



April 2025

The Psychology of Free: How a Price of Zero Influences Decisionmaking

Andrea Caceres-Santamaria, Senior Economic Education Specialist

“The best things in life are free.”
—Coco Chanel

Introduction

Why do we get so excited when we see the word “free”? In competitive markets, businesses use strategies to attract customers and increase sales. One effective and appealing tactic is offering something for free. Examples include “Buy one, get one free!” and “Free samples inside!” The power of “free” goes beyond just saving money; it involves psychological factors that influence our decisions without us realizing it. Free items, free shipping, and the psychological impact of “free” reveal much about social norms and human decisionmaking.

Zero-Price Effect

People get excited about not having to give up something in order to gain something else. Think of lines for free food samples or all the free promotional items such as pens, chip clips, and candy people take at conferences or events. It may feel like a successful treasure hunt for things you didn’t even know you wanted! When something is offered for free, people often put a greater value on it.

From an economic perspective, this excitement can be linked to the concept of **consumer surplus**, which is the difference between the highest amount a consumer is willing to pay and what they actually pay. When an item is free, the consumer surplus is maximized, creating a sense of gaining a great deal.

As a result, people may take little to no notice of any downsides to acquiring the item, such as potential quality issues or the time and effort required to use the item. The Decision Lab notes that, since humans are intrinsically afraid of loss, presenting something as “free” takes away those fears. It brings up the thought of, “Why not? I have nothing to lose since I am not paying for it.” They describe this as the **zero-price effect**—the psychological effect that happens when increased value is placed on something priced at zero. We usually decide if something is worth getting by looking at its cost, the effort needed to get it, and the benefits it offers. However, we tend to ignore our usual decisionmaking process when something is free. We may overestimate the benefits of free items and overlook any potential drawbacks.

Emotional vs. Rational Decisionmaking

When making purchasing decisions, our minds activate a **cost-benefit** analysis. Certain purchases like a car or a house require more careful decision analysis. However, when deciding what to eat at a restaurant, it comes down to taste and the options available. Cost-benefit analysis involves identifying pros and cons between two or more choices. In addition to spending, there is also something to lose. The “something to lose” in a cost-benefit analysis refers to potential negative outcomes, such as financial loss or missed opportunities, that might result from choosing one option over another. When spending money, it is important to minimize any losses.

So, how does the idea of “free” bypass logical cost-benefit analysis? Educational psychologist Bill Ross believes it’s the role of dopamine in our perception of free. That is, our brains enjoy the satisfaction of being rewarded for something, and “free” makes people feel rewarded. Dopamine is a neurotransmitter that plays a key role in the brain’s reward system, regulating pleasure and motivation. When we experience something enjoyable like getting something for free, dopamine is released, creating a sense of pleasure and encouraging us to repeat the behavior.

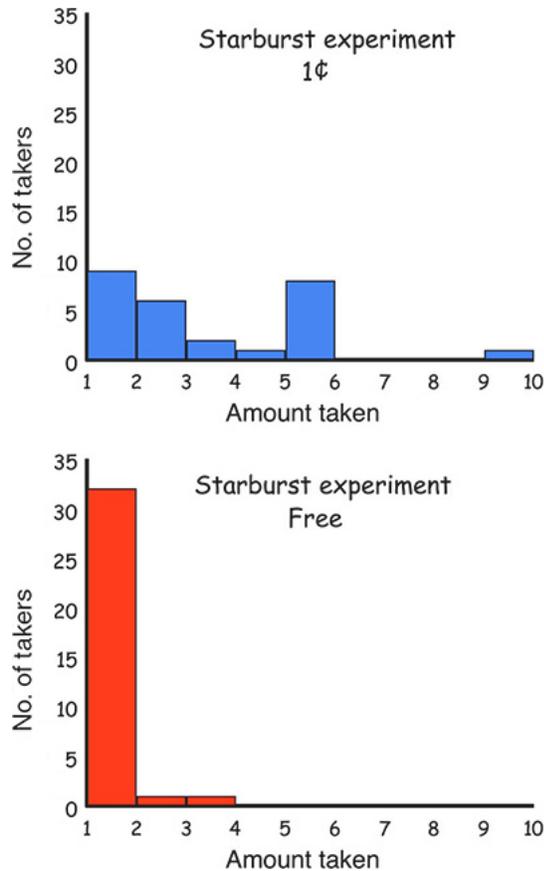
Zero-Price Effect and Social

So, if we’re less likely to do a cost-benefit analysis and dopamine contributes to feeling pleased and rewarded when getting free stuff, does this mean that a price of zero increases the demand for a product? The law of demand states that, all else being equal, as the price of a product decreases, the quantity demanded by consumers will increase, creating an inverse relationship between price and quantity demanded. [Ariely, Gneezy, and Haruvy show](#) that when prices go down, people tend to buy more of that product, following the market norm of seeking the best value for their money.

The authors highlight that the interaction between buyers and sellers in a market is guided by prices. So, if following the law of demand, an individual consumer would demand a higher amount of a product when its price goes from, say, \$1 to \$0. However, after the price is set to \$0, social norms come into effect. **Social norms** are the unwritten rules and expectations about how people should behave in a particular society or group. Studies show that when things are given away for free, some people are more conscious about the external perception of their actions. That is, if something is given away for free, people are more cautious about the amount they take. They do not want to be seen as greedy by taking too much and not leaving enough for others. Social morals guide our actions in these situations by prompting us to consider others and apply the norm of fairness.

A study that Dan Ariely conducted at the Massachusetts Institute of Technology highlights this concept. A candy booth was set up at the university’s student center, where hungry college students walked by. The experiment was conducted in two different conditions: Condition one (also called the monetary condition) advertised the candy for one cent. Condition two advertised the candy for free. The researchers counted the number of students who stopped by the booth and how many candies were either taken for free or paid for.

The initial goal of the researchers was to have roughly 30 students per condition. The figure below shows the frequency distributions of the amount of candy taken by individuals across the two conditions. In the monetary condition, where the candy cost \$.01, the average amount taken was 3.45 pieces. In the free condition, the average amount taken was 1.09 pieces.



SOURCE: Ariely, Dan; Gneezy, Uri and Haruvy, Ernan. "Social Norms and the Price of Zero." *Journal of Consumer Psychology*, 2018, 28(2), pp. 180-91.

So, does the law of demand apply when the price is zero? Well, the candy experiment shows that the quantity demanded by each individual in the free condition was lower than in the monetary condition. The product was attractive at a price of zero, but there was likely careful thought about other people. This may have slowed down students' impulse to take a lot of candy, allowing them time to think about the costs and benefits of taking one or more pieces.

Ariely's experiment shows that in certain situations, we reflect on the costs and benefits to not only ourselves, but others: The benefit that a student enjoys one piece of candy and leaves more for others to enjoy as well gets weighed against the cost that maybe the student could have made a healthier choice; but, surely that dopamine kicked in the moment they saw that free candy *and* as they enjoyed it!

Social norms work the other way, too. [Gneezy and Rustichini conducted an experiment](#) that examined whether fines imposed on parents who were late to pick up their children from daycare would reduce the behavior. As it turns out, tardiness *increased* after the fine was imposed. Oddly, when the price for being late was zero, fewer people were late than when the price was above zero. One potential explanation suggests that adding a fine made showing up on time seem optional. Without the fine, parents felt

they were inconveniencing the teachers, which created social pressure to be on time. Once the fine was added, it seemed like another price point, where paying the higher price was simply an economic decision. Of course, a much higher fine would likely change the outcome.

Free Shipping

Now let's look at how using the term "free" *increases* spending. More and more online retailers are attracting customers through the promise of shipping purchases for free. It has become so popular to offer free shipping that one of the top reasons consumers abandon their online shopping carts is because they see a shipping charge. According to Shopify.com, if free shipping is not offered, a retailer could experience up to 48% of shoppers abandoning their online carts. Retailers can encourage customers to spend more by setting a minimum purchase amount in order to get free shipping. Say, for example, that minimum amount is \$50; a customer who is at \$46 and sees that shipping will be \$8.99 is most likely to go back and make a purchase of \$10-\$15 to get the free shipping. Customers do this because they perceive greater value in buying an additional item rather than paying for shipping.

Conclusion

"If it's free, it's for me!" sounds exciting, and that's because it *does* create a sense of excitement. Our brains are wired to enjoy the feeling of getting something for free. Just be careful about the hidden costs of "free" and try to make informed decisions. The zero-price effect changes our perceived value of the free item, and we often ignore the costs-benefit analysis that is involved in monetary transactions: Remember, when you choose to stand in a long line to get that freebie, you are giving up doing something else.

Glossary

Benefits: Things favorable to a decisionmaker; rewards gained from an action/activity.

Consumer surplus: The difference between the highest amount a consumer is willing to pay and what they actually pay.

Costs: Things unfavorable to a decisionmaker.

Social norms: The unwritten rules and expectations about how people should behave in a particular society or group.

Zero-price effect: The psychological effect that happens when increased value is placed on something priced at zero.

References

Ariely, Dan; Gneezy, Uri and Haruvy, Ernan. "[Social Norms and the Price of Zero](#)." *Journal of Consumer Psychology*, 2018, 28(2), pp. 180-91.

"Free Shipping: Why It's Important and How to Cover the Costs (2025)." Shopify.com, updated February 26, 2025.

Gneezy, Uri and Rustichini, Aldo. "[A Fine Is a Price](#)." *Journal of Legal Studies*, 2000, 29(1), pp. 1-17.

Ross, Bill. "Psychology of Free: Its Impact on Buying Behavior." Emulent (blog), December 13, 2024.

"Zero Price Effect." The Decision Lab, n.d.

Name _____ Period _____

Reading Q&A

The Psychology of Free: How a Price of Zero Influences Decisionmaking

After reading the article, complete the following:

1. What is the “zero-price effect”?
 - a. The idea that people prefer expensive items over free ones
 - b. Placing a higher value on something just because it is free
 - c. The assumption that free items are of low quality
 - d. The economic principle that free items have no real cost
2. Which economic concept is linked to the excitement of getting something for free?
 - a. Marginal utility
 - b. Marginal cost
 - c. Consumer surplus
 - d. Inflation
3. How does “free” impact rational cost-benefit analysis?
 - a. It encourages people to be more logical about their choices.
 - b. It forces people to consider the long-term consequences.
 - c. It causes people to bypass logical decisionmaking and act emotionally.
 - d. It has no effect on decisionmaking processes.
4. Which of the following best explains why free shipping leads to higher spending?
 - a. Customers perceive greater value in adding more items than paying for shipping.
 - b. Free shipping decreases the overall price of all items in the cart.
 - c. Customers believe the shipping cost will be refunded later.
 - d. Free shipping makes customers more likely to abandon their carts.
5. How do social norms affect consumer behavior when items are free?
 - a. People take as much as they can without hesitation.
 - b. People reduce the amount they take to avoid appearing greedy.
 - c. People tend to ignore social expectations and focus only on personal gain.
 - d. Social norms have no effect on free item consumption.

6. Why did tardiness increase when a fine was introduced at the daycare?
 - a. The fine made showing up on time seem optional.
 - b. The fine was too expensive for most parents to pay.
 - c. The daycare's policy made lateness less common.
 - d. Parents were confused about the new rule.

7. According to the law of demand, when the price of a product decreases, the quantity demanded
 - a. decreases.
 - b. remains constant.
 - c. becomes unpredictable.
 - d. increases.

8. What is one key takeaway from both the candy and daycare experiments?
 - a. Economic decisions are purely rational and uninfluenced by emotions.
 - b. Social norms can sometimes override traditional market behaviors.
 - c. People always prefer paying a small amount over getting things for free.
 - d. Pricing decisions have no impact on consumer behavior.