Kevin Magnani - Wachusett Regional High School



# **Lesson #1: The Anchoring Effect**

## **Abstract**

This lesson helps you introduce and simulate the impact the cognitive bias of the Anchoring Effect has on rational decision-making for individuals. Students will participate in a classroom experiment designed to anchor their choice-making process. Students also get exposed to interpreting and drawing conclusions off of experimental data from econometrics.

### **Objectives**

The student will be able to:

- 1. Understand through participating in a class experiment the power anchoring has on individual choice making.
- 2. Collaborate and critically think with peers as to how anchoring plays a crucial role on consumerism and revenue generation.
- 3. Apply the experiment to real world marketing examples and economic topics.

### **Details**

National Standards: Economics Standard 2, Standard 4 and Standard 8

Time: One class period (45-50 min)

Grade level (8th-12th)

Subject(s)

Key concept(s): Behavioral Economics and the Anchoring Effect

Materials/Resources: whiteboard, presentation easel or projector, dry erase markers, scrap paper

Online links for resources used in the lesson: N/A

Teacher Prep: Teacher should select a common product and create an image of that product to display to the class. The teacher should have the retail price of the product known in order to reveal it after the experiment.

# **Lesson Plan**

### **Activities:**

- 1. Write on the whiteboard or project the three digits 1 5 9 to the class
- 2. Instruct each student to make any 3-digit number out of numbers shown (using each number only once) and convert it to dollars.
- 3. Instruct students to write their number on a scrap paper to themselves 10 times.
- 4. Instruct students to now say quietly to themselves the dollar amount they wrote down 20 times.
- 5. Instruct students to make a quick jingle song out of the dollar value number.
- 6. Now show the image you selected (without the retail price!). Be sure you know the retail price but do not reveal it. Ask students to write down what they think the retail price would be.

Kevin Magnani - Wachusett Regional High School



7. Draw a 3 column chart on the board for data collection as follows:

1 5 9

- 8. Have any student who created a 3-digit number that started with a 1 come up to the board and put their retail price guess in the 1 column. Do the same for the 5's and the 9's
- 9. If anchoring occurred, those whose numbers started with 1 should have guessed a low retail price and those that had a number beginning with 9 should have guessed more expensive retail prices.
- 10. Reveal the actual retail price of the image to the class.
- 11. Have class as a group try to determine the strength of the anchoring effect. Ask "What do you notice about the price guesses vs the numbers created?" Compare data of those with higher numbers with higher prices, lower numbers with lower prices to see who was anchored.

#### **Assessment:**

- 1. Discussion or Written Response: "Provide two examples of Anchoring tactics used in retail sales or marketing and explain how the bias is being used to increase sales."
- 2. Pair and Share: Share out with a partner a time in which you believe you allowed the anchoring bias to impact your economic decisions.

**Extension: (if available)** 

#### **Exit Ticket:**

1. Each pair shares one experience they discussed in the Pair and Share above.

## **Lesson #2: Loss Aversion Bias**

#### <u>Abstract</u>

This lesson helps you introduce and simulate the impact the cognitive bias loss aversion has on rational decision-making for individuals. This lesson can be used before introducing the marketing and business strategies of industries such as the gaming industry and its power over consumers.

## **Objectives**

The student will be able to:

- Understand through participating in a class experiment the power loss aversion has on individual choice making.
- 2. Collaborate and critically think with peers as to how loss aversion plays a crucial role on consumerism and revenue generation.
- 3. Apply the experiment to real world marketing examples and economic topics.

## **Details**

National Standards: Economics Standard 2, Standard 4 and Standard 8 / Personal Finance Standard 6

Time: One class period (45-50 min)

Kevin Magnani - Wachusett Regional High School



Grade level (8th-12th)

Subject(s)

Key concept(s): risk, loss aversion, cost / benefit analysis, marginalization

Materials/Resources: one pair of dice (or online dice roll simulator); Record Sheet, Worksheet: Casinos and Loss Aversion.

Online links for resources used in the lesson: N/A

Teacher Prep: Teacher should create an Excel or Google Spreadsheet that is projected in front of the class to show the results of the experiment as the lesson progresses. Here is a template <u>Record Sheet</u>. Classroom copies of the <u>Worksheet: Casinos and Loss Aversion</u> should be made available to the class.

## **Lesson Plan**

#### **Activities:**

- 1. Begin by asking students what emotions are associated with risk and risky behavior. Write their responses on the board. (responses such as "scary"; "thrilling", "exciting", anxiety" will be typical)
- 2. Ask students what advantage sellers have if they get the consumer to feel those emotions. Write down the responses on the board and discuss. (typical answers: they are impulsive, not thinking straight, may buy more off emotion)
- 3. Have students Turn And Talk to a partner and come up with two industries that exploit risk emotions from consumers as part of their business model. (car companies, casinos, stock brokers). Share out the answers to the class for 5 min.
- 4. Now project on the screen your Excel or Google <u>Record Sheet</u>. Ask for 5 student volunteers to come up. Record their names on the Record Sheet.
- 5. ROUND 1: Ask all 5 students to choose one of these:
  - a. Play the game and:
    - i. if the die rolls an odd number, you get 10 points added to your next exam
    - If the die rolls an even number, you get 5 points removed from your next exam
  - b. Choose not to play and you get 1 point on your next exam for volunteering.
- 6. Record their choices on the Record Sheet under ROUND #1.
- 7. ROUND 2: Change THE PAYOUT ONLY to the following and ask the 5 students to choose again:
  - a. Play the game and:
    - i. if the die rolls an odd number, you get 15 points added to your next exam
    - ii. If the die rolls an even number, you get 5 points removed from your next exam
  - b. Choose not to play and there are no points added or taken away (notice how these higher stakes can nudge them to play esp with no gain for simply volunteering!)
- 8. Record their choices on the Record Sheet under ROUND #2.
- 9. ROUND #3: REVERT TO ORIGINAL PAYOUTS from Round #1 but change the ODDS ONLY to the following and ask the 5 students to choose:
  - a. Play the game and:
    - i. if the die rolls any number except 1 or 6, you get 10 points added to your next exam
    - ii. If the die rolls a 1 or 6, you get 5 points removed from your next exam
  - b. Choose not to play and you get 1 point on your next exam for volunteering.
     (notice here how the chance of winning is greater but we can see who is most risk adverse)

Kevin Magnani - Wachusett Regional High School



10 Record their choices on the Record Sheet under ROUND #3. Ask the class to look at the results and ask the following questions:

- a. Who was most risk tolerant? Who was most risk adverse?
- b. What do the results show about what motivated changes in their decision making? Payout or Odds?
- c. Did winning or losing the first round influence their decision on whether to play the next round?

### **Extension:**

Hand out a copy of the <u>Worksheet: Casinos and Loss Aversion</u>. Have students watch the video <u>Loss Aversion: A Trick</u> <u>Our Brains Play On Us In Gambling and Life</u>. Have students complete the worksheet questions for homework.

#### **Exit Ticket:**

Students answer the question "Which of the 5 volunteers would a business like a casino most like to have as their customer?"

### **Resource Links:**

Record Sheet Template
Worksheet: Casinos and Loss Aversion

video Loss Aversion: A Trick Our Brains Play On Us In Gambling and Life

### Lesson #3: It's Your Store - Behavioral Economic Biases Assessment



## **Abstract**

This lesson helps students finalize the concepts of behavioral biases at the end of the behavioral economics lesson. It serves as a quick formative assessment of the concepts that connect behavioral economic biases in decision making with business management and marketing tactics. Students get a real world look at how businesses use these biases to increase sales and revenues.

### **Objectives**

The student will be able to:

- 1. Understand how irrational, behavioral biases can impact consumer behavior.
- 2. Critically think of how to best market and identify strategies to increase sales based on consumer behavioral biases.
- 3. Demonstrate competency regarding key behavioral economic concepts.

## <u>Details</u>

National Standards: Economics Standard 2, Standard 4 and Standard 8 / Personal Finance Standard 6

Time: One class period (45-50 min)

Grade level (8th-12th)

Subject(s)

Kevin Magnani - Wachusett Regional High School



Key concept(s): marketing, anchoring, decision making, cost / benefit, revenue, decoy principle

Materials/Resources: Google Slides, Behavioral Biases Review Sheet, EXAMPLE SLIDE

Teacher Prep: As this lesson is used as an assessment at the end of the unit, teachers should ensure that each student group has access to creating a Google Slides presentation to hand in for the assessment.

# Lesson Plan

#### **Activities:**

- 1. Have students form groups of 2 or 3 students total
- 2. Hand out the Behavioral Biases Review Sheet to each group
- 3. Read the following prompt out loud to the class:

"Your group are the managers of a local retail store of your choice. (Clothing, food, sporting goods, etc). Your task is to incorporate behavioral economics biases into how you organize, display, advertise and offer products to your customers in order to increase sales revenues. You are to create a Google Slideshow that incorporates marketing tactics in your store that exploit each of the 10 biases on the review sheet (one slide for each bias)."

- 4. Have students start by reading the <u>Behavioral Biases Review Sheet</u> biases and taking 10 min to brainstorm ideas as a group. If a group of three, each group member must lead at least 3 of the 10 biases for division of labor.
- 5. Guide them in the process by presenting the following guidelines for structure.
  - Analyze each bias below and create an action plan for how you would incorporate this principle into changes within your store.
  - b. Write down the specific actions you would take to incorporate each behavioral bias into your store.
  - c. Create a slideshow of a title page and 10 slides. Cut and paste 1-2 pictures online to use as an example for each slide along with your action plan bulleted.
  - d. Put your name next to the slides that you lead the group on.
- 6. Show an **EXAMPLE SLIDE** for modeling the assessment

**Extension: None** 

Exit Ticket: Upload slideshow to Google Classroom or share with instructor

**Resource Links:** 

**Behavioral Biases Review Sheet** 

**EXAMPLE SLIDE** 

(end)