

Is Rationality Overrated?



Image: https://commons.wikimedia.org/wiki/File:Neurodiversity_Crowd_1.png

Supporting Questions

1. Should Bryson upgrade his phone?
2. What influences an individual's economic decisions?

Is Rationality Overrated?	
C3 Framework	D2.Eco.1.9-12. Analyze how incentives influence choices that may result in policies with a range of costs and benefits for different groups.
Staging the Compelling Question	Students view a 3 minute video of a teacher facilitating the Ultimatum Game in his class. Discuss why students made the decisions they made and whether those choices would be considered rational.

Supporting Question 1	Supporting Question 2
Should Bryson upgrade his phone?	What influences an individual’s economic decisions?
Formative Performance Task	Formative Performance Task
Complete a chart listing the costs and benefits associated with Bryson upgrading his phone.	List the factors that influence people’s economic decisions.
Featured Sources	Featured Sources
<p>Source A: Bryson’s Scenario</p> <p>Source B: “Top 10 Most Popular Cell Phones Right Now”, January, 2020</p>	<p>Source A: Vox Article - Is rationality overrated? Sometimes, it’s better to be reasonable.</p> <p>Source B: New York Times Excerpt - Why is Behavioral Economics so Popular?</p> <p>Source C: Blog Excerpt - The Irrational Consumer: What it means for behavioral economics</p>

Summative Performance Task	ARGUMENT: Is rationality overrated? Construct an argument in response to the compelling question using your answer to Bryson’s scenario and your rationale behind it.
	EXTENSION: Interview an adult about a time they made a reasonable but irrational purchase (for example, a birthday, holiday or vacation).

Inquiry Description

This inquiry leads students through an investigation of the psychology behind economic decision making. Rooted in the science of behavioral economics, this inquiry provides students with an opportunity to relate to the kinds of economic choices people in their age group make every day based on varying incentives, costs, and benefits. Students' first task is to consider the scenario of a same-age peer in regards to a theoretical cellphone upgrade. After following up with a brief introduction to behavioral economics, students will produce an evidence-based argument to support their claim for the compelling question: Is rationality overrated?

The primary economic standard addressed by this inquiry is:

- D2.Eco.1.9-12. Analyze how incentives influence choices that may result in policies with a range of costs and benefits for different groups.

It is important to note that this inquiry would benefit from prerequisite knowledge of economic concepts such as scarcity, opportunity cost, and incentives and as such, this inquiry highlights the following additional standards:

- D2.Eco.3.9-12. Analyze the ways in which incentives influence what is produced and distributed in a market system.
- D2.Eco.10.9-12. Use current data to explain the influence of changes in spending, production, and the money supply on various economic conditions.

Structure of the Inquiry

This inquiry integrates skills from the C3 Framework for Social Studies State Standards. In addressing the compelling question, "Is Rationality Overrated?," this inquiry draws upon contemporary sources ranging from consumer guides for popular cell phones to the New York Times.

The instructional sequence in this module includes three parts: Compelling Question, Two Supporting Questions with accompanying Formative Performance Tasks, Summative Performance Task

This inquiry is expected to take 1-2, 90-minute class periods. The inquiry time frame could expand if teachers think their students need additional instructional experiences (e.g., supporting questions, formative performance tasks, featured sources, writing). Teachers are encouraged to adapt the inquiry to meet the needs and interests of their students. This inquiry lends itself to differentiation and modeling of historical thinking skills while assisting students in reading the variety of sources.

Staging the Compelling Question

To stage the compelling question teachers will post the question, "Are we Rational?" Teachers will ask students what they think this means by leading a small class discussion about the definition of the term "rational." Once the teacher has engaged the students with this thought, they will play the video "The Ultimatum Game - Are People Rational." This experience shows the power of irrational versus rational

thought. In the video, the class is divided in half with one half automatically receiving bonus points. This group then gets to decide if the other half will receive bonus points and how many. The second half of the class has the option to take the deal or refuse. Students will have the opportunity to wrestle with questions such as “How do we learn to make rational decisions? What does it mean to be rational? Are rationality and fairness the same thing? Should other people get to dictate how we make decisions? Are our decisions influenced by pop culture?” Students will begin to think about the decisions made in the video and whether or not these thoughts were rational.

Supporting Question 1

The first supporting question asks students, “Should Bryson upgrade his phone?” It is focused on the students understanding how everyday decisions are made that could be considered irrational. For example, are we making rational decisions when paying \$500 or more for cell phones? The formative performance task is for students to analyze the costs and benefits of Bryson upgrading his cell phone with different options while considering their cost, features, and monthly plans. It is important for teachers to guide students to think beyond monetary costs and benefits. Does the cell phone have a nice camera? How does it function? How much storage space does it have? Can it be used for work or school? Is it waterproof? Will it increase social status?

The formative task is for students to complete a chart listing the costs and benefits associated with Bryson upgrading his phone. Students will determine the best choice, providing a brief rationale for their choice. Completion of this formative performance task is less about arriving at a “correct” answer and more about having students experience a common economic decision-making process before diving into a basic understanding of behavioral economics. Their rationale will be layered upon in the summative task as they connect it to the understandings they gain about behavioral economics.

- **Featured Source A** is a hypothetical description of a high school student named Bryson, his priorities in a cellphone and his financial situation.
- **Featured Source B** guides students to current specifications and pricing information for cell phones on the market. Students are provided a simplified table if time and technology constraints make that a preferable option.

The scaffolds and other materials used to support students as they work with sources include a summarized breakdown of cell phone information and an organizer for students to consider the costs and benefits of each option. Teachers may implement this task with the following procedures.

1. Review Bryson’s situation to determine what he wants and how much money he has. Consider what his priorities might be as a student, a teenager, and a customer.
2. Review available cell phone information.
3. Determine which is the best choice for Bryson and provide a brief rationale for the decision.

List the cost and benefits associated with each phone. It is important to think beyond monetary costs and benefits. Does the cell phone have a nice camera? How does it function? How much storage space does it have? Can it be used for work or school? Is it waterproof? Will it increase social status?

Cell Phone Model	Cost (Do not simply list price!)	Benefit
Apple iPhone 11 Pro		

Max		
Samsung Galaxy S10 128GB		
Motorola Moto G7 Power/Supra		
Google Pixel 3a		

Supporting Question 2

The second supporting question provides students with an opportunity to explore economic disciplinary concepts to understand why people make the choices they make. Rather than utilizing traditional economic models, students are asked to apply behavioral economics in order to answer, “What influences an individual’s economic decisions?”

The formative task is for students to list the factors that influence people’s economic decisions. Students are provided with excerpted and modified articles from contemporary economics experts in order to get a clear introduction to the discipline of behavioral economics.

- **Featured Source A** describes how people sometimes make decisions that are reasonable, but not rational.
- **Featured Source B** provides a basic definition of behavioral economics the concept of risk aversion.
- **Featured Source C** explains the “why” of decision making, providing examples related to emotions, context, and timing.

Teachers may implement this task with the following scaffolds and procedures:

1. The teacher could provide students with several small pieces of paper with the instructions to write any factor they come across in their readings that influences people’s decisions. For example, in Source A, students may list factors such as: what’s rational, what’s reasonable, individual wants, social norms, self-interest, and kindness. In Source B, students may list factors such as loss aversion or avoiding negative consequences. In Source C, students may list factors such as: emotions, environment, past decisions, alternative options, and how long people have to wait for satisfaction. At this point, students have the ability to sort, group, and process these factors as they discuss what causes people to make the choices they do.
2. After students have identified individual factors that influence people’s decisions, they can go back through the readings to discuss examples of choices people are likely to make. Teachers

can lead this discussion or have students work through the examples in small groups. In Source A, they might identify “donating to a good cause because it’s reasonable.” In Source B, they might identify that people would work harder to avoid losing \$5 than they would to gain \$5. Source C has multiple examples, such as “buying something because it feels good, not because it’s a rational purchase,” “buying more than needed just because it seems like a good deal,” or “deciding whether to accept less right now or get more later.”

3. At this point, students should be able to individually come up with a list, rooted in behavioral economics, of why people make the decisions they make.

Summative Performance Task

At this point in the inquiry, students have examined a hypothetical yet relatable scenario regarding the purchase of a new cell phone and have determined the best course of action. They have also been introduced to the basic premise of behavioral economics and the findings of some of its related studies. Students should be expected to demonstrate the breadth of their understanding and their abilities to use evidence from multiple sources to support their claims. In this task, students are asked to construct an argument in response to the compelling question, “Is rationality overrated?” They will use their answer to the scenario provided as an example as they explain and support their rationale behind it.

Students’ arguments will likely vary, but could include any of the following:

- *Rationality is overrated because people can make decisions that are reasonable for social or personal reasons even if they are financially rational.*
- *Rationality is not overrated because the factors influencing financially irrational decisions do not cancel out the problems created by accumulated debt.*
- *Rationality must be balanced with reasonableness, people may make occasional decisions that are reasonable, but not rational as long as they understand the long-term financial consequences of their choices.*

To support students in their writing, teachers may want to provide argument stems for the students to choose from that students are then asked to choose between. Students would choose whichever argument best justifies the choice they made on behalf of the student in the scenario. They can then elaborate, connecting their choice in Supporting Question 1 with the motivating factors identified from Supporting Question 2.

To extend their arguments, students will interview a parent(s)/guardian (other adult) about a time they made a reasonable but irrational purchase, for example, a birthday, holiday or vacation. Students will explain whether their choices were rational or irrational based off the information learned in class about rational and irrational choices.

Staging the Compelling Question

Featured Source

Source A: The Ultimatum Game - Are people rational? Jacob Clifford, Published January 27, 2017
[https://www.youtube.com/watch?v= MgMpLTtJA0](https://www.youtube.com/watch?v=MgMpLTtJA0)



Accessed at: <https://www.youtube.com/watch?v= MgMpLTtJA0>

Supporting Question 1

Featured Source

Source A: Bryson's Scenario

Bryson is a Junior at Heath High School in Paducah, KY. Bryson has finally paid off his current cell phone, an iPhone X (introduced in 2017). He's ready to upgrade, but doesn't necessarily want to make more monthly payments and he has been researching all the latest phones and the various features they have to offer. Bryson is an average student, making A's in some classes, B's and C's in others. He is not a huge gamer but engages with social media daily. His family shares both a video and music streaming service, but he knows he can't stream anything unless it's downloaded or he's on WiFi. Bryson's teachers also require the use of a few education related apps in order to stay up to date on announcements, submit digital assignments, take quizzes, and participate in online discussion boards.

Since he's not far from being out on his own, Bryson's parents have been trying to teach him financial responsibility, allowing him to learn from his own decisions. Bryson has picked up extra shifts at the barbeque restaurant where he's employed and has been diligent in his efforts to work and save money, but as a student athlete, Bryson knows he won't be able to work as many hours for the next few months due to practices and games. As a reward for his efforts, his parents have decided to contribute \$200 toward his phone upgrade. Bryson has managed to save \$500 himself, giving him a total of \$750. He may use all of the money or may have some left over. Since he's not locked into a contract at this time, Bryson also has the opportunity to switch carriers that results in a better situation.

Supporting Question 1

Featured Source

Source B: [“Top 10 Most Popular Cell Phones Right Now”](#), January, 2020

Students will need internet access in order to fully explore this source. The table below summarizes a portion of the information available.

<p>Apple iPhone 11 Pro Max</p>	<p>6.1 inch display 12MP camera Apple iOS 64GB int. memory 75.7mm wide 150.9mm high 8.3mm thick 4GB RAM</p>	<p>\$699 Upfront</p>	
<p>Samsung Galaxy S10 128GB</p>	<p>6.1 inch display 16MP camera Android 128GB int. memory 70.4mm wide 149.9mm high 7.8mm thick 8GB RAM</p>	<p>\$750 Upfront</p>	
<p>Motorola Moto G7 Power/Supra</p>	<p>6.2 inch display 12MP camera Android 32GB int. memory Standby: Up to 3 days 76mm wide 160.8mm high 9.4mm thick</p>	<p>\$179 upfront</p>	
<p>Google Pixel 3a</p>	<p>5.6 inch display 12.2MP camera Android 64GB int. memory 70.1mm wide 151.3mm high 8.2mm thick 4GB RAM</p>	<p>\$318 upfront</p>	

Accessed at: <https://www.whistleout.com/CellPhones/Guides/popular-cell-phones>

Supporting Question 2

Featured Source

Source A: [Vox Article Excerpt](#) - "Is rationality overrated? Sometimes, it's better to be reasonable," Sigal Samuel Jan 20, 2020 [modified]

Humans were supposed to be “the rational animal”! Are we instead just doomed to keep making lots of terrible decisions? Researchers based at the University of Waterloo in Canada wanted to understand what prompts people to use rationality — or deviate from it — in their decision-making. The study starts by distinguishing between two terms: there’s *rationality*, where you focus on maximizing the chance of getting what you want, and there’s *reasonableness*, where you strike a balance between what you want and social norms.

Although we might sometimes use rational and reasonable interchangeably, the study shows that people generally associate *rationality* with the cold hard logic of self-interest and *reasonableness* with socially conscious traits like kindness or cooperativeness.

One of the noteworthy things in this study is that simple linguistic cues — rational versus reasonable — are effective at influencing participants’ behavior in a pretty consistent way.

The fact that participants donated more generously when primed to think about reasonableness may have implications for fields like education, politics, advocacy, and marketing. “To encourage people to make more cooperative choices,” the study suggests, “reduce the demand to be rational and enhance the request to be reasonable.”

But is it better to act rationally or reasonably? The researchers conducted some experiments to understand people’s perceptions, expectations, and behaviors. Here are three key findings:

- Participants perceived reasonable people as less selfish than rational people.
- Participants expected that reasonable people would share more than rational people.
- Their expectation turned out to be correct: People who viewed themselves as reasonable shared significantly more than those who viewed themselves as rational.

We need a lot more research before we can draw any sweeping conclusions. For example, although the researchers can show association — the more the participants view themselves as rational, the less money they donate; the more they view themselves as reasonable, the more money they donate — they cannot say for sure what motivation is driving people who opt for reasonableness over rationality.

Accessed at: <https://www.vox.com/future-perfect/2020/1/20/21068423/rationality-behavioral-economics-psychology-reasonable-decisions>

Supporting Question 2

Featured Source

Source B: [New York Times Excerpt](#) - “Why is Behavioral Economics so Popular?” David Gal, October 6, 2018 [modified]

What is behavioral economics, and why has it become so popular? The field has been described by Richard Thaler, one of its founders, as “economics done with strong injections of good psychology.” Proponents view it as a way to make economics more accurate by incorporating more realistic assumptions about how humans behave.

In practice, much of behavioral economics consists in using psychological insights to influence behavior. These interventions tend to be small, often involving subtle changes in how choices are presented.

Consider loss aversion. This is the notion that losses have a bigger psychological impact than gains do — that losing \$5, for example, feels worse than gaining \$5 feels good. Behavioral economists point to loss aversion as a psychological glitch that explains a lot of puzzling human conduct.

Advertisers influenced by the idea of loss aversion have focused on framing their messages in terms of loss (“you will lose out by not buying our product”) rather than in terms of gain. But such framing techniques have been shown to be ineffective: A meta-analysis of 93 studies found “no statistically significant differences” in the persuasive power of public-health messages when framed in terms of loss as opposed to gain.

There is nothing wrong with achieving small victories with minor interventions. The worry, however, is that the perceived simplicity and efficacy of such tactics will distract decision makers from more substantive efforts — for example, reducing electricity consumption by taxing it more heavily or investing in renewable energy resources.

It is great that behavioral economics is receiving its due; the field has contributed significantly to our understanding of ourselves. But in all the excitement, it’s important to keep an eye on its limits.

Accessed at: <https://www.nytimes.com/2018/10/06/opinion/sunday/behavioral-economics.html>

Supporting Question 2

Featured Source

Source C: [Blog Excerpt](#) - "The Irrational Consumer: What it means for behavioral economics," Jelle Fastenau, Nov 01, 2019 [modified]

Naturally, there are countless factors that can influence a person's decisions, both internally and externally. To make things a bit more structured, I've summarized some of the cornerstones to irrational consumerism into three themes that are also observed in behavioral economics: Emotions, Context, Time.

1. Emotions have long been known to shape our choices in many ways. Consumption by itself can also be a means to an end when it comes to regulating our emotions or affirming our self-image by buying status goods. Just think about it: Did I really have to order takeout after that tough day at work? Did I really have to buy those expensive new clothes? Your rational self might disagree, but your emotions are telling you: "Go ahead, you deserve this right now."
2. Context specific decisions are influenced by situational factors. This can relate to anything ranging from environment, past decisions, alternative options, etc. In particular, the phrasing of a message is known to greatly affect a person's preferences. For example, when offered a basic and a premium package, marketers will use the decoy effect. Adding a third option that is similar in price to the premium option, but offers significantly fewer advantages, will make the premium option seem more reasonable.
3. Time between the moment of choice and its consequence makes a difference. For example, the Marshmallow Test proved that giving children the choice of either having one sweet immediately, or waiting a little bit longer to receive two is enough to place them in a small existential crisis. In short, our rule of thumb is: the better the ultimate pay-off is, the longer we're willing to wait for it.

Accessed at: <https://blog.crobox.com/article/the-rational-consumer-debunked>