

Behavioral Insights for the Sustainable Development Goals (SDGs)

Applying Behavioral
Science to Fight Poverty
and Enhance Equity



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Senior Social Scientist
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How do we make decisions?



Think
Automatically

We tend to think fast and rely on **mental shortcuts**



Think
Socially

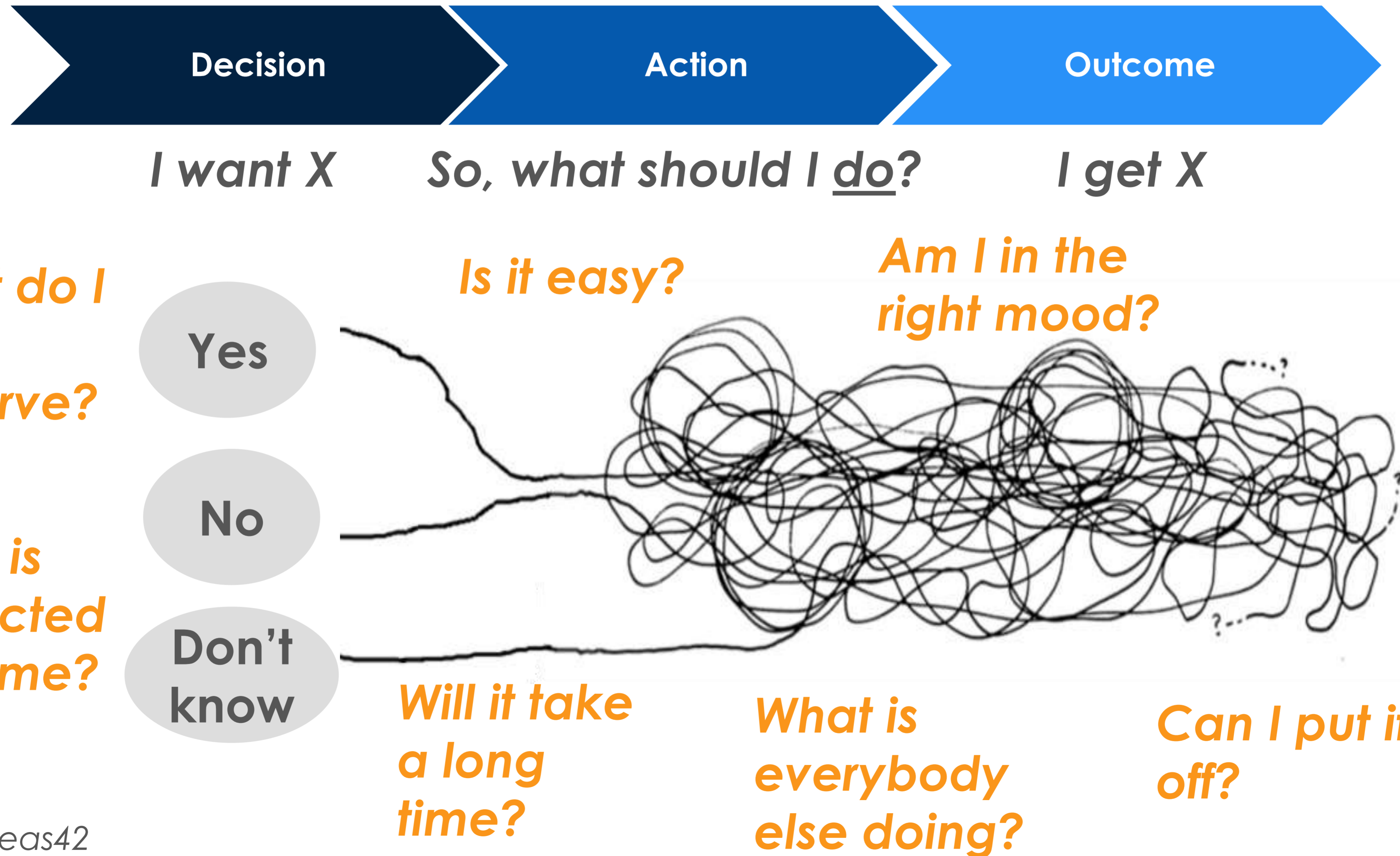
We cooperate, as long as others do the same, and **rely on** social networks and **norms**



Think ^{with}
Mental Models

We do not invent new concepts, but rather use **mental models** drawn from society and a **shared history**

What makes decision making difficult?



What makes decision making difficult?

Features of the decision

(Incomplete information, unclear goals, conflicting data)

Dynamic Environment

(Context, people, goals, relationships change with time)

Resource Constraints and Politics

(Time & money constraints, sensitivities)

Pragmatism

(Implementability, morale)

Process Issues

(No clear process, group issues)



Why behavioral science?



Standard policy tools

- Information
- Incentives and prices
- Laws



Behavioral policy tools

- Defaults
- Role models
- Mindsets

Why behavioral science?

Policies can benefit from:

- Simplifying procedures
- Improving choice architecture
- Adjusting information provided
- Sending reminders
- Using social networks and social norms to shape behavior
- Providing and exposing new ideas of mental models and behavior
- Invoking positive identities



Who we are

- The World Bank's applied Behavioral Science Unit, housed in the Poverty and Equity Global Practice
- A “start up” within a multilateral development bank tasked with bringing behavioral science to development at scale and capacity to our clients



Timeline

2015

World Bank flagship publication World Development Report 2015: Mind, Behavior, and Society

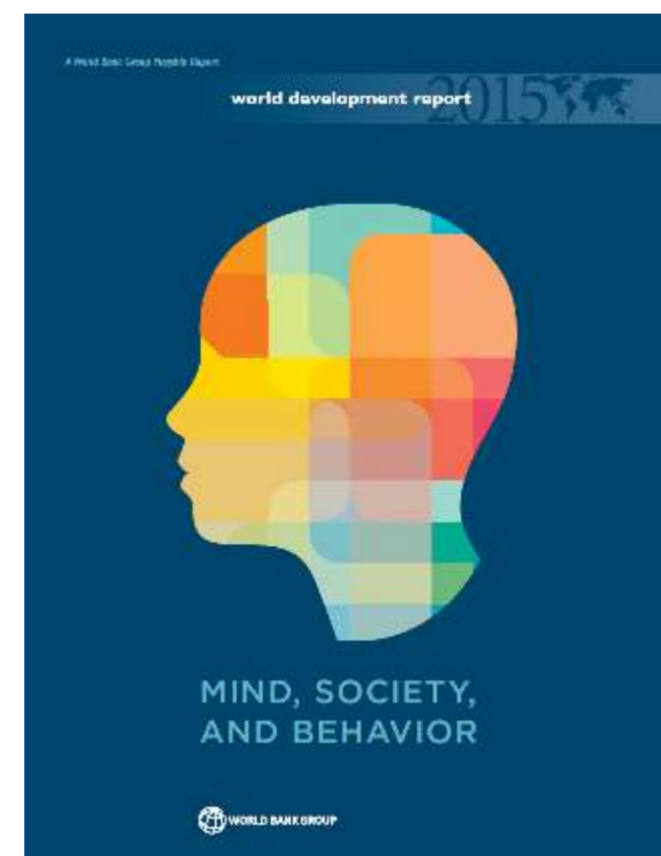
TODAY

eMBeD, World Bank Behavioral Science Unit

eMBeD
Mind, Behavior, and Development Unit

2012

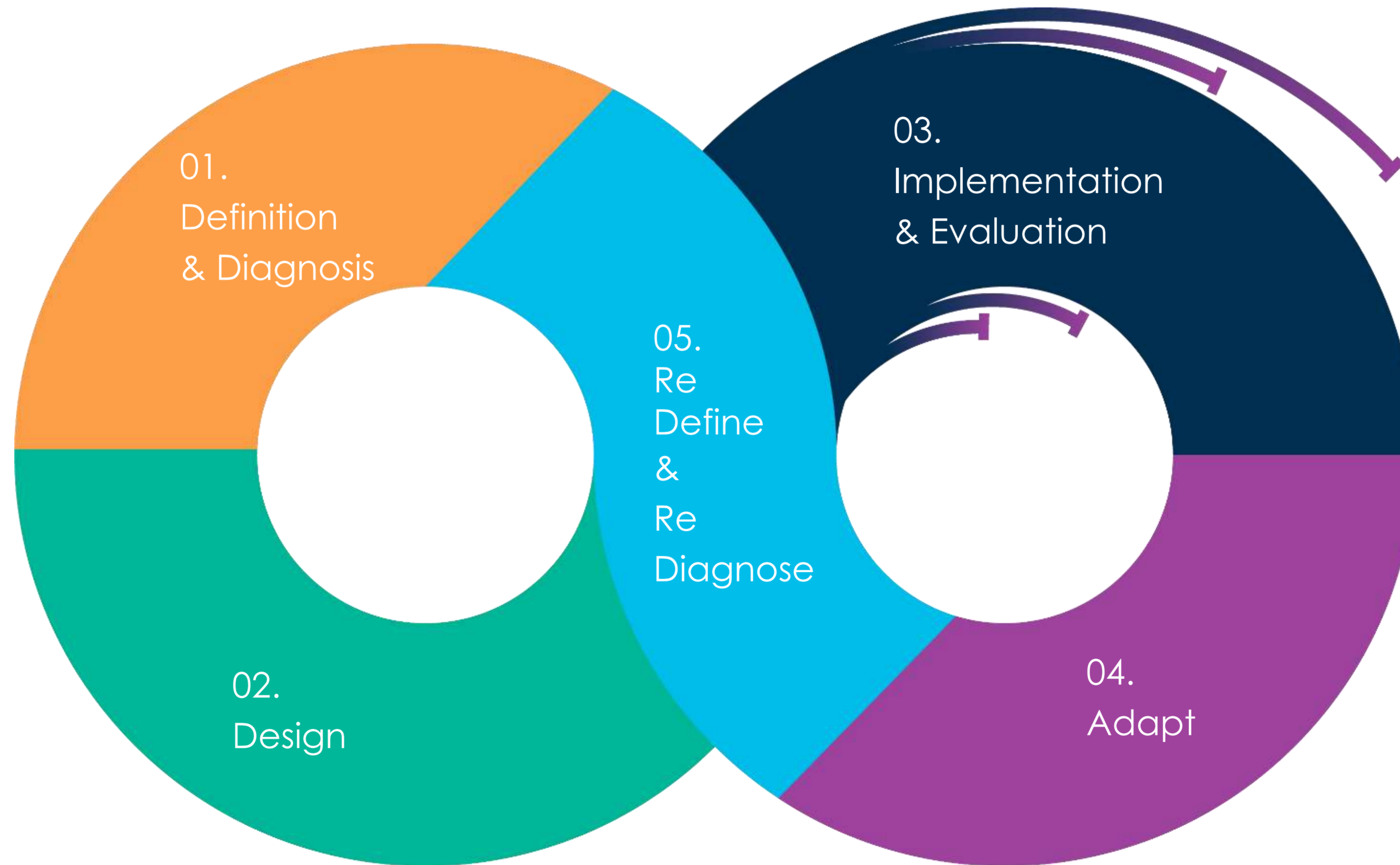
Bank teams replicate successful behavioral interventions with positive results



2016

- Global Insights Initiatives
- Poverty Behavioral Initiative

How we work



eMBeD work and the SDGs



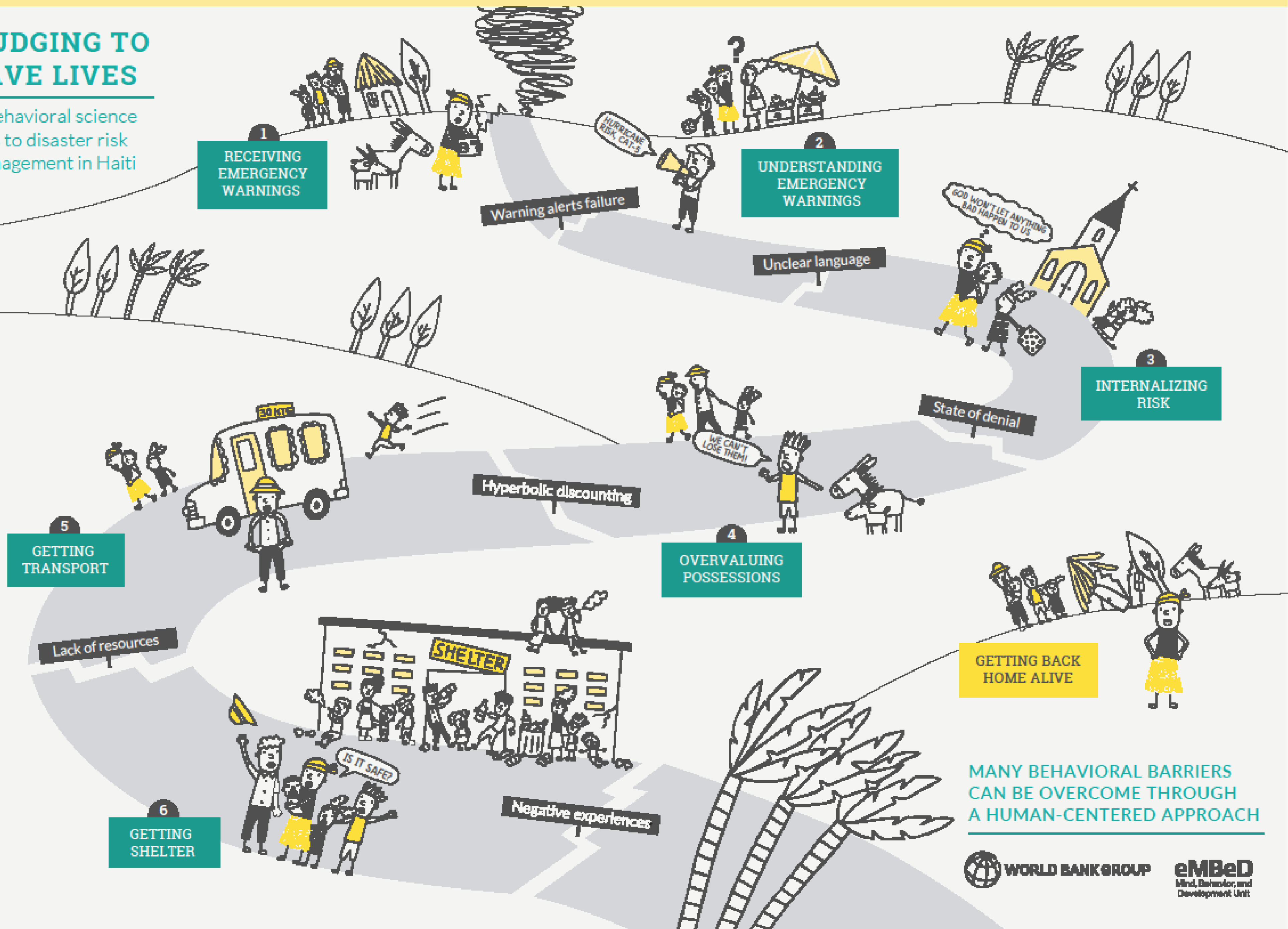
A few of our projects:
Definition and diagnostics

Behavioral maps



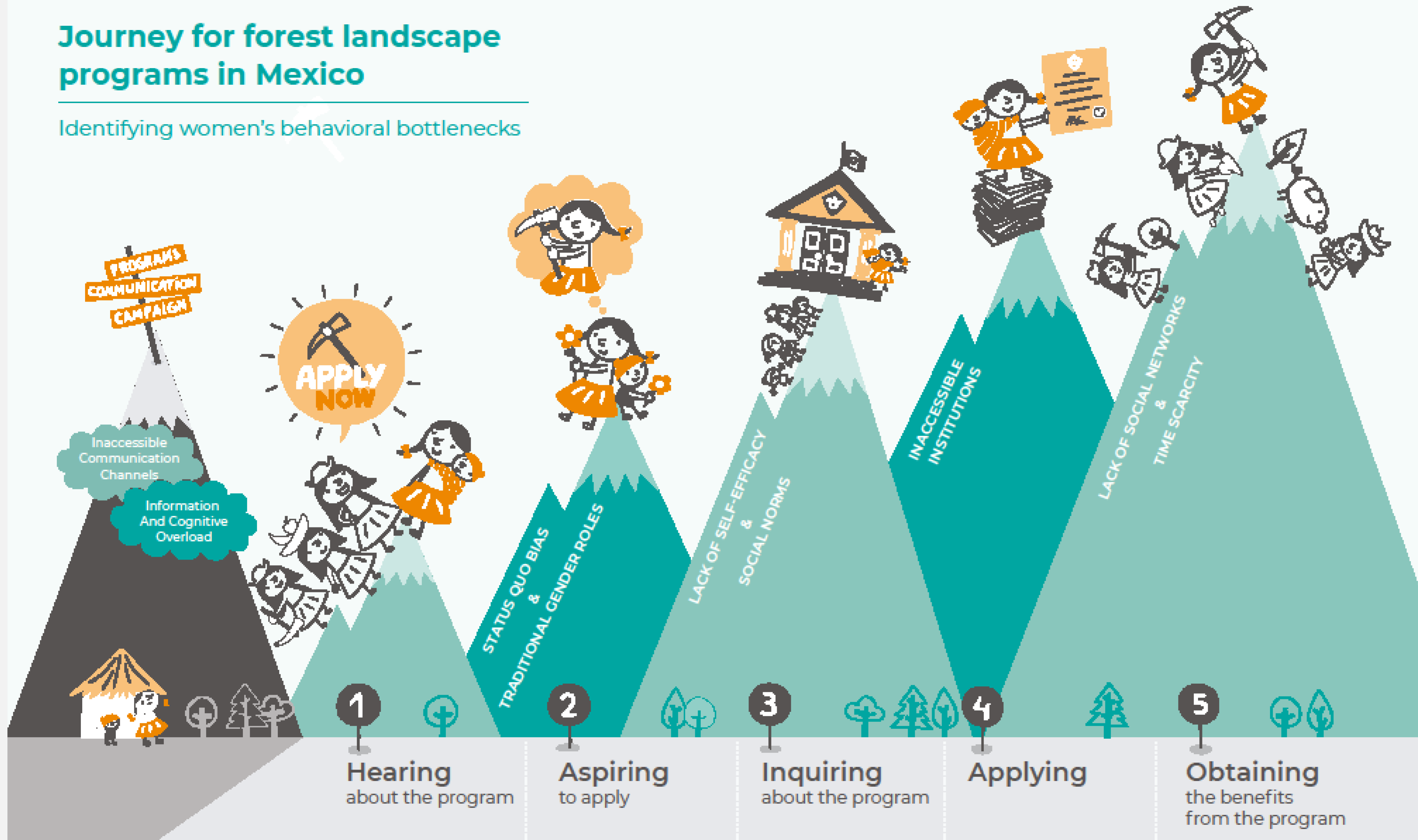
NUDGING TO SAVE LIVES

A behavioral science lens to disaster risk management in Haiti



Journey for forest landscape programs in Mexico

Identifying women's behavioral bottlenecks



Encouraging clean energy take-up



Encouraging clean energy take-up

- To date, big investments in supply side but not in looking at how to improve uptake/behavior
- Big impacts in household health, climate, air quality
- Disproportionate impact on women



Encouraging clean energy take-up



A few of our projects: Implementation and results

eMBeD Projects –a quick summary

In Peru, Indonesia, and South Africa. The Peru Growth Mindset intervention led to a 0.14 standard deviation increase in math test scores, equivalent to 4 months of schooling, at a cost of less than \$0.20 per student.



In Nigeria, eMBeD found that incentivizing accurate administrative work through social recognition programs and ceremonies increased recordkeeping accuracy by 13%.

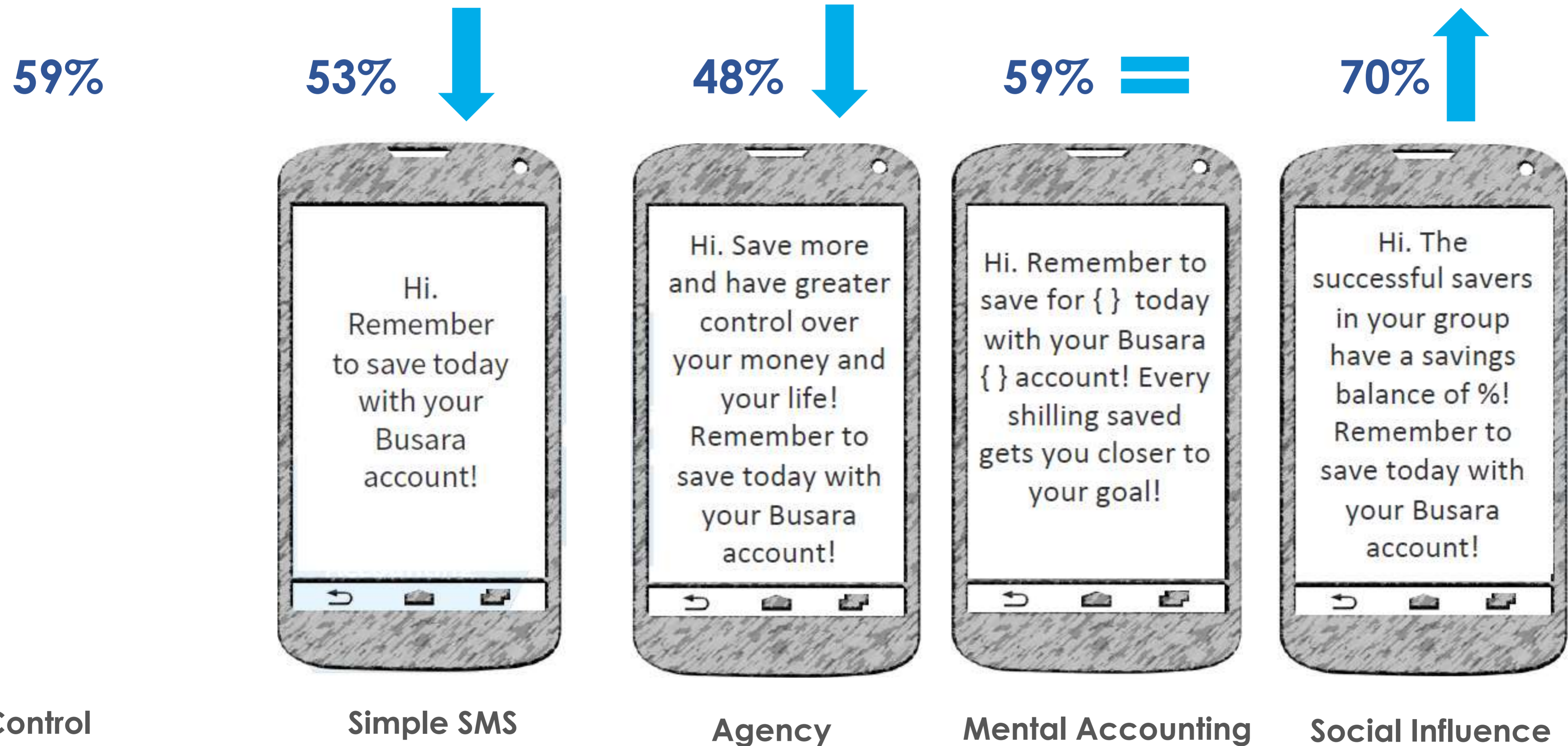


In India, Tanzania, Nigeria, Georgia, well designed and targeted communications campaigns changed behaviors in relation to latrine use, savings, HIV risk behaviors, and son preference. In India latrine used increased by 10%.



in Poland, Kosovo, and Guatemala, trials found that using different language in tax-related letters increased tax compliance. In Poland – “hard tones” increased tax compliance by 20.8%

Testing SMS design to increase savings in Tanzania

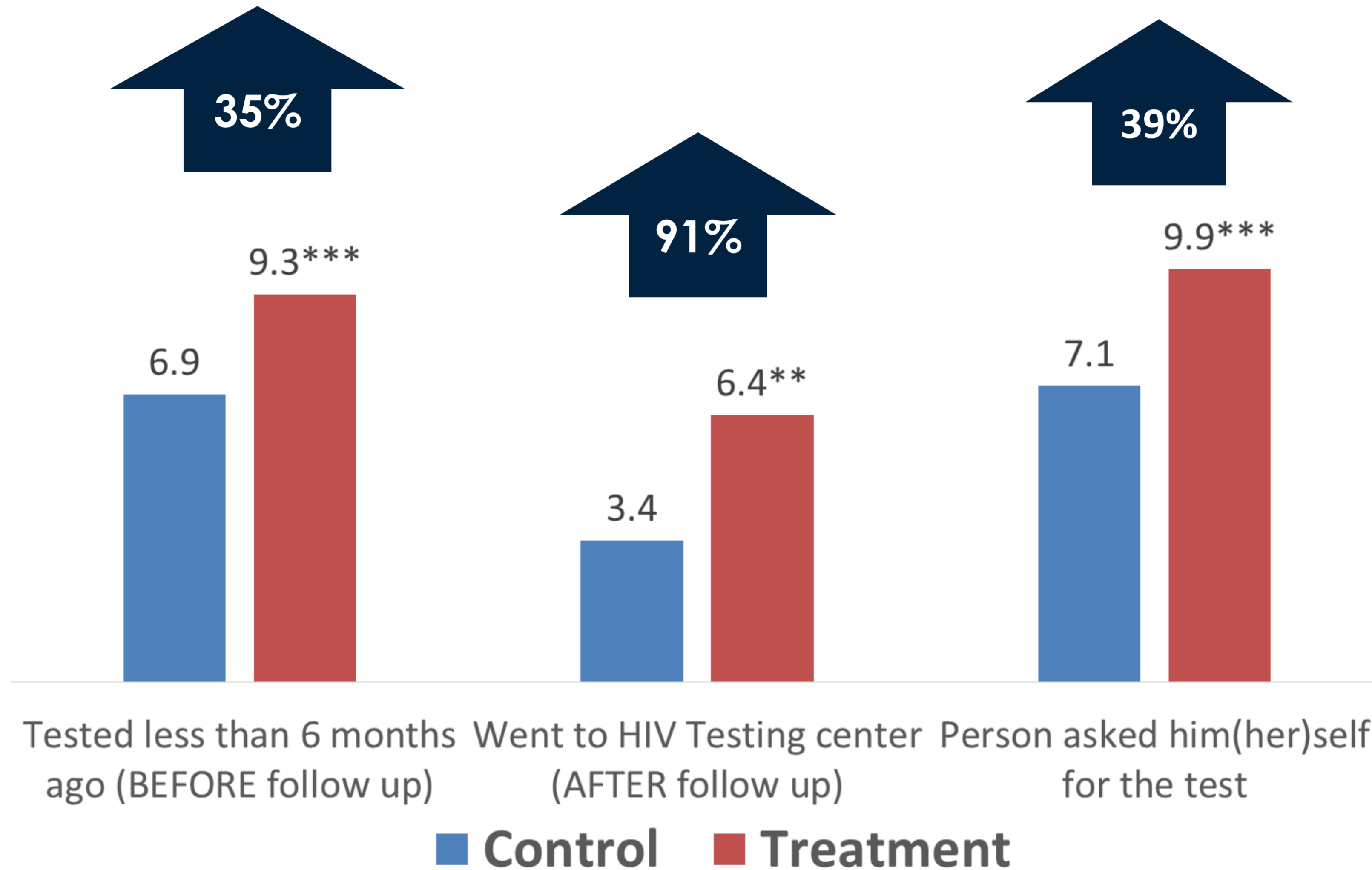


Increasing HIV testing in Nigeria

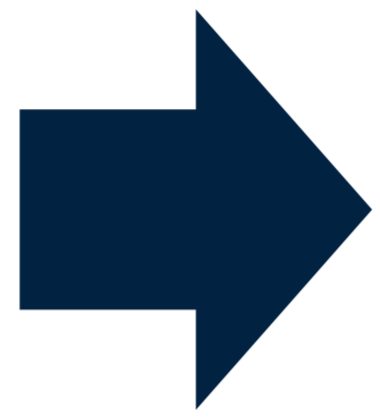


MTV shuga

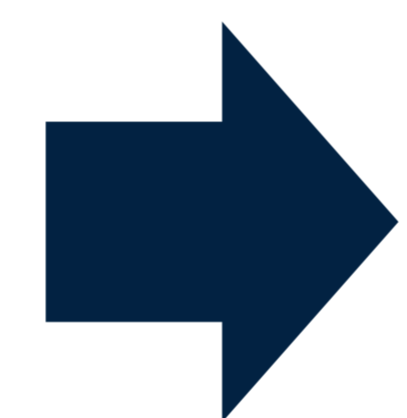
Increasing HIV testing in Nigeria



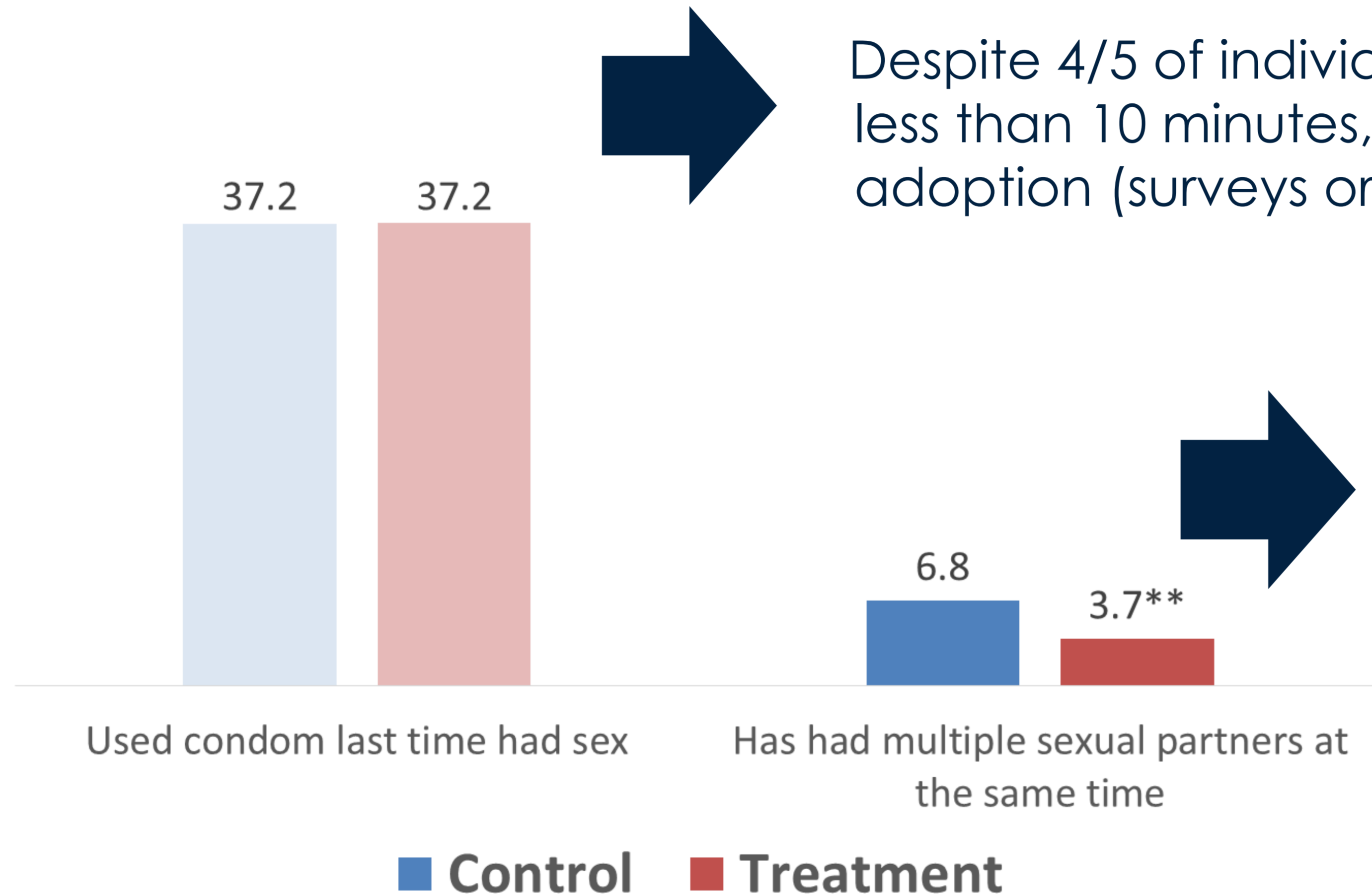
Increasing HIV testing in Nigeria



Despite 4/5 of individuals know they can get a condom in less than 10 minutes, there are no effects on condom use adoption (surveys or experiment).



But, there is a reduction on the number of sexual partners.



At home: water conservation in Cape Town



INFORMATION FOR ACTION

WATER SAVING TIPS

QUICK FIXES THINGS YOU CAN DO RIGHT NOW	SMART PURCHASES SAVE A LOT BY SPENDING A LITTLE
<p>Take shorter showers</p> <p>A standard showerhead can use as much as 16 litres per minute. If you shorten your shower by only three minutes, you can save up to 48 litres per shower. For a family of four, this amounts to 5 760 litres (5.76 kilolitres) per month!</p>	<p>Use a water-saving showerhead</p> <p>A water-efficient showerhead can use as little as 6 litres of water per minute. Switching from a normal to a water-efficient showerhead can save as much as 10 litres of water per minute. This means a family of four can save 1 200 litres (1.2 kilolitres) per minute each month without any other behavioural change.</p>
<p>Don't leave taps running</p> <p>A running tap can use 20 litres of water per minute. Turn off the tap when brushing your teeth, shaving and washing dishes. If you spend 2 minutes each day brushing your teeth and you leave the tap running, you use 1 200 litres (1.2 kilolitres) per month. This amounts to 4 800 litres (4.8 kilolitres) for a family of four. Reduce your consumption to only a fraction of this by switching off the tap!</p>	<p>Fit taps with water-saving devices</p> <p>Tap aerators, which screw onto your taps, reduce the flow of water by mixing air into the water flow. While normal tap-flow is between 20-30 litres per minute, these water-saving devices can reduce the flowrate to as little as 6 litres per minute.</p>
<p>Have a smaller bath</p> <p>If you only fill your bath halfway, you would save between 40 to 75 litres each bath. A saving of 40 litres per bath for a family of four amounts to 4 800 litres (4.8 kilolitres) of water saved every month!</p>	<p>Reduce the water used per flush</p> <p>Older toilets can use as much as 12 litres of water per flush. Converting your existing toilet to a multi-flush (interruptible flush) system can halve your water use per flush. If a family of four flushes the toilet 10 times per day, this is a saving of 1 800 litres (1.8 kilolitres) per month.</p>
<p>Fix leaks immediately</p> <p>Leaking taps, showerheads and toilets can waste large amounts of water. A dripping tap can waste between 30 - 60 litres of water a day. That is 900 - 1 800 litres (0.9 - 1.8 kilolitres) per month! Remember that not all leaks are visible.</p>	<p>Use a pool cover</p> <p>During hot weather, pool levels can drop by about 1cm per day. Pool covers or blankets can reduce evaporation by up to 90%, saving the water you would use to top up your pool. If your pool level drops by more than 6cm a week, you might have a leak. Look for cracks inside the pool. Remember that automatic top-up systems are not allowed.</p>
<p>Practice water-wise gardening</p> <p>When watering your garden, keep to the times specified in the by-law. Remember to turn off automatic sprinklers when rain is expected.</p>	<p>Did you know? 1 kilolitre = 1 000 litres</p>

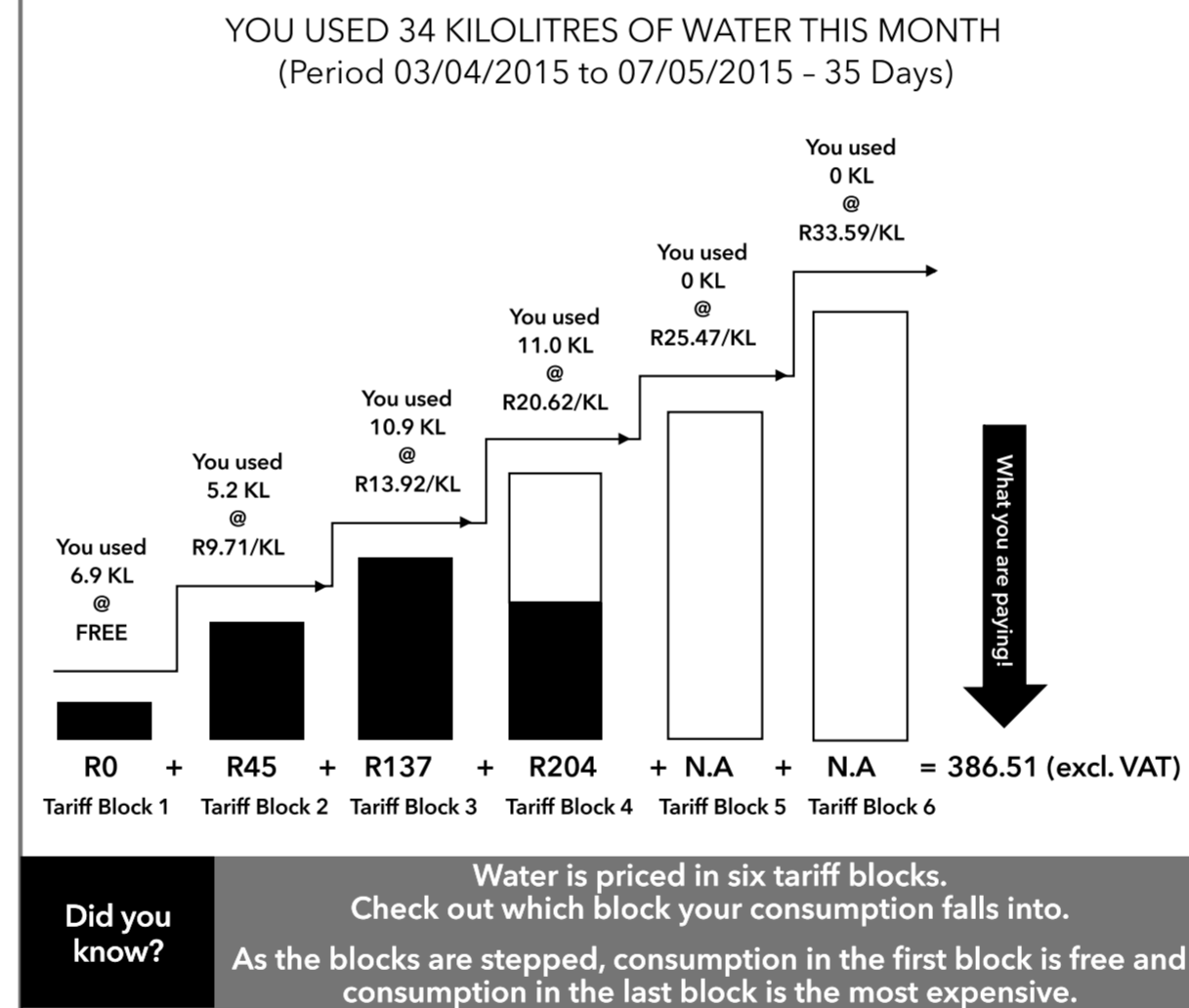
Please call 021 650 5186 on weekdays between 09:00 and 16:00 with queries.



Making progress possible. Together.

FINANCIAL GAIN

CHECK THIS BREAKDOWN OF YOUR WATER BILL!



Not sure how to reduce your consumption? The tips on the back show you how!

SOCIAL RECOGNITION

BE PUBLICLY RECOGNISED FOR SAVING WATER!

- The City is launching a water savings initiative over the summer months when water usage normally increases.
- Please try to reduce consumption by 10% between November and April.
- As you used 34 kl this month, this means you need to keep your monthly consumption around 31 kl.
- The City will **publicly recognise** the achievement of all water-wise households by **publishing your name and suburb on the City's website**.
- You will be notified of how your household did in May.
- **Get saving today!**

Not sure how to reduce your consumption? The tips on the back show you how!

At home: water conservation in Cape Town



HETEREGENOUS IMPACT

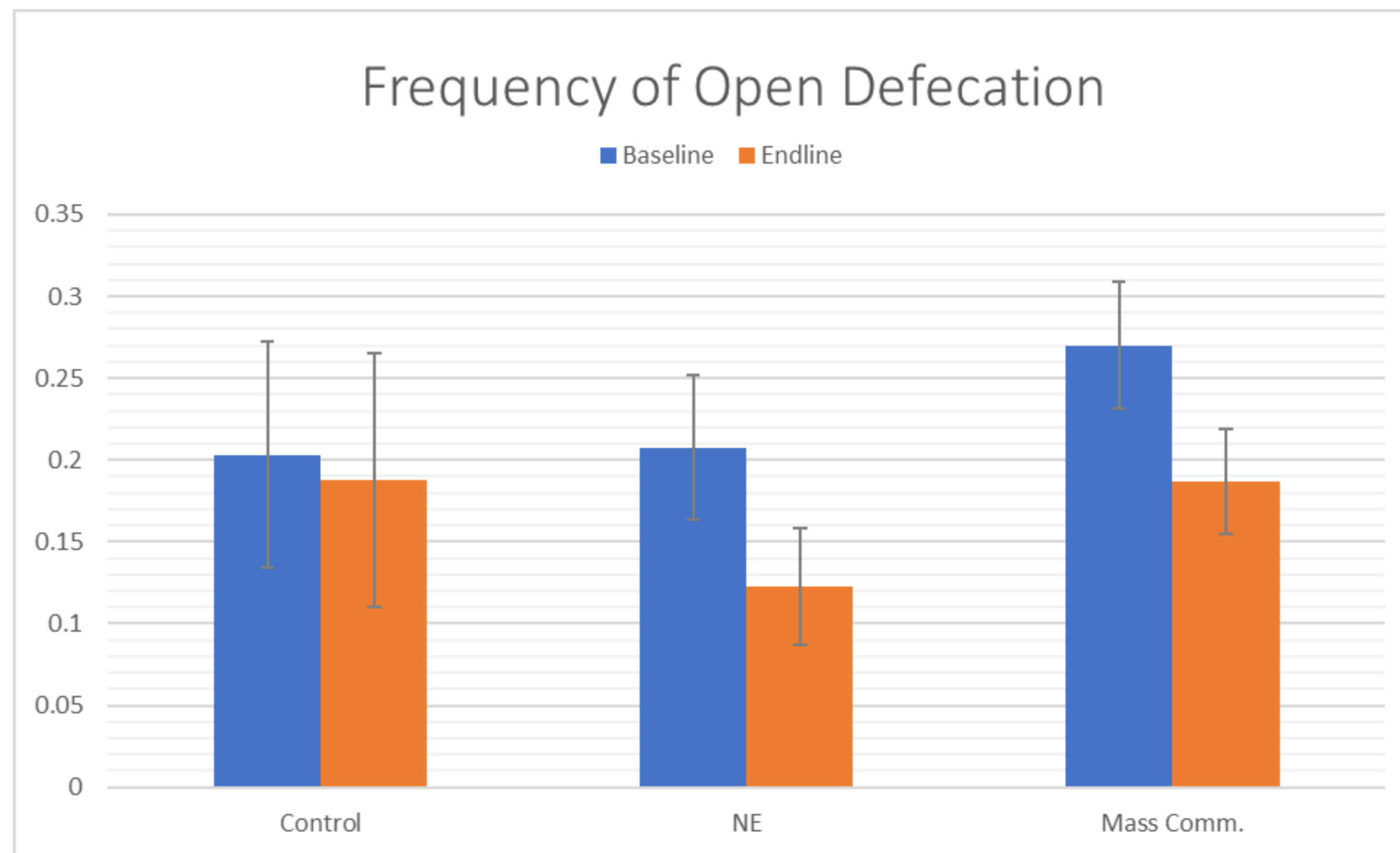
- Lower income households responded most to the tariff graph and financial messages
- ... while high income households responded most to the social recognition

Improving sanitation in Uttar Pradesh



Improving sanitation in Uttar Pradesh

- Changes in both personal behavior and attitude towards latrine use
- Statistically significant reduction in reported frequency of open defecation in both sets of treatment villages



**A few of our projects:
Adapt and replicate**

Improving student performance in Peru, South Africa, Indonesia



Improving student performance in Peru, South Africa, Indonesia

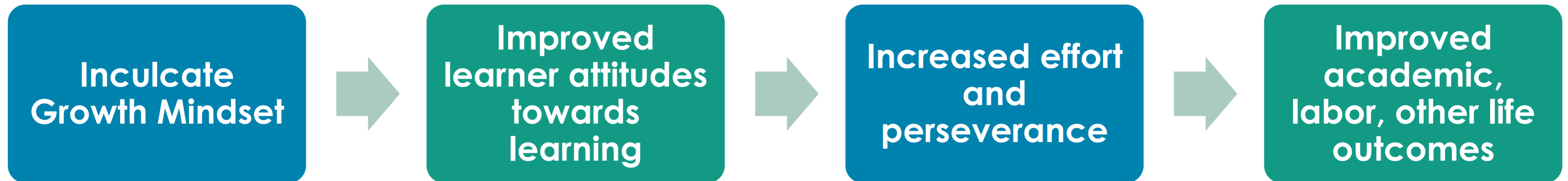


Fixed: Believing you are born with certain abilities and cannot change them

Growth Mindset is a belief about ones abilities
It runs on a continuum, from...



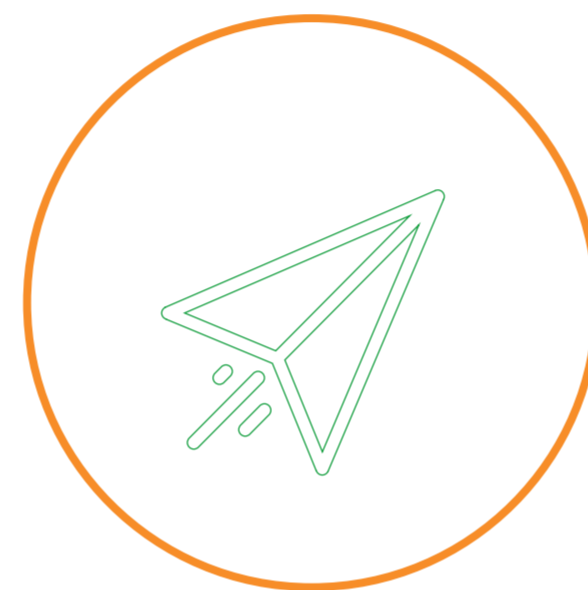
Growth: Believing you can grow your abilities through effort and hard work



Improving student performance in Peru, South Africa, Indonesia



10% increase in 2017
final Math test
17% increase in 2018
term 1 Math



13% increase in growth
mindset index (beliefs
about learning)



Less than \$1 USD per
student to increase
test scores by 1 point

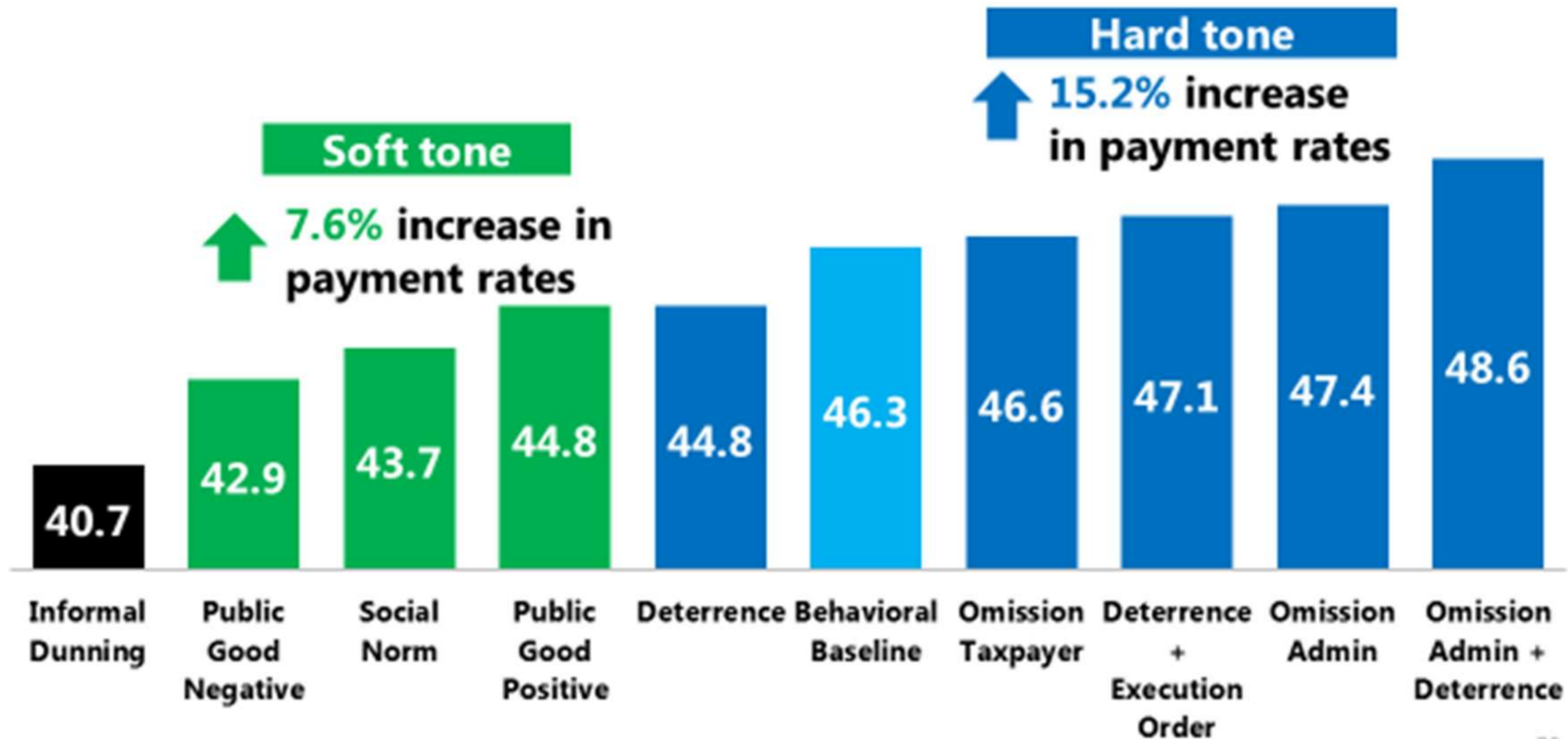
Peru: effects comparable to 4 months of catch-up in math.

<http://documents.worldbank.org/curated/en/731961542391505661/Instilling-a-Growth-Mindset-in-South-Africa>

<http://documents.worldbank.org/curated/en/992261505907400267/Cambiando-la-mentalidad-de-los-estudiantes-evaluaci%C3%B3n-de-impacto-de-expande-tu-mente-sobre-el-rendimiento-acad%C3%A9mico-en-tres-regiones-del-Per%C3%BA>

Increasing Tax Compliance (Poland, Guatemala, Kosovo)

Percentage of Taxpayers that Paid their Income Tax



Beyond the beneficiary: Policy-makers, front-line workers, and experts



Are experts exempt from biases?

Confirmation bias – the tendency to seek out and interpret evidence consistent with prior views



Are experts exempt from biases?

Please evaluate this study...

	Rash got worse	Rash got better
Patients who DID use the new skin cream	223	75
Patient who DID NOT use the new skin cream	107	21

Are experts exempt from biases?

Please evaluate this study... (different set of respondents)

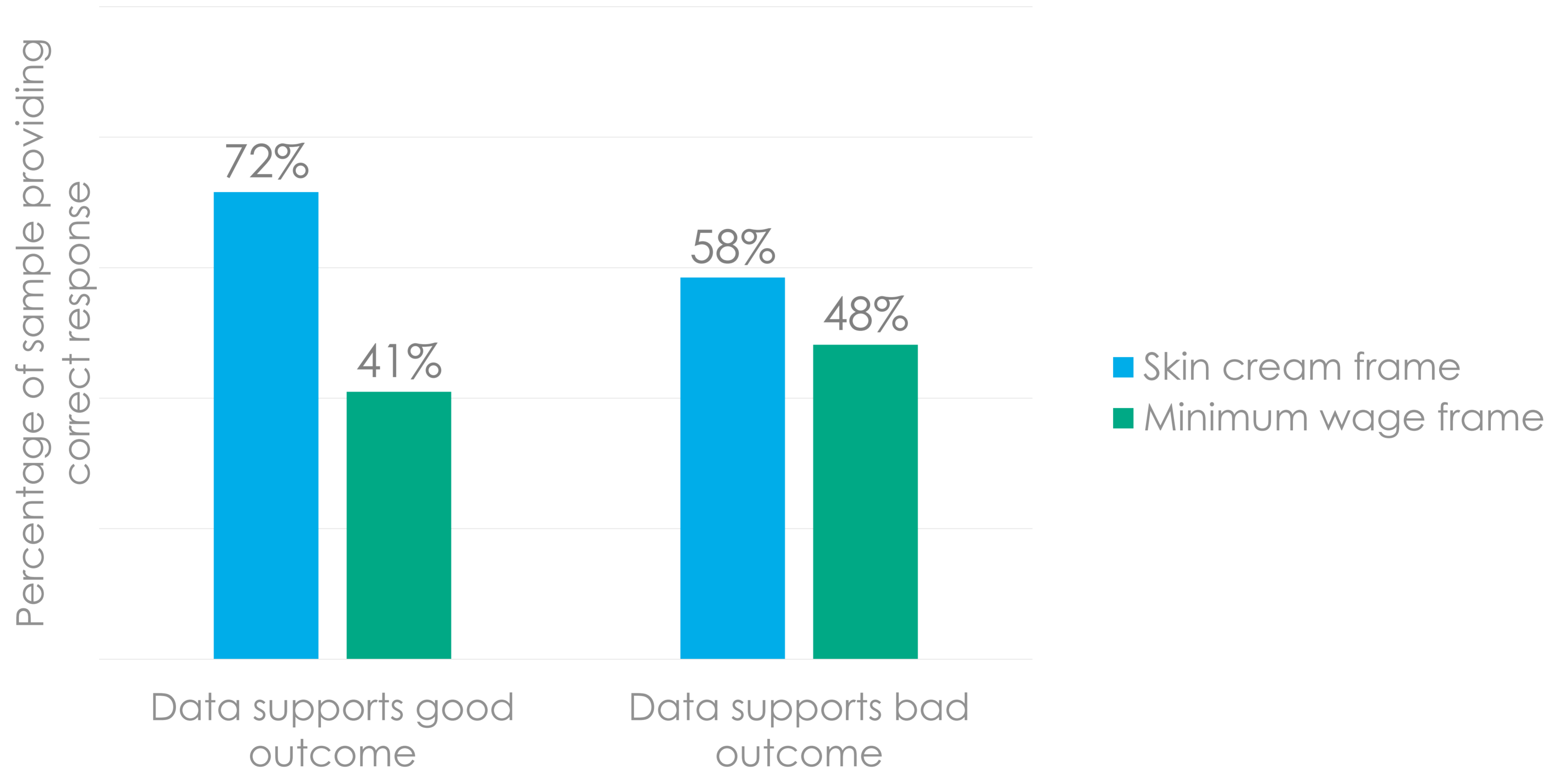
	Rash got better	Rash got worse
Patients who DID use the new skin cream	223	75
Patient who DID NOT use the new skin cream	107	21

Are experts exempt from biases?

Please evaluate this study...

	Income of poorest 40% fell	Income of poorest 40% rose
Localities that DID increase the minimum wage	223	75
Localities that DID NOT increase the minimum wage	107	21

Correct responses



Cash Transfer Modernization in Bangladesh



What else and what comes next?

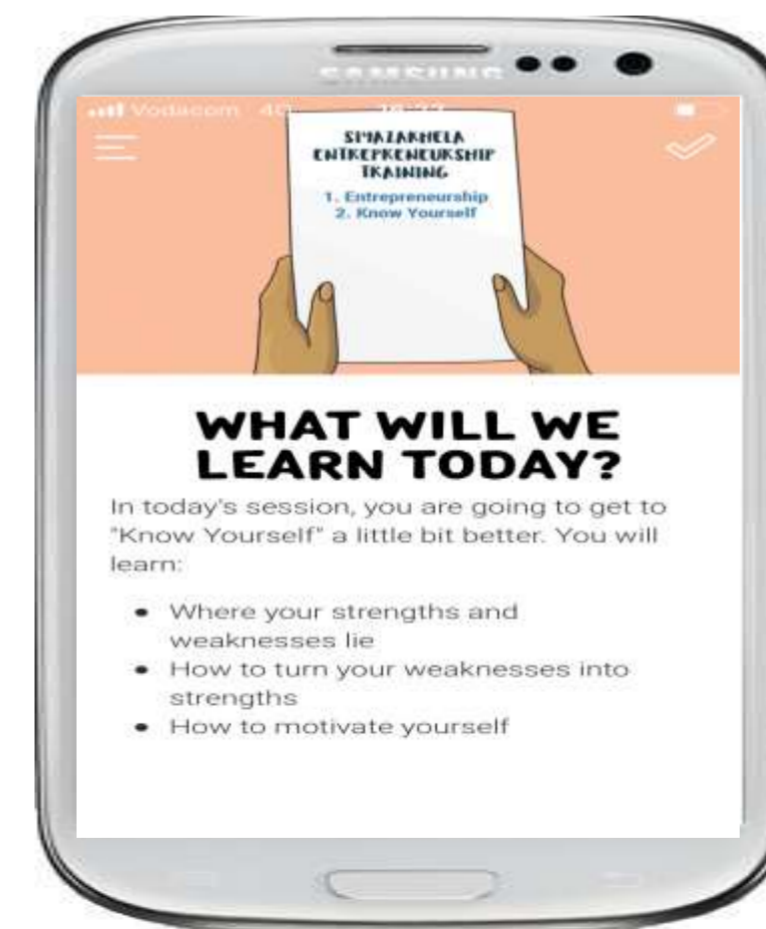
Using technology for interventions and measurement (VR, games, platforms)



eMBeDing behavioral insights with structural reforms (e.g. Social cohesion, unemployment)



Measuring the tricky things and measuring things well to build quality evidence



Identifying ways to tackle sticky norms

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