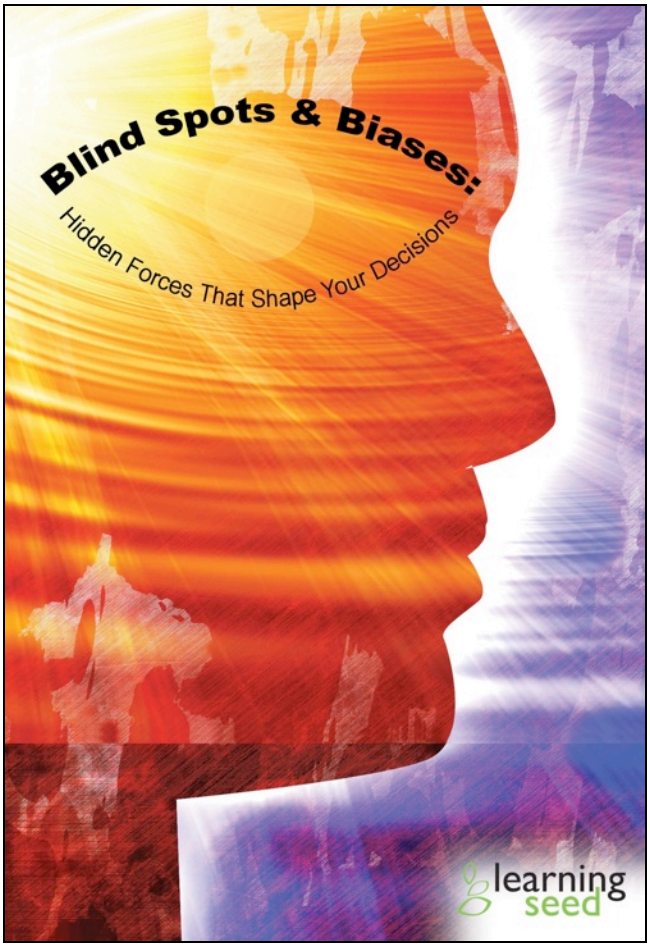
Blinds Spots and Biases

How Hidden Forces Shape Your Decisions



Suite 301
641 West Lake Street
Chicago, IL 60661
800.634.4941

info@learningseed.com
www.learningseed.com

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The Video

Executive Producer: Joseph Lombardo
Writer: Jeffrey Schrank
Video Editor: David Phyfer
Narrator: Kate Burns

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Chicago, IL 60661
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info@learningseed.com

Closed Captioning

This program is closed-captioned.

Summary

Recent research on how our brains work reveals a collection of "mental shortcuts" we use in making decisions. These tools are used daily, yet typically they remain invisible to the user. Some researchers call these shortcuts heuristics or biases, but they may be thought of as mental "blind spots." They are part of how the brain works. Since these blind spots cannot be completely avoided, we should become more aware of their influence on our decision-making processes. This program examines five of these "blind spots": Expectation, Belief, Availability, Anchors and Imitation.

The Expectation Bias

The expectation bias depicts reality as the brain sees it – it's part of human nature. People have a tendency to focus on what they expect to see and ignore the rest. Optical illusions and magic tricks take place in the expectation blind spot. The more we focus on the expected, the more likely we are to be blind-sided.

Our perception of the world is formed through the input and analysis of the data collected by our senses, but the results of the data analysis can be filtered by our blind spots. Some experts believe drivers crash into emergency vehicles at an accident site, even when their lights are flashing, because drivers only see the regular traffic pattern they expect to see. Drivers fail to see the emergency vehicles on the road shoulder because they are hidden in their expectation blind spot.

Aroma therapy uses pleasant smells to relax and heal. It has been found that the influence of a specific scent can be shaped by expectations, and that physical reactions can be controlled more by expectations than by the aroma itself.

And the expectation bias affects perceptions and achievement, winners and losers. People who are taught they are lacking in some skill and are told they are expected to fail, usually perform poorly.

The Belief Bias

Humans are born with a bias to believe. Belief is a survival tactic – we need it for the species to continue. Our brain accepts some beliefs that seem to be a good fit while actively rejecting others; we especially like to believe that which benefits us. Evidence that confirms our beliefs is easily noted, while we tend to ignore other points that are in conflict.

Some beliefs are socially useful as cultural binders, besides being fun and entertaining. Adults take advantage of the belief bias in their children, such as Santa Claus or the Easter Bunny. The belief bias is also key to the enjoyment of stories, plays and the illusions created in movies. Audiences enter into an unspoken agreement to believe the illusion because they believe they will be rewarded with emotions.

In the process of establishing a belief, most people start with a tested belief and try to confirm it as right. Not many people try to prove their belief is wrong, they just seek to confirm that it is true.

A belief bias can confirm an expectation. With the placebo effect, an inactive substance used as a control in an experiment becomes an effective treatment for an illness because the expectation of relief is itself effective. It has also been consistently proven that some people's belief that something expensive is usually better, triggering their belief bias to override their taste buds. And, the belief in one's own goodness has helped shape human history, from conflicts in daily life to hostilities among nations.

The Availability Bias

Sometimes we believe that something must be must be true or likely to recur because it is easily recalled from memory – it is the obvious choice, otherwise, why would it be so readily available? A search engine provides us a long list of results, but we most often select one near the top, rarely jumping far down into the list. A highlighted item on a shopping list is the one most easily recalled. When we base our judgments upon how easily accessible information is to our brain, the invisible tool at work is the availability bias.

The more quickly a memory can be recalled, the more likely we believe it to be true and accurate. Pictures are often more available than statistics or logical arguments, as they make a greater impact on memory than data. Vivid images are more memorable, and can be used to influence behavior. Repetitive images in advertising make a brand more familiar, and thereby more likely to be selected.

Basing our decision on the availability bias can be dangerous when making judgments that involve risk. How we approach solutions to big problems such as health, the environment, and social conflicts involves significant risk, so we should consider the possibility of errors in judgment when we are operating under the availability bias, and not always be overconfident in the apparent solution.

The Anchoring Effect

Our brains seek help when making judgments – something to grasp as a starting point – an anchor. That starting point influences our decision, but we are not usually aware of our anchors. Because anchors are a blind spot, we can focus too heavily on an anchoring fact when making decisions.

We try to make sense of what goes on around us by first making an initial estimate, and then making adjustments to that position based on additional information. Once we assume the information is accurate, we use this anchoring bias to make decisions and negotiations.

But if we remain unaware of the anchor, and are not receptive to any new information, the result can be a poor decision. We may also negotiate ineffectively if we fail to make adjustments for a changing market. We may be influenced by anchoring based on the power of language or the positioning of what appears to be a bargain that induces us to buy more than we intended. The best way to avoid being trapped by an inaccurate anchor is to find the right answer.

Imitation and Conformity

Another mental shortcut we use is to imitate others, to conform to the behavior of the crowd. The imitation bias helps social animals survive and build communities, helping us to learn how to be human and fit into our culture.

Infectious laughter. Yawning because a classmate just did. We are not aware we are imitating the behavior of others because we have a bias to imitate. We use this bias to help learn everything we do. Recently brain researchers discovered "mirror neurons" that fire in key parts of our brain not only as we act, but also when we watch someone else perform that action – we are mentally imitating what we see others doing.

Mirror neurons help explain the popularity of video games. Mimicking a celebrity sports hero or entertainer in a video game rewards the player with some of the same pleasure derived from doing the real thing.

Our bias to conform and imitate helps to explain how fads can sweep a nation. We want to be like those in the community around us, even if our blind spot prevents us from actually acknowledging it.

Discussion Questions

Decision-making:

Do you believe that failing to question decisions made based on the biases that live in our blind spot could cause us to become dangerously overconfident in our perspective?

Is there a reasonable likelihood you could make serious judgmental errors by utilizing certain knowledge that is readily available to us?

How helpful would you consider feedback on the outcomes of your decisions? Would the right feedback help you judge the accuracy of your decisions?

Conflict:

Do you agree that the pre-existing belief in one's own goodness has helped shape history – that such beliefs have caused wars and kept countries divided?

If each person or nation believes it is just and is the victim rather than the aggressor, how will a conflict ever end?

What belief biases do you see in the world today?

Blind Spots and Biases

Matching Quiz

Match the words in the first column to the best available answer in the second column.

_____	This bias depicts reality as the brain sees it.	1) Anchor Bias
_____	A starting point the brain uses as something to grasp onto when making judgments.	2) Belief Bias
_____	A mental shortcut used to emulate the behavior of others, and to appear to fit in with the crowd.	3) Availability Bias
_____	Basing our judgments upon the importance of how easily accessible information is in our brain.	4) Imitation and Conformity Bias
_____	Unquestioning belief in the conclusions that fit in with the way a person thinks.	5) Expectation Bias

Blind Spots and Biases

Matching Quiz *Answer Key*

__5__	This bias depicts reality as the brain sees it.	1) Anchor Bias
__1__	A starting point the brain uses as something to grasp onto when making judgments.	2) Belief Bias
__4__	A mental shortcut used to emulate the behavior of others, and to appear to fit in with the crowd.	3) Availability Bias
__3__	Basing our judgments upon the importance of how easily accessible information is in our brain.	4) Imitation and Conformity Bias
__2__	Unquestioning belief in the conclusions that fit in with the way a person thinks.	5) Expectation Bias

Blind Spots and Biases

Fill-in-the-Blank Exercise

Select the correct term from the list below and write it in the blank space. Some terms may be used more than once, while others not at all.

1. Optical illusions and magic tricks take place in the _____ blind spot.

2. We try to make sense of what goes on around us by making an initial estimate, and then make adjustments to that position based on additional information. Once we assume the information is accurate, we use the _____ bias to make decisions and negotiations.

3. Recent research on how our brains work reveals a collection of "_____ _____ "or _____ we use in making decisions.

4. Show fans a close call in any sport and most will see the call going in favor of their team. Fans expect their team will win. A "fan" could be defined as someone with an _____ bias.

5. Thanks to our _____ bias, a bit of sugar can help prevent colds, soap can cure a skin disease or water relieve pain.

6. A study of treatments for arthritis compared over-the-counter supplements, a prescription drug, and a _____. The study found 60% of the test subjects reported all three treatments provided relatively similar relief.

7. The invisible tools of expectation, belief, availability, anchors, and imitation are useful _____ _____ we all use.

8. The _____ bias contributes to the blizzard of advertising. Constantly repeated advertising makes brand names familiar, so they rise to the top in our search for what to buy.

9. A hotel's experiment designed to save money on laundry expenses encouraged guests to re-use their towels, declaring that most guests recycled their towels at least once during their stay. Although towel re-use increased 26%, few towel re-users would admit they were acting to imitate others. That's why these biases are called "_____ _____."

10. _____ _____ are part of why smiles and yawns are contagious, and why if you laugh, the whole world laughs with you. We use the _____ bias to help learn everything from our first smiles and steps to graceful dance moves.

mirror neurons **conformity** **expectation** **blind spots** **placebo** **belief**

availability **anchoring** **biases** **mental shortcuts** **perceptions** **imitation**

Blind Spots and Biases

Fill-in-the-Blank Exercise *Answer Key*

1. Optical illusions and magic tricks take place in the **expectation** blind spot.

2. We try to make sense of what goes on around us by making an initial estimate, and then make adjustments to that position based on additional information. Once we assume the information is accurate, we use the **anchoring** bias to make decisions and negotiations.

3. Recent research on how our brains work reveals a collection of "**mental shortcuts**" or **biases** we use in making decisions.

4. Show fans a close call in any sport and most will see the call going in favor of their team. Fans expect their team will win. A "fan" could be defined as someone with an **expectation** bias.

5. Thanks to our **belief** bias, a bit of sugar can help prevent colds, soap can cure a skin disease or water relieve pain.

6. A study of treatments for arthritis compared over-the-counter supplements, a prescription drug, and a **placebo**. The study found 60% of the test subjects reported all three treatments provided relatively similar relief.

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10. **Mirror neurons** are part of why smiles and yawns are contagious, and why if you laugh, the whole world laughs with you. We use the **imitation** bias to help learn everything from our first smiles and steps to graceful dance moves.

Glossary

Anchor biases are starting points that our brains use as something to grasp onto when making judgments.

When we base our judgments upon how easily accessible information is to our brain, the invisible tool at work is the **availability bias**.

A **bias** is a mental leaning or inclination.

When people tend to unquestioningly accept the conclusions that fit in with their systems of belief, their **belief bias** is operating.

The **expectation bias** depicts reality as the brain sees it.

The **imitation bias** is a mental shortcut we use is to emulate the behavior of others, and to conform to the behavior of the crowd. This blind spot is also referred to as the **conformity bias**.

Mental blind spots, which are also called *heuristics* or *biases*, are a collection of mental shortcuts that are used in decision-making. These tools are used daily, yet typically remain invisible to the user.

Neurons are nerve cells in the brain that send and receive electrical signals. **Mirror neurons**, fire in key parts of our brain when we act, and more importantly, when we watch someone else perform that action.

The **placebo effect** occurs when an inactive substance used as a control in an experiment becomes an effective treatment for an illness.

For More Information

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