World Development Report 2015

MIND, SOCIETY, AND BEHAVIOR
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MIND, SOCIETY, AND BEHAVIOR

(How a Better Understanding of Human Behavior Can Improve Development Policy)
We’ll give examples of novel ways to address policy questions:

Policy question 1-- How to increase savings for health?

Under-5 mortality could be cut in half through investments in readily available preventative health products
We’ll give examples of novel ways to address policy questions:

**Policy question 1-- How to increase savings for health?**

Under-5 mortality could be cut in half through investments in readily available preventative health products.

Besides standard policies, what more could be done to increase savings for health products?
Verbált encouragement to save for health needs

<table>
<thead>
<tr>
<th>Kenyan shillings</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>31%</td>
</tr>
</tbody>
</table>

Amount spent on preventive health products in past 12 months

Could not afford medical treatment for an illness in past 3 months
- **Savings for BEDNET**

![Graph showing savings and percentage](image)

**Bar Chart**
- **Kenyan shillings**
  - **Verbal encouragement to save for health needs**: 258
  - **Verbal encouragement + labelling + a lockable box**: 427

**Percentage**
- **Could not afford medical treatment for an illness in past 3 months**
  - **31%**
  - **23%**
Low aspirations can also be an obstacle to savings

From a survey in Ethiopian villages:

“We have neither a dream nor an imagination”

“We live only for today”

Bernand, Dercon & Taffesse 2011
Impact 6 months later of seeing the 1-hour video of success stories

• Aspirations & locus of control go up
• Savings go up
• Hours worked go up

Bernard, Dercon, et al. 2014
Objective of the WDR 2015

• Not to displace existing policies approaches

• But to add to them with a new set of tools based on how people actually think
All policy rests on assumptions of why we do what we do
Principle 1

THINKING AUTOMATICALLY

Automatic thinking—intuitive, associative, and impressionistic—is the “secret author of many of the choices and judgments you make.”

- Kahneman (2011)
How many 7-letter words whose sixth letter is “n” would you expect to find in four pages of a novel?

_ _ _ _ _ n _
How many 7-letter words whose sixth letter is “n” would you expect to find in four pages of a novel?

_ _ _ _ n _

How many 7-letter words ending in “ing” would you expect?

_ _ _ _ i n g

The average answer to the 2nd question is 3 times more than the average answer to the 1st question.

Violates logic.
Availability heuristic

The more easily people can think up examples, the more instance of the object they predict.
College application decisions of the poor in the US

• How do US high school students decide how many colleges to apply to?

• When poor students apply to only a few colleges, they aim too low.
Impact of change in ACT rule in 1998

• Estimated lifetime change in earnings of poor seniors is $10,000, on average.
Other policies that work by changing automatic thinking

Too little adherence to drugs
Too little enrollment in post-2\(^{\circ}\) school
Too little teacher effort

Too much borrowing from payday lenders
Other policies that work by changing automatic thinking

Too little adherence to drugs
Too little enrollment in post-2o school
Too little teacher effort

Too much borrowing from payday lenders

Text phone reminders
Change timing of CCT’s
Give teachers advance bonuses that they will lose if student performance is too low
On cash envelope, show the dollar costs of payday lender vs. charge card borrowing

Sources: Pop-Eleches et al. 2011; Barrera-Osorio et. al 2011; Fryer et al. 2012; Bertrand and Morse 2011
Principle 2

THINKING SOCALLY

Social norms and social preferences exert a powerful influence on individual decision making and behavior. They are the “glue” or “cement” of society.

- Elster (1989)
Money paid at an office snack bar per liter of milk consumed

Picture shown     Money voluntarily paid

<table>
<thead>
<tr>
<th>Image shown each week</th>
<th>£ paid per liter of milk consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td><img src="image1.png" alt="Image 1" /></td>
</tr>
<tr>
<td>8</td>
<td><img src="image2.png" alt="Image 2" /></td>
</tr>
<tr>
<td>6</td>
<td><img src="image3.png" alt="Image 3" /></td>
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<tr>
<td>4</td>
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</tr>
<tr>
<td>2</td>
<td><img src="image5.png" alt="Image 5" /></td>
</tr>
</tbody>
</table>

Source: Adapted from Bateson, Nettle, and Roberts 2006.
Money paid at an office snack bar per liter of milk consumed

**Picture shown**

Money voluntarily paid

Source: Adapted from Bateson, Nettle, and Roberts 2006.
Money paid at an office snack bar per liter of milk consumed

Our sociality is hard wired
What I’ve emphasized so far is the **framing of opportunities**.

But we also **frame ourselves**
Coins tossed by an honest person

Cohn, Fehr, and Marechal 2014
Payoffs to an honest person & the control group

Cohn, Fehr, and Marechal 2014
Making bankers’ identity more salient makes them less honest

Payoffs to an honest person & the treatment group

Cohn, Fehr, and Marechal 2014
To verify identity salience, a follow-up word completion test was run

Complete the word:

__ __ o k e r

The frequency of bank-related words, like broker, in the banker identity condition was increased by 40%.
Policy question 2: How to decrease traffic deaths?
Don’t just sit there as he drives dangerously! STAND UP SPEAK UP NOW!

Source: Habyarimana and Jack 2011.
Impact

- Insurance claims involving injury or death fell by 50%.

Habyarimana and Jack 2011
Interventions on thinking socially

Too little effort by doctors

Gap in performance between stigmatized and non-stigmatized students

High-risk behavior by men with criminal histories
Interventions on thinking socially

Too little effort by doctors

When doctors are reminded by peers of best practices and encouraged to improve their performance, the doctors who are visited do so.

Gap in performance between stigmatized and non-stigmatized students

“Self-affirmation” exercises in which people with stigmatized identities focus briefly on their personal values or experiences

High-risk behavior by men with criminal histories

Cognitive Behavior Therapy program

Principle 3

THINKING WITH MENTAL MODELS

What we perceive and how we interpret the world depends on the mental models – the concepts and world-views – we draw on from our societies and shared histories.

- Denzau and North 1994

Here insert the Heider –Simmel video (1944) from the web. It’s 2 minutes in length. If your computer is linked to the web, it may be possible to do this using the next slide.
“The perception of intention and emotion is irresistible; only people afflicted by autism do not experience it. 

*All this is entirely in your mind, of course”*

(Kahneman 2011).
Policy question 3

How to explain why the efficiency of institutions varies across regions?
Institutions emerge in many ways.

• One way is through the imitation or formal adoption of a group conventions.

But then how do group conventions emerge?

• By the convergence, in repeated games, of self-fulfilling expectations.

• An obstacle to this process for cooperative conventions is the culture of honor—*cross me, and I’ll punish you!*
A US experiment on the culture of honor compared the reaction to insult between young men from the US North and the US South.

Cohen et al. 1996
A surge in hormones of US Southerners

Cohen et al. 1996
6 of the over 200 subjects in the Stag Hunt (Brooks, Hoff, Pandey 2015)
2x2 coordination game in India—
Payoffs to column player

<table>
<thead>
<tr>
<th></th>
<th>Be independent</th>
<th>Try to cooperate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be independent</td>
<td>Small gain</td>
<td>Big loss</td>
</tr>
<tr>
<td>Try to cooperate</td>
<td>Small gain</td>
<td>Big gain</td>
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2 Nash equilibria
Percentage of pairs that cooperate in the last period

High-caste pairs
Percentage of pairs that cooperate in the last period

Proportion of pairs that cooperate in the last period by caste type:

- High-caste (Blue bar)
- Mixed-caste (Yellow bar)

Brooks, Hoff, and Pandey (2015)
Percentage of pairs that cooperate in the last period

- High-caste pairs
- Mixed-caste pairs
- Low-caste pairs

Brooks, Hoff, and Pandey (2015)
Percentage of players who continue to try to cooperate after getting a big loss

In high-caste pairs

In low-caste pairs

Brooks, Hoff, and Pandey (2015)
Rational actor

Information

(objective costs and benefits)

Behavior
Psychological, social, & cultural actor

Information

Mental models

Category Prototypes
Automatic causal narratives
Default assumptions

Mental representations

Behavior
Psychological, social, & cultural actor

Behavioral interventions

Mental models

Information

Mental representations

Behavior

Categories
Prototypes
Automatic causal narratives
Default assumptions
Policy question 4

How to end extreme poverty?
Jamaica early childhood development project

- Parent-child engagement is very low, on average, in poor countries

- But parents can be taught—partly with information, and partly with praise & support, to increase verbal engagement with their children
Changing a mental model of child development can break the intergenerational transmission of poverty
The 2-year program erased wage gaps between adult wages of stunted & non-stunted toddlers

<table>
<thead>
<tr>
<th>Condition</th>
<th>Average Adult Earnings</th>
</tr>
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<tbody>
<tr>
<td>Stunted, no intervention</td>
<td>0.79</td>
</tr>
<tr>
<td>Not stunted as a toddler</td>
<td>1.1</td>
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</tbody>
</table>

Gertler et al. 2014
The 2-year program erased wage gaps between adult wages of stunted & non-stunted toddlers.

- Stunted, with mother-toddler home visits: 0.94
- Stunted, no intervention: 0.79
- Not stunted as a toddler: 1.1

Gertler et al. 2014
Policies to change mental models

Justification for FGM

Beliefs in the inferiority of women

Beliefs in the intrinsic inferiority of disadvantaged groups
Policies to change mental models

Justification for FGM
Beliefs in the inferiority of women
Beliefs in the intrinsic inferiority of disadvantaged groups

Group deliberation
Political reservations for women
Build the self-confidence of those groups through, e.g. brief self-affirmation exercises

“Behavioral economics policies are beautiful because they are small and concrete but powerful.

They remind us that when policies are rooted in actual human behavior and specific day-to-day circumstances, even governments can produce small miracles.”

December 12, 2014
Thanks!
Appendix
How individuals think

Rational
Deliberative
Autonomous
Self-regarding
Complete

Intuitive
Automatic
Socially conditioned
Social preferences
Organized by mental models, shaped by history
All policy rests on assumptions of why we do what we do

*People think automatically:* when deciding, we usually draw on what comes to mind effortlessly

*People think socially:* social norms guide much of our behavior, and most of us are conditional cooperators

*People think with mental models:* what we perceive and how we interpret the world depends on concepts and world-views drawn from our societies and shared histories.
Conclusion

- The new approaches do not replace standard economics
- But standard price effects are not the only determinants of behavior
- The WDR tries to advance the use of behavioral insights to promote better development policy
- The body of evidence on decision making is still coming into view