect, which is based on people's susceptibility to flattery and propensity to believe supposedly authoritative sources, means that, if delivered properly, people will take generalizations as directly applicable to them.There are 65% who concur with this statement and 13% who disagree. 11.8% of individuals maintain their neutral stance on this issue.Elements of the Barnum Effect can be effective in online CRO campaigns, even if they are best appropriate to activities like fortune-telling and horoscopes. For instance, 'generalities' (message to audience groupings) can be employed in personalization efforts to provide the impression to individual clients that they are receiving personalized attention. Personalizations ads that leverage user behavior triggers or in-depth demographic information are just two examples.There are 46.1% in agreement with this, while 23.0% disagree. Thirty-four percent of people haven't made up their minds about this issue.

Reliability Analysis

The reliability analysis technique computes a number of frequently used scale reliability measures and gives data on the connections between the scale's constituent items. To measure inter-rater dependability, one can compute intraclass correlation coefficients.A guideline for interpreting alpha for Likert scale queries is as follows:

Table 2: Reliability Analysis

Cronbach's alpha	Internal consistency
a ≥0.9	Excellent
0.9 > a ≥ 0.8	Good
0.8> a ≥ 0.7	Acceptable
0.7 > a ≥ 0.6	Questionable
0.6 > a ≥ 0.5	Poor
0.5 > a	Unacceptable

Both Cronbach's Alpha and McDonald's Omega are highly equivalent indices of reliability. The main advantage of Omega over Cronbach's alpha is that it accounts for both the degree of connection between items and constructs and the measurement errors inherent to individual items. The strength of correlation between items and constructs is taken into account, unlike in Cronbach's alpha. Therefore, Omega provides estimates that are better representations of the underlying reliability of the scale. Omega reliability needs to be at least 0.70 to be considered acceptable.

The below table shows the analysis of the reliability of the constructs used in the research:

Table 3: Analysis of the reliability of the constructs

S.No.	Cognitive Bias (Constructs)	Cronbach's Alpha	McDonald's Omega	Remark
1.	Confirmation & Consistency Bias	0.759	0.760	Acceptable
2.	Anchoring Bias	0.704	0.704	Acceptable
3.	Choice Overload Bias/Paradox of Choice	0.719	0.719	Acceptable
4.	Pygmalion Effect	0.744	0.746	Acceptable
5.	Barnum Effect	0.750	0.751	Acceptable
6.	Consumer Buying Decision	0.690	0.715	Acceptable in Omega

Table 4: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Consumer_Buying_Decision	.391	77	.000	.700	77	.000
Barnum Effect	.178	77	.000	.884	77	.000
Pygmalion Effect	.145	77	.000	.922	77	.000
Choice Overload	.175	77	.000	.935	77	.001
CC_Bias	.202	77	.000	.920	77	.000
Anchoring Bias	.230	77	.000	.903	77	.000

In statistics, normality tests are employed to assess if a dataset can be accurately represented by a normal distribution and to determine the likelihood that the underlying random variable follows a normal distribution.

While the Shapiro-Wilk test can be applied to larger sample sizes, it is particularly well-suited for smaller sample sizes (less than fifty samples). On the other hand, the Kolmogorov-Smirnov test is typically used for larger sample sizes, specifically when n is less than fifty.

Both of the tests mentioned above utilize the null hypothesis, which assumes that the data is derived from populations with normal distributions. When P > 0.05, null hypothesis accepted and data are called as normally distributed.

H_0-Data has a normal distribution.

Interpretation:

As P<0.05, therefore null hypothesis is rejected and data is not normally distributed. As our data is not normally disturbed, we will be using spearman's rank correlation and ordinal logistic regression for further research.

Table 5: Correlation Analysis

S. No	Factor under study- Bias	Spearman rho value	Significance Value
1.	Confirmation and Consistency bias	0.028	0.779
2.	Anchoring Bias	0.383	0.000
3.	Choice Overload Bias	0.056	0.629
4.	Pygmalion effect	0.356	0.000
5.	Barnum effect	0.333	0.001

H_0(1)- There is no significant relationship between confirmation and consistency bias with consumer buying decision

Interpretation- As significance value >0.05, then null hypothesis is accepted. The value of Spearman's rho also shows and confirms negligible relationship between the confirmation and consistency bias and the construct.
(r=-0.028, Sig.=.779, N=102)

H_0(2)- There is no significant relationship between anchoring bias with consumer buying decision

Interpretation- As significance value <0.05, the null hypothesis is rejected. The value of Spearman's rho also shows and confirms a good moderate positive relationship between this cognitive bias and the construct.
(r=0.383, Sig.=.000, N=102)

H_0(3)- There is no significant relationship between choice overload bias with consumer buying decision

Interpretation- As significance value >0.05, null hypothesis is accepted. The value of Spearman's rho also shows and confirms negligible relationship between the confirmation and consistency bias and the construct.
(r= 0.056, Sig.=.629, N=102)

H_0(4)- There is no significant relationship between Pygmalion effect with consumer buying decision

Interpretation- As significance value <0.05, our null hypothesis is rejected. The value of Spearman's rho also shows and confirms a good moderate relationship between the Pygmalion effect and the construct.
(r= 0.356, Sig.=.000, N=102)

H_0(5)- There is no significant relationship between Barnum effect with consumer buying decision

Interpretation- As significance value <0.05, our null hypothesis is rejected. The value of Spearman's rho also shows and confirms a good moderate relationship between the Barnum effect and the construct.
(r= 0.333, Sig.=.001, N=102)

Regression Analysis

The output begins with a Case Processing Summary that specifies which cases were examined. Here, we have 102 total participants in the sample.

Table 6: Regression Analysis

Case Processing Summary			
		N	Marginal Percentage
Consumer buying Decision	Strongly Disagree	1	1.0%
	Neutral	6	5.9%
	Agree	43	42.2%
	Strongly Agree	52	51.0%
Confirmation and Consistency Bias	Strongly Disagree	6	5.9%
	Disagree	3	2.9%

	Neutral	22	21.6%
	Agree	54	52.9%
	Strongly Agree	17	16.7%
Anchoring Bias	Strongly Disagree	3	2.9%
	Disagree	7	6.9%
	Neutral	29	28.4%
	Agree	52	51.0%
	Strongly Agree	11	10.8%
Paradox of Choice	Strongly Disagree	3	2.9%
	Disagree	15	14.7%
	Neutral	32	31.4%
	Agree	46	45.1%
	Strongly Agree	6	5.9%
Pygmalion Effect	Strongly Disagree	10	9.8%
	Disagree	12	11.8%
	Neutral	26	25.5%
	Agree	40	39.2%
	Strongly Agree	14	13.7%
Barnum Effect	Strongly Disagree	9	8.8%
	Disagree	5	4.9%
	Neutral	12	11.8%
	Agree	37	36.3%
	Strongly Agree	39	38.2%
Valid		102	100.0%
Missing		0	
Total		102	

Table 7: Model Fitting Information

MODEL FITTING INFORMATION				
Model	**-2 Log Likelihood**	**Chi-Square**	**df**	**Sig.**
Intercept Only	168.086			
Final	124.736	43.350	20	.002

Interpretation: If the Model is statistically significant, it indicates that the model fits the data better than the null model.

Table 8: Goodness-of-Fit

Goodness-of-Fit			
	Chi-Square	**df**	**Sig.**
Pearson	228.315	223	.389
Deviance	110.475	223	1.000

Interpretation: If the significant value of the Goodness of Fit statistic is less than 0.05, then the fit is poor. The model matches the data reasonably well ($p > 0.05$).

By definition, a goodness-of-fit test evaluates how well the observed data match the expected model.If the number is not statistically significant, then there are no large discrepancies between the data and the expected model.

Table 9: Pseudo R- Square

Pseudo R- Square	
Cox and Snell	**.346**
Nagelkerke	**.412**
McFadden	**.231**

Interpretation: Pseudo indicates it is not a rigorous explanation of the observed variation. They can, however, stand in as a rough approximation of the criterion's inherent variability. R-Square will be calculated using the McFadden method in Ordinal Regression.When comparing the outcome prediction using the predictors to the null model, we find a 23.1% improvement in this example.

Table 10: Parameter Estimates

Parameter Estimates					
				95% Confidence Interval	
		Estimate	Sig.	Lower Bound	Upper Bound
Threshold	**[ConsumerbuyingDecision = 1.00]**	10.748	.000	-15.270	-6.225
	[ConsumerbuyingDecision = 3.00]	8.390	.000	-12.401	-4.378
	[ConsumerbuyingDecision = 4.00]	4.592	.014	-8.269	-.915
Location	**[ConfirmationandConsistencyBias=1.00]**	-1.752	.012	-3.989	.484
	[ConfirmationandConsistencyBias=2.00]	-2.689	.090	-5.800	.421
	[ConfirmationandConsistencyBias=3.00]	-1.819	.029	-3.455	-.183
	[ConfirmationandConsistencyBias=4.00]	-.886	.045	-2.381	.609
	[ConfirmationandConsistencyBias=5.00]	0[a]	.	.	.
	[AnchoringBias=1.00]	1.670	.358	-5.228	1.889
	[AnchoringBias=2.00]	.101	.939	-2.492	2.694
	[AnchoringBias=3.00]	.375	.703	-2.302	1.551
	[AnchoringBias=4.00]	.517	.599	-2.443	1.409
	[AnchoringBias=5.00]	0[a]	.	.	.
	[ParadoxofChoice=1.00]	-3.524	.109	-7.829	.781
	[ParadoxofChoice=2.00]	-1.963	.255	-5.344	1.418
	[ParadoxofChoice=3.00]	-2.791	.089	-6.011	.429
	[ParadoxofChoice=4.00]	-2.337	.153	-5.544	.871
	[ParadoxofChoice=5.00]	0[a]	.	.	.
	[PygmalionEffect=1.00]	.941	.417	-3.211	1.330
	[PygmalionEffect=2.00]	739	.442	-2.622	1.143
	[PygmalionEffect=3.00]	.329	.703	-2.025	1.366
	[PygmalionEffect=4.00]	.235	.771	-1.349	1.819
	[PygmalionEffect=5.00]	0[a]	.	.	.
	[BarnumEffect=1.00]	1.390	.026	-.860	3.639
	[BarnumEffect=2.00]	.288	.011	-2.650	2.074
	[BarnumEffect=3.00]	3.212	.000	-5.006	-1.419
	[BarnumEffect=4.00]	1.109	.051	-2.224	.007
	[BarnumEffect=5.00]	0[a]	.	.	.

Table11: Test of Parallel Lines[a]

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	124.736			
General	92.034[b]	32.702[c]	40	.787

H_0- Across all response categories, the location parameters are identical.

As P>0.05, null hypothesis is accepted which means location parameter are same across the response categories. Every factor has equal chance of having a higher effect.

Findings

The value of Spearman's rho also shows and confirms negligible relationship between the confirmation and consistency bias and the construct. The value of Spearman's rho also shows and confirms a good moderate positive relationship between anchoring bias and the construct. The value of Spearman's rho also shows and confirms a good moderate positive relationship between anchoring bias and the construct. The value of Spearman's rho also shows and confirms a good moderate positive relationship between Pygmalion bias and the construct. The value of Spearman's rho also shows and confirms a good moderate positive relationship between Barnum Effect and the construct. The value of Spearman's rho also shows and confirms negligible relationship between the confirmation and consistency bias and the construct. Anchoring Bias has probability of higher effect on consumer buying decision. However, the difference is insignificant. Paradox of Choice has probability of lower effect (being in the lower category) on consumer buying decision. Also, the difference is significant .Barnum Effect has probability of higher effect on consumer buying decision. Also, the difference is significant. Pygmalion Effect has probability of higher effect on consumer buying decision. Also, the difference is significant Confirmation and Consistency Bias is more has probability of lower effect on consumer buying decision. Also, the difference is significant.

Recommendations

This study found out that 3 cognitive biases have a higher impact on consumer buying decisions .Companies can use this bias to persuade consumers regarding their brands. A caveat will be to avoid manipulation. They can use an expensive dummy product with their intended lower price product as a part of using Anchoring Bias to influence consumer buying decisions. The enterprises can use motivational advertisements as a part of using Pygmalion effect to influence consumer buying decisions. Also, personalized messages or provide personalized experience through generalized methodology as a part of using Barnum effect to influence consumer buying decisions. They should avoid using confirmation and consistency

bias as it could be generalized. It should avoid using fewer choices for their product because they won't be able cast a bigger net.

Conclusion

A wide range of factors have a role in shaping the decisions that consumers make regarding their purchases. Cognitive biases are one example of these types of things. A cognitive bias is a systematic thought process that is caused by the human brain's natural urge to simplify information processing by applying a filter that is made up of one's own personal experiences and preferences. Cognitive biases can have a significant impact on one's ability to make accurate judgments and decisions. It was found out after significant research that the Anchoring Bias, the Pygmalion Effect, and the Barnum Effect, which are all forms of cognitive bias, have a higher influence on the purchasing decisions that customers make. On the other hand, the Choice Overload Bias and the Paradox of Choice, in addition to the Confirmation and Consistency Bias, have a somewhat smaller influence on the decision of a buyer to make a purchase.

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