

Removing the Road Blocks to Learning





Tanya Beer and Julia Coffman Center for Evaluation Innovation

GEO Conference June 4, 2013



A bat and ball together cost a dollar and ten cents.

The bat costs a dollar more than the ball.

How much does the ball cost?









5 cents



Why are we talking about this?

You deal with complexity and uncertainty.

How can we help metropolitan regions shape the economic opportunities available to lowincome families?



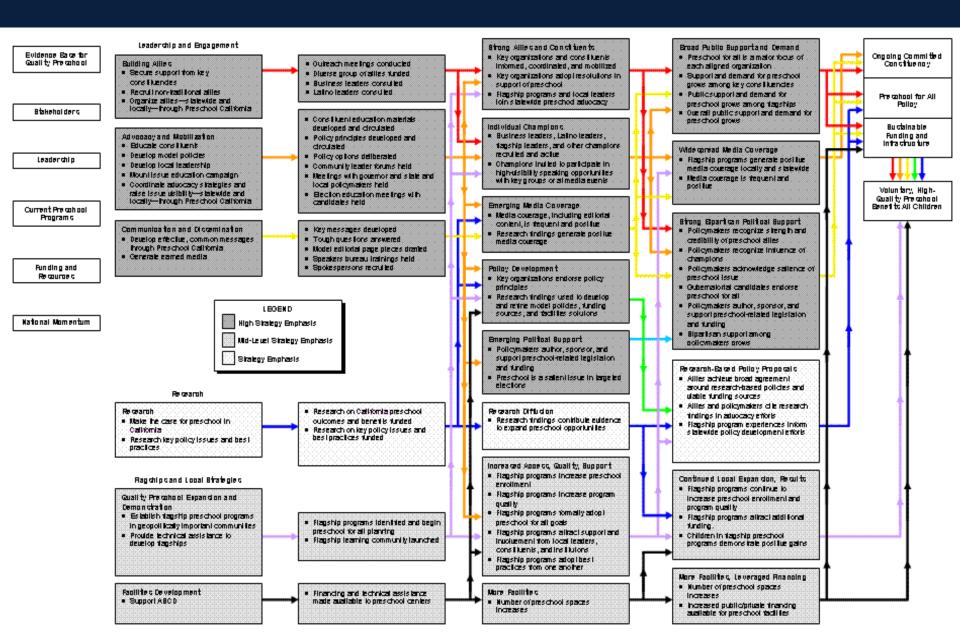
How can we reverse the childhood obesity epidemic by 2015?



How can we achieve highquality preschool for all 3- and 4-year-olds in California?



And you try to reduce or manage it (I said try).



And data and evaluation are often enlisted to help.

What are the underlying causes of this issue?

How should assumptions about the true cost of of the strategy be adjusted?

> What is motivating the actors and how do we reinforce desired behaviors?

How can we take advantage of the evolving political climate?

But unfortunately, we are not always rational.

We are hardwired to use heuristics and biases cognitive traps—when processing information.



They affect:

- ✓ How we access information
- ✓ What we pay attention to
- ✓ What we learn
- ✓ How we apply it

We think a lot about how to gather good data and create learning opportunities.

Ask the right questions and get the right data

Structure the work to enable regular use of data

Effectively process and use the data

But we need to finish the equation.

What are cognitive traps?

Our minds have two processing systems.

THINKING, FASTANDSLO DANIEL KAHNEMAN

WINNER OF THE NOBEL PRIZE IN ECONOMICS

System 1: Rapid intuitive decisions based on associative memory, images, and emotional reactions

System 2: Monitors the output of System 1 and overrides it when the result conflicts with logic, probability, or some other decision-making rule

The two systems act differently.



System 2 is lazy and trips us up, especially when we are busy.

There are all sorts of cognitive traps.

Decision Making

- Anchoring/adjustment
- Conjunction fallacy
- Focusing effect
- Overconfidence effect
- Curse of knowledge
- Ease of recall
- Planning fallacy

<u>Social</u>

- Actor-observer bias
- False consensus effect
- Fundamental attribution error
- Halo effect
- In-group bias
- Projection bias
- Self-serving bias

Memory

- Primacy effect
- Recency effect
- Serial position effect
- Google effect
- Hindsight bias
- Illusory correlation
- Egocentric bias

We are focusing on a few relevant to philanthropy.

The <u>framing effect</u> causes us to weigh the same data differently or define our choices too narrowly.

600 people suffer from a fatal

disease...

VS.





Treatment B

33% chance that no people will die, 66% probability that all 600 will die. The <u>framing effect</u> causes us to weigh the same data differently and respond differently to risk.

600 people suffer from a fatal disease...

Treatment A

Saves 200 lives

VS.



Treatment B

33% chance that no people will die, 66% probability that all 600 will die.

400 people will die

VS.

33% chance of saving all 600 people, 66% possibility of saving no one.

<u>Bounded awareness</u> prevents us from seeing and seeking relevant, readily available information.



Photo by Daniel Simons at www.smithsonianmag.org

<u>Confirmation bias</u> makes us favor information that confirms our pre-existing beliefs.

State polls showing consistent leads in key battleground states

Late-October national polls showing gains



Nate Silver's "Model" of all presidential polling

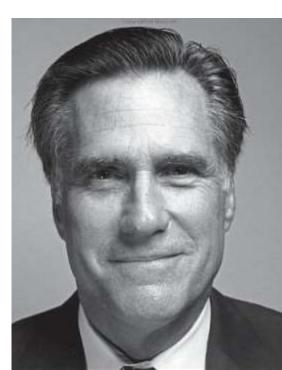
Hurricane Sandy performance

More engaged and motivated voters

Large and enthusiastic crowds in swing states

Beliefs that national polls were skewed.

Internal polls showing leads in key states.



<u>Survivorship bias</u> makes us concentrate on the small number of successes and ignore the large number of failures.







"Those who switch save more."

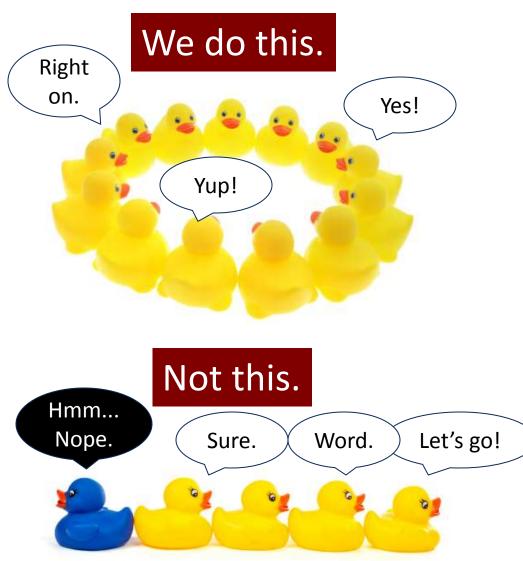
Escalation of commitment makes it difficult to revisit previous choices.



<u>Normalization of deviance</u> causes us to ignore or misinterpret early warning signs.



Working in groups can make it worse.



Particularly susceptible are groups with:

Strong directive leadership
Time pressure
Important complex decisions



Roberto Cremonini Cremonini Consulting Network



Joshua Joseph The Pew Charitable Trusts



Veronica Olazabal The MasterCard Foundation

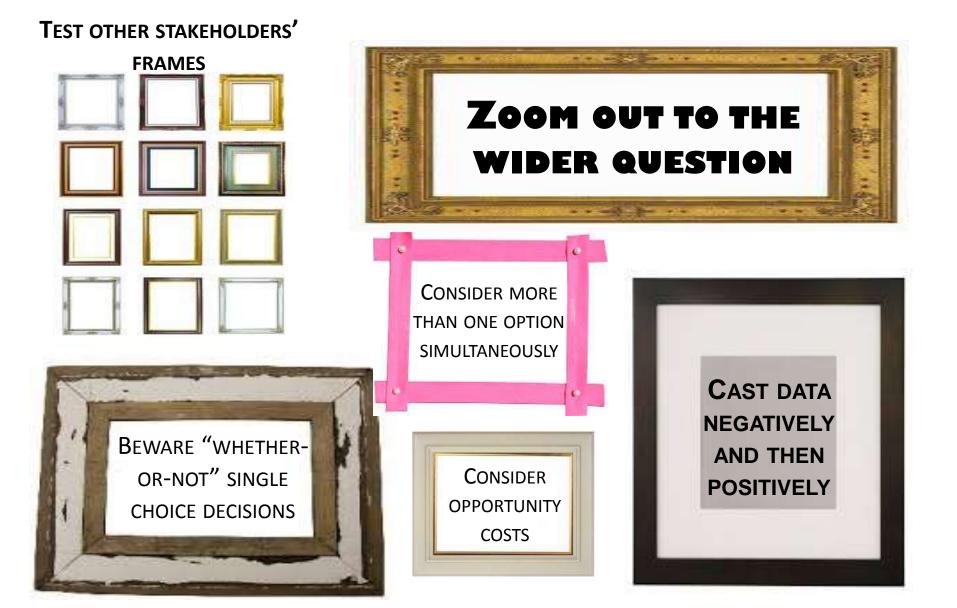


Dan Wilson Ontario Trillium Foundation

What can we do to avoid the traps?

Just being aware is not enough.

Test alternate frames for problems, data, and choices.



Ask for the bad news (and mean it).



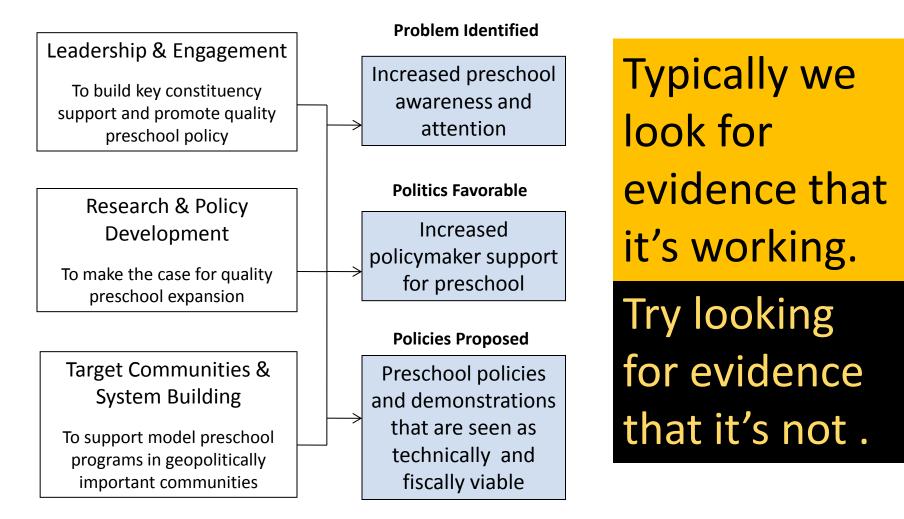
Bad emotions, bad parents, and bad feedback have more impact than good ones.

Bad information is processed more thoroughly than good.

Look for disconfirming evidence.

CHANGE STRATEGIES

OUTCOMES



Use devil's advocacy.



Which consulting firm is better?

Remind yourself what you <u>don't</u> know.



- 1. Tell me what you know.
- 2. Tell me what you don't know.
- 3. Only then can you tell me what you think.

--Colin Powell

Reason analogically.



Education

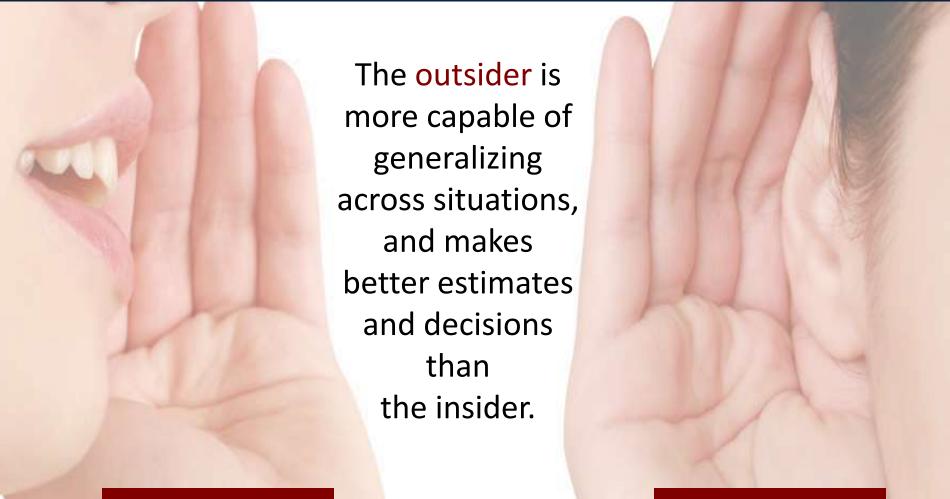
Health

Compare and contrast across silos.



Environment

Get an outsider's view.



Outsiders



Let's put it all together and think about...



...the team meeting.



What information is being considered?



Who is at the table?

Devil's Advocate





Outsider



What are you talking and thinking about?

I want to take over this meeting! But I must control myself....

> What if we posed the question another way?

I disagree. I should probably speak up.

Didn't our other program area experience a similar problem?

Wait. What don't we know here?

Now you.