

# Anchoring effects and applications

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## Abstract

The anchoring effect has long been a subject that has attracted researchers from a diverse range of fields, including economics, finance, and psychology. This paper describes the background, definition, motivation, and some applications of the anchoring effect. Simultaneously, we pay more attention to the influence on economic research and consumption decisions. In application 1, we focus on the anchoring effect and marketing strategy by analyzing Evian water in Starbucks, the limited purchase of Campbell soup, and the descending price order on the menu. In application 2, we focus on the measurability of the anchoring by calculating the amount of donation under different situations and assessing the house's value. In application 3, we focus on the link between the anchoring effect and suggestion by analyzing additional questions in two porridge shops. Our studies showed that anchoring affects all aspects of people's lives. In addition, all our preliminary results illuminate the nature anchoring effect, which significantly influences the research of heuristics.

**Keywords:** Anchoring effects, globalization, personalization, customization, and diversification

## Introduction

With economic globalization, the continuous improvement of material living standards, the constant enrichment of spiritual life, and the multi-dimensional development of social culture, consumers' material purchase needs have changed from meeting basic life needs to personalization, customization, and diversification, highlighting personal characteristics and satisfaction. Therefore, the internal mechanism and influencing factors of consumer decision-making become more and more complicated and challenging to grasp.

But under buyer's market conditions, consumers have most of the control of market exchange. Therefore, clarifying the decision-making process, rationalization mechanism, and impact factors of consumers when purchasing products is the essential demand for enterprises to effectively classify consumers into specific categories, market segmentation, product positioning, and promotion strategies, and it is also a necessary prerequisite for enterprises to implement particular marketing strategies successfully.

The anchoring effect is a pervasive psychological phenomenon that affects our decision-making and behavior. By recognizing the anchoring impact and taking appropriate measures, we can improve the accuracy of decision-making, avoid being misled by unreasonable information, and better deal with challenges in work and life. Firstly, anchoring helps us to realize the potential impact. Secondly, anchoring helps us to think from different angles. Thirdly, anchoring helps us to judge independently.

As an essential component of the heuristic, the anchoring effect is significant to economics research and people's daily lives. According to Epley N and Gilovich, "people use missetting as a reference frame to define gain or loss, so the simplified model composed of anchoring values has an important impact on the later decision-making of individual"<sup>[1]</sup>. Similarly, Tversky A. and Kahneman D found, "In the field of economic research, consumers will also rely on the anchoring effect theory to calculate whether they get benefits based on the absolute value of anchoring"<sup>[2]</sup>.

According to Kahneman. D. said, "Anchoring effects explain why, for example, arbitrary rationing is an effective marketing strategy"<sup>[3]</sup>. According to Kahneman. D., he said, "Anchoring is a case of suggestion; the suggestion is a priming effect, which selectively evokes compatible evidence."<sup>[4]</sup> Consequently, in the first sample experiment, participants given a high anchor would produce a high donation amount, while others with a low anchor would have a low donation amount. Similarly, in the second experiment, the anchoring effect could influence real estate agents, even if they are not realized.

It is acknowledged that the anchoring effect and suggestion are relevant. In this sample application, two shops with different greeting ways and expressions have additional sales.

## 2.Heuristic

### 2.1 what is it?

Anchoring refers to people's tendency to link future

estimates with past estimates, and they are susceptible to other people's suggestions. When people estimate the quality of something, there is no absolute good or bad; everything is relative, and the key depends on how you position the basis point. The positioning of the base point is like a mistake; it is determined, the evaluation system is determined, and the quality is assessed.

The anchoring effect means that when people need to quantitatively estimate an event, some specific values will be used as the starting value, and the starting value is like an anchor to restrict the estimated value. When deciding, you unconsciously give too much weight to the initial information.

## 2.2 Definition

According to Tversky and Kahneman(1974), "In many situations, people estimate by starting from an initial value adjusted to yield the final answer. The initial value, or starting point, may be suggested by the formulation of the problem, or it may be the result of a partial computation. In either case, adjustments are typically insufficient. Different starting points yield different estimates, which are biased toward the initial values. We call this phenomenon anchoring"<sup>[5]</sup>

## 2.3 Why it matters?

The anchoring effect can be applied to the research of judgment and decision problems in many fields. For example, consumption decision-making behavior, medical diagnosis behavior, technology evaluation problems, legal judgment, consultation and negotiation, price estimation problems, and performance evaluation risk decision problems.

In real life, people are often in an uncertain situation to make judgments and decisions, which may cause cognitive and decision bias. Although we can not avoid these biases altogether, a correct understanding of their internal mechanisms can help us effectively reduce them and think more rationally about our decision-making process. As a heuristic estimation bias of misalignment and adjustment, the study and understanding of the mechanism and main influencing factors of the misalignment effect on consumers' price decisions can help marketing planners implement more accurate marketing strategies according to the characteristics of consumers' price decisions and also assisting the enterprises to predict consumers' purchasing decision behaviors better, offering a more distinctive service to your customer base.

## 2.4 Applications

### 3.4.1 Application 1: anchoring effects and marketing strategy.

In the case of marketing strategy, the price anchor point is the comparison benchmark of commodity prices. In marketing, enterprises shake people's evaluation of the value of money through various anchor tricks or the use of contrast and suggestion to create illusions.

As an anchor in Starbucks, Evian Water costs 22 yuan, which is five times more than any other shopping platform. Hence, people who want to show their status may buy it at Starbucks since the price of Evian water at Starbucks may give a high-end impression. Additionally, coffee for 30 yuan or 40 yuan is not so expensive compared with the cost of Evian water.

Limited purchase is an effective marketing strategy. Taking Campbell Soup as an example, shoppers purchased seven cans when there was a restriction of 12 cans, which is twice as much as no restrictions. As a result, the number of 12 cans could produce an anchoring effect to influence decisions and choices.

Price list in descending order. In other words, The menu prices in a restaurant or bar are listed in descending order. Put the most expensive price first, which becomes the starting point of reference, the anchor. For this reason, as customers navigate the menu from top to bottom, there is a sense of monetary enjoyment as prices get cheaper and cheaper. Consequently, It is easier for merchants to sell for higher prices. Some merchants will take advantage of this psychology, first marking the high cost and then declaring a discount sale; although the final transaction price is still high, customers still choose the discount products. Although in this process, the customer knows that the price will fall, the quality of the product will also decline, but out of loss aversion, the happiness of paying less is far greater than that of getting a little more quality.

### 3.4.2 Application2: anchoring effect and measurability

The anchoring effect is unique compared to many other psychological phenomena. That is to say, the anchoring impact can be measured, and its product is extensive.

When it comes to money, people's decisions have a substantial anchoring effect. For example, in a donation campaign, experimentalists asked different questions to different survey respondents. For some visitors, the experimenter asked, "Would you like to donate money to protect the marine creatures?" Simultaneously, the experimenter asked another group of visitors, "Would you like to donate \$5 to protect marine creatures?". There is no doubt that the two different questions produced very different results. Without mentioning the amount of \$5 anchored, the average amount of money these conservation tourists were willing to hand over was \$64. However, When the anchoring amount was only \$5, the average contribution was only \$20. When the anchor

amount reached \$400, the average donation reached \$143. The difference between the high and low anchor amounts is \$123, and the anchor index is above 30%, indicating that increasing the initial asking price by \$100 yields an average return of \$30.

Similarly, in the case of valuation, the anchoring effect plays a significant role. In one experiment, real estate agents were asked to assess the value of a house for sale. The experimenter provided them with comprehensive information about the place and the selling price. Simultaneously, the real estate agents went to see the house in person. Then, they came up with what he thought was a reasonable selling price. Although they insisted they were not affected by the selling price, the anchoring effect was still as high as 41 percent. Professionals suffer from the same anchoring effect as business students who know nothing about real estate, with the latter having a higher % anchoring impact of 48%.

### 3.4.3 Application 3: anchoring effect and suggestion

There is a link between anchoring development and direction. The relevant cases are as follows:

There are two shops selling porridge on the same street. However, the daily turnover of the shop on the left is always tens of dollars more than that of the shop on the right. To understand the differences in the sales strategies of the two stores, The experimenter came to the shop on the right, and the owner asked, "Do you add eggs?".

However, when he came to the shop on the left, the owner asked him: "Add an egg or two eggs? " The number of eggs added can be regarded as anchoring. Undoubtedly, different questions can produce different results; the store on the left sells more eggs than the one on the right.

However, the two stores place consumers in different positions. The shop on the right allows customers to freely choose whether to add eggs or how many eggs to add. On the contrary, the owners of the shops on the left put consumers in a position where they have to spend to increase their turnover.

It is difficult to comment on the impact of this implication on people's spending decisions. However, with the development of society and the progress of people's ideas, people nowadays pay more attention to their rights of free choice. Thus, setting too strict an anchor for profit can be counterproductive.

## 3. Conclusion

In conclusion, anchoring effects are essential in economic research and daily life. First, it could be considered an effective marketing strategy, especially in influencing consumption decisions. As a result, owners could use this psychological phenomenon to earn more profits. Second, the anchoring effect is measurable. By measuring the effect of anchoring, we could better understand the potential impact and think from different angles. Third, anchoring is a kind of suggestion; it exerts a subtle influence on people's thoughts and decisions. However, it is worth noting that the anchoring effect is not always beneficial. To sum up, we should make good use of the advantages of anchoring and avoid the disadvantages so that it can better serve our lives.

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