

# Effect of Anchoring and Framing on Price Perception Among Consumers

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## **Abstract**

Consumers often believe they judge prices logically, but in reality, their decisions are quietly shaped by psychological cues they may not even notice. This study explores how two powerful biases—anchoring and framing—influence everyday price perception. Using responses from 90 consumers, the research reveals that the very first price people see becomes a mental anchor that strongly shapes how fair or valuable later prices feel. Framing, such as presenting the same price as a “discount” or a “saving,” also shifts perception, but not as forcefully as the initial anchor. Statistical analysis showed a significant difference between the effects of anchoring and framing, with anchoring emerging as the more dominant influence. The results highlight how easily consumers’ judgments can be guided by subtle cues rather than rational evaluation. This study reminds us that what feels like a “good deal” is often shaped by psychology, not mathematics, and urges both buyers and marketers to be more aware of these hidden forces.

## **INTRODUCTION**

Consumer decisions are not always based on careful calculations or rational judgements, they make buying decisions every day without realising how many psychological factors influence their price judgements. Although people believe that they evaluate price logically while making a purchase, many studies in behavioural economics shows that a very large amount of consumer decisions are influenced by mental shortcuts called cognitive biases. These biases helps individuals to make quick decisions, but can also distort judgement. Especially when dealing with prices, discounts, and promotional messages. Among the many biases identified in consumer behaviour anchoring and framing are two of the most popular biases used by marketers, whether intentionally or unintentionally understanding how these biases work is important because they affect not only what customers choose to buy but also how much value they believe they are getting from a product.

Anchoring refers to the tendency of consumers to depend on the first piece of information they come across while judging a price. The first piece of information becomes an "anchor" or “reference point” that influences their later judgements. Anchoring is very common in pricing because consumers usually do not know the exact value of a product, so the first price they see will automatically become a benchmark. For example a smartphone is first shown at Rs. 70000 and then offered at a ‘discounted’ price of Rs. 55000, consumers often feel it is a good deal because the initial price acts as an anchor, even if the selling price is not lowest in the market. This often happens because people do not know the real or fair market value of many products so the displayed anchor will shape their perception. In modern retail marketing settings both online and offline anchoring is common pricing strategy appearing in strike through “MRP” tags and high initial prices followed by a large discount percentage

Framing is another psychological effect that influences how consumers interpret information based on how it is presented. The information itself remain the same but the way it is framed changes how people feel about it. For example putting a tag of “50% off” may appear more attractive than saying “save Rs.1500” even the final price is exactly the same. Similarly highlighting a discount as a “limited time offer” or “exclusive offer” may encourage stronger positive responses even though it does not changes the actual price. The power of framing effect lies in the fact that consumers respond not only to the numerical values but also to the emotional tone context in which information is offered. In today’s marketplace, especially with the rise of e-commerce and frequent promotional events, consumers are constantly exposed to anchors and frames. As a result, their perception of price and value is shaped by more than numerical information alone. Understanding how these biases affect consumer decisions is important for businesses aiming to design fair and effective pricing strategies, and equally important for consumers who wish to make more informed choices. This study focuses on examining the influence of anchoring and framing on consumers’ price perception in a retail context. By collecting responses from consumers, the research aims to shed light on the extent to which these psychological cues impact everyday buying decisions.

### **Statement of the Problem**

Consumers today face prices that keep changing, and many people do not always know whether a price is actually high, low or reasonable. In many real situations, people do not judge a price by itself. Instead, they compare it with some number they see first, like a starting price, a discount label, or the way the offer is presented. This first number or message often creates a kind of “anchor” in the mind. After that, people adjust their judgment, but usually not enough. Because of this, their final idea of the price may not be accurate.

Even though anchoring and framing are known ideas in behavioural research, many ordinary consumers do not realise how strongly these effects shape their decisions. In everyday buying, people often trust their first impression of a price, and this can make them think something is a good deal even when it is not. Sometimes the way the information is shown, like emphasising savings or highlighting losses, also changes how they judge the same price. This can lead to wrong assumptions, confusion, or inconsistent choices.

In the present study, the main problem is that we do not fully understand how consumers in this context respond to anchoring and framing when judging prices. There is limited factual evidence from this sample of consumers, and there is also a lack of clarity about whether both effects work strongly or only slightly. Because of these gaps, it becomes difficult to understand whether consumers are making rational decisions or whether their judgments are being unintentionally shaped by these psychological effects. This study tries to address this issue by collecting responses from 90 consumers and examining how much anchoring and framing actually shift their price perception. The findings can help show the real pattern of consumer judgement and highlight the need for more awareness about such influences

### **Objectives of the Study**

1. To identify the extent to which anchoring influences consumers’ perception of product prices.
2. To assess the effect of different framing styles on consumers’ evaluation of the same price.
3. To compare the influence of anchoring and framing to see which bias has a stronger impact on price perception.

4. To analyse whether consumers show variations or consistency in their price judgments when exposed to anchoring and framing cues.

### Hypotheses of the Study

**H1:** Anchoring has a significant influence on consumers' perception of product prices.

**H2:** Different framing styles (positive vs. negative) produce a significant change in consumers' evaluation of the same price.

**H3:** There is a significant difference between the impact of anchoring and framing on consumers' price perception.

**H4:** Consumers show noticeable variation in their price judgments when exposed to anchoring and framing cues.

### Methodology

This study followed a simple quantitative design to understand how anchoring and framing influence the way consumers judge product prices. The purpose was not to measure financial knowledge or buying ability but to see how people react to basic price information when it is presented differently.

A total of 90 consumers participated in the study. They were selected through convenience sampling. The questionnaire had three parts. The first part collected simple demographic details, mainly to understand the background of the respondents. The second part measured anchoring by giving participants a reference price and then asking how fair or reasonable they found the actual price. The third part assessed framing by showing the same price in different ways, such as emphasising savings or highlighting loss. The items were rated using a five-point scale, which helped in converting the responses into numerical data for analysis.

Data collection was done manually and through online forms, and the responses were transferred into JASP for analysis. Before running the tests, basic checks like reliability were performed for the scaled items. The study used descriptive statistics to understand general patterns and inferential tests to examine the strength of anchoring and framing effects.

### REVIEW OF LITERATURE

Tversky and Kahneman (1974) introduced the concept of anchoring, explaining how individuals rely heavily on the first piece of information when making judgments. Their early experimental work showed that even irrelevant numerical anchors could influence decision making, laying the foundation for understanding price-related anchoring in consumer behaviour. Ariely et al. (2003) examined this effect further and found that consumers often form valuations of products based on arbitrary initial prices, demonstrating that the first displayed price shapes later willingness to pay.

Mazumdar, Raj, and Sinha (2005) studied reference price formation in retail settings and concluded that consumers depend strongly on external price cues such as list prices and suggested retail prices. Their research showed that anchoring is particularly strong when consumers lack complete information about the true value of a product. Adaval and Monroe (2002) also found that initial price cues influence perceived value, noting that consumers adjust insufficiently from the anchor even when they are aware that the initial price may be exaggerated.

In the context of framing, Thaler and Sunstein (2008) highlighted how small changes in the wording or presentation of information can alter consumer choices without changing the actual price. Their findings

emphasised that gain-framed messages (such as “you save ₹500”) can generate different reactions compared to loss-avoidance frames. Levin, Schneider, and Gaeth (1998) conducted a detailed review of framing effects and found consistent evidence that consumers respond differently when identical information is presented in positive versus negative frames, especially in purchase and pricing decisions. Grewal and Marmorstein (1994) studied promotional framing and found that the way discounts are presented percentage off versus rupee savings significantly affects consumers’ perceived value and likelihood to purchase. Their results showed that framing influences emotional reactions toward price deals even when the final price remains unchanged.

Overall, past studies consistently show that anchoring and framing significantly influence consumer price perception, with anchoring creating a strong reference point and framing shaping how consumers interpret the same price information.

## RESULTS AND DISCUSSION

Based on the responses collected from 90 consumers, descriptive statistics were computed for the anchoring and framing variables. The mean and standard deviation values helped to identify the overall tendency and variation in consumer responses relating to price perception under different psychological cues. The results are presented in Table 1.

**Table 1: Descriptive Statistics**

| Items           | N  | Min  | Max   | Mean  | Std. Dev. |
|-----------------|----|------|-------|-------|-----------|
| Anchoring Score | 90 | 2.00 | 4.667 | 3.411 | 0.563     |
| Framing Score   | 90 | 2.00 | 4.333 | 3.115 | 0.618     |

*Source: Compiled from survey data*

The descriptive results indicate that both anchoring and framing have influenced consumer price perception. Among the two, anchoring shows a slightly higher mean score (3.411) compared to framing (3.115), which suggests that consumers tend to rely more strongly on the initial price or reference point they are exposed to rather than the manner in which price information is framed. The variation in responses is moderate in both cases, with standard deviation values of 0.563 and 0.618 respectively.

## Reliability of Measurement Scales

Before further analysis, reliability tests were carried out to verify the internal consistency of the items used to measure anchoring and framing effects. The results are shown in Table 2.

**Table 2: Reliability Statistics**

| Scale     | Cronbach’s Alpha | Std. Error | 95% Confidence Interval (Lower–Upper) |
|-----------|------------------|------------|---------------------------------------|
| Anchoring | 0.744            | 0.056      | 0.634 – 0.854                         |
| Framing   | 0.788            | 0.047      | 0.695 – 0.881                         |

*Source: Compiled from survey data*

Both scales show Cronbach’s alpha values above 0.70, indicating good internal consistency and reliability for the measurement instruments used in the study.

### Difference Between Anchoring and Framing Influence

A paired samples t-test was performed to determine whether a significant difference exists between anchoring and framing scores of the respondents. The results are presented in Table 3

**Table 3: Paired Samples t-Test**

| Measure 1       | Measure 2     | t     | df | Sig. (p-value) |
|-----------------|---------------|-------|----|----------------|
| Anchoring Score | Framing Score | 3.408 | 89 | < .001         |

*Source: Compiled from survey data*

The results indicate a statistically significant difference between anchoring and framing ( $p < 0.001$ ). This implies that consumers' price perception is influenced more strongly by anchoring than by framing. The significant difference supports the assumption that the reference price presented to consumers plays a more dominant role in shaping their judgment compared to the manner in which the price information is framed.

### Relationship Between Anchoring and Framing

Correlation analysis was performed to examine whether anchoring and framing are related psychological constructs among respondents.

**Table 4: Correlation Analysis**

| Variables                       | Pearson's r | Sig. (p-value) |
|---------------------------------|-------------|----------------|
| Anchoring Score - Framing Score | 0.028       | 0.795          |

*Source: Compiled from survey data*

The correlation coefficient ( $r = 0.028$ ) shows almost no relationship between anchoring and framing, and the result is not statistically significant ( $p > 0.05$ ). This indicates that both biases operate independently, and the extent to which a consumer is influenced by anchoring does not determine how strongly they respond to framing cues.

### Discussion

The findings of the study provide a clear picture of how consumers respond to different types of price information. The results indicate that anchoring and framing both play a role in shaping how people judge product prices, but the strength of their influence is not the same. Among the two, anchoring emerged as the more dominant factor. The respondents tended to rely heavily on the initial price or reference point they were exposed to, which is consistent with earlier behavioural research that shows consumers often struggle to adjust away from the first piece of information they see. The higher mean value for the anchoring score reinforces this tendency.

Framing, on the other hand, also affected consumer responses but to a comparatively lesser extent. Although the same price was presented in different ways, the change in evaluation was not as strong as the shift created by an anchor. This suggests that while promotional messages, discount wording, and the phrasing of price information do influence consumers, they may not override the initial reference price given to them. This behaviour is commonly seen in retail settings, where consumers interpret discounts in relation to the tagged or displayed "original" price.

The paired samples t-test further strengthens this interpretation by confirming a statistically significant difference between the effects of anchoring and framing. This difference shows that consumers give more weight to the first price they encounter rather than to how the price message is framed later. This finding is important because it highlights how easily consumers may form an impression of a “good deal” even before analysing the actual value of the offer.

The absence of a significant correlation between anchoring and framing also provides an interesting insight. The two biases appear to operate independently, meaning that a consumer who is highly influenced by anchoring is not necessarily influenced by framing, and vice versa. This independence suggests that different psychological mechanisms are at play, and each bias affects consumer judgement in its own way. Overall, the results indicate that consumers may not always make price judgments based solely on rational thought. Their decisions are shaped by subtle psychological cues that they may not be consciously aware of. The strong effect of anchoring observed in this study highlights the need for greater awareness among consumers and more responsible pricing strategies from marketers. As retail environments continue to use reference prices and promotional framing extensively, understanding how these cues affect consumer behaviour becomes increasingly important.

## CONCLUSION

This study shows that both anchoring and framing influence how consumers judge product prices. The results from 90 respondents indicate that anchoring has a stronger effect. When people see an initial price, it becomes a reference point, and they tend to compare all later prices with it. Because of this, the first price shown often shapes their final decision more than they realise.

Framing also affects price perception, but to a smaller extent. Changing the way a discount or offer is presented can make the same price seem more attractive, but it does not influence consumers as strongly as the first anchor they see. The study also found that anchoring and framing do not depend on each other, meaning each bias works separately.

Overall, the study shows that consumers do not always judge prices logically. Their decisions are affected by the first price they see and by how price information is presented. These findings help us understand why people may think they are getting a good deal even when the actual price has not changed much. It also highlights the need for consumers to be more aware when evaluating prices and for marketers to use pricing strategies responsibly.

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