USING EVIDENCE FROM BEHAVIOURAL SCIENCE FOR CLIMATE ACTION 12 June 2023

17:00 - 18:00 CEST

















USING EVIDENCE FROM BEHAVIOURAL SCIENCE FOR CLIMATE ACTION We are about to start!



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USING EVIDENCE FROM BEHAVIOURAL SCIENCE FOR CLIMATE ACTION

OPENING REMARKS



JO PURI

Associate Vice-President Strategy and Knowledge Department

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GOING THE LAST MILE: BEHAVIOURAL SCIENCE INTERVENTIONS IN DEVELOPING COUNTRIES

DR JYOTSNA (JO) PURI ASSOCIATE VICE-PRESIDENT SKD INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT (IFAD)

JLIFAD

Investing in rural people



WEALL SUFFER FROM BIASES

Bias: an error in cognition that arises in a person's line of reasoning when making a decision is flawed by personal beliefs

Cognitive biases

Overconfidence bias Loss aversion bias Availability heuristic Framing bias Presentation of a choice Anchoring bias



BEHAVIOURAL SCIENCE

CREATING THE ARCHITECTURE TO MAKE THEM

BEHAVIOURAL SCIENCE TOOLS

FAD Investing in rural people

NUDGES

Using a boost assumes that individuals are motivated to engage in the desired behaviour but lack the means to achieve it. Alternatively, boosts can improve individual decisions independently of a target behaviour

"Any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives"

(Thaler and Sunstein, 2009, p.6)

Last mile gaps: gaps between the knowledge provision and skills creation that are usually included in investments, and changes in practices and behaviour on the ground.

METHODS AND FRAMEWORKS FROM BEHAVIOURAL SCIENCE CAN HELP IDENTIFY BARRIERS AND ENABLERS FOR BEHAVIOUR CHANGE

BOOSTS

DECISION MAKING IS NOT ALWAYS RATIONAL/EVIDENCE BASED

BEHAVIOURAL **SCIENCE** TOOLS

CAN CLOSE **LAST MILE GAPS** BY ADDRESSING COGNITIVE BIASES

THE CAN ENHANCE **INVESTMENTS**





EFFECTIVENESS OF PROJECTS AND



ORDINARILY SHOULD *NOT*CHANGE OUR PAY-OFFS



BEHAVIOURAL SCIENCE CAN BE AN IMPORTANT TOOL FOR INCREASING THE EFFECTIVENESS OF DEVELOPMENT PROJECTS

Employing behavioural science approaches to close last mile gaps requires:



APPROPRIATE BEHAVIOURAL SCIENCE INTERVENTIONS TEST BEFORE THEY ARE USED AND SCALED-UP



BEHAVIOURAL SCIENCE INTERVENTIONS IN DEVELOPING COUNTRIES: AN EVIDENCE GAP MAP – some surprises



		«	Development results			
ase viour	End behaviour	No change in behaviour	Enhance Equity	Support resource conservation	Changi techno	
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82% of GCF investments potentially have the last mile gap in their overall causal pathways

FAD



Incentives

Change groups

Conditional cash transfers

Unspecified

Nudging

Boosting

- On the portfolio-level, behaviour change by final beneficiaries is essential for most adaptation and cross-cutting projects.
- After reviewing 11 GCF projects as case studies, results show that nudges and boosts are broadly applicable to climate projects.

Neither nudging nor boosting were mentioned in the funding proposals.

Projects with intervention





SYSTEMATIC REVIEW: BEHAVIOURAL SCIENCE INTERVENTIONS WITHIN THE DEVELOPMENT AND ENVIRONMENTAL FIELDS IN DEVELOPING COUNTRIES

68 UNIQUE STUDIES WERE IDENTIFIED THAT FOCUS ON FIVE INTERVENTION TYPES: FEEDBACK, REMINDERS, SALIENCE (COMMUNICATION), SALIENCE (EXPERIENCE DESIGN), GOAL-SETTING INTERVENTIONS

SYSTEMATIC REVIEW: Findings and implications

• Feedback is the most effective intervention type, particularly for electricity and water consumption.

RESULTS





Reminders are comparably effective on acquiring knowledge.

• Goal-setting, salience communication and salience experience design – do not provide robust evidence.

SYSTEMATIC REVIEW: Findings and implications

CONCLUSIONS







- Feedback interventions and reminders can be a tool to influence resource consumption.
- The *duration* of effects of behavioural interventions are unclear.

Thank you for your



To access the publication, please visit:

attention!

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KEYNOTE SPEECH



ANDREAS REUMANN

Head Independent Evaluation Unit Green Climate Fund

















2023 UNITED NATIONS BEHAVIOURAL SCIENCE WEEK

Andreas Reumann Head of Independent Evaluation Unit **Green Climate Fund**

















Evaluating impact of climate investments: Rigorous evidence and how do we get there?

Did the

a change?

program *cause*

Would the

happened

anyway??

change have

Are there other costeffective ways to retrieve the same change?

Attributable impact/change

If the

program

caused the

much was

change, how

the change?



To be evidence-based, W UN NETWORK we need collaborative evidence synthesis

Traditional reviews with bias:

- Selection bias
- Lack of comprehensive-ness.
- Publication bias.
- No transparency.
- Quality bias.
- Discussion bias.

Gaps:

Evidence Base

- Geographic gaps
- Thematic gaps
- Distribution gaps

Locating EGMs and ERs in the evidence synthesis product space:

Content	Systematic review: primary studies Review of re systematic re	Global evidence mapping initiative eviews: eviews		
		Evidence and gap map: SRs & primary studies	: 5	
			Mega-map: SRs & EGMs	Map of maps: EGMs
	narrow	Scope		broad

Behaviour change as one factor W UNINNOVATION C Quintet in Transformational change!



Figure 2 of IEU's learning paper no.5 3/2021 Assessing the likelihood of transformational change at GCF

Not just in implementation challenge.

- Also conceptualizing what Tchange could look like (*did* a Tchange occur?) and measuring the magnitude of the change.

- Is contingent on comprehensive and cross-sectoral interventions (Wienges et al., 2017), which may involve reconfiguring social, political, technical and policy elements of society.

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THEMATIC TALK

"Evidence Gap Mapping" and "Systematic Review"



MARTIN PROWSE

Evaluation Specialist Independent Evaluation Unit Green Climate Fund



ROMINA CAVATASSI

Senior Economist FAO / IFAD















2023 UNITED NATIONS BEHAVIOURAL SCIENCE WEEK

Samantha Booth, Romina Cavatassi, Benjamin Curtis, Deborah Sun Kim, Laurenz Langer, Caitlin Blaser Mapitsa, Promise Nduku, Martin Prowse, Jyotsna Puri, Jamie Robertsen

Behavioural Science Interventions within the Development and Environmental Fields in Developing Countries - An Evidence Gap Map and Systematic Review









Objectives

The specific objectives of this EGM are to:

- Describe the available evidence base on the effectiveness of behavioural science interventions on environmental, and development outcomes in non-Annex I countries
- Improve access to this evidence for decision-makers, project implementers

To achieve these objectives, we:

- 1. Produced an **interactive evidence gap map** on behavioural science interventions on climate, environmental and development outcomes in developing countries
- 2. Synthesized causal evidence to identify the effects of specific behavioural science interventions in a **systematic review**













Records identified Additional records identified through other through database searching (n = 40.424)sources (n = 362)Records excluded (n = 34,209)Exclude on language = 152Exclude on population = 838 Exclude on no intervention or irrelevant intervention = 21.062 Exclude on outcome = 1.401Exclude duplicate = 146Records screened at title and abstract (after 6.446 Exclude on study design = 184 duplicates removed) (n = 34,340)Study on relevance = 10.426Full-text articles excluded, with reasons (n = 47)Exclude on date = 1Exclude on population = 3

Full-text articles assessed for eligibility (n = 131)

Studies included in the EGM (n = 84)

Studies included in the systematic review (n = 60)

 Population: Behavioural science intervention studies in non-Annex 1 countries of Kyoto Protocol of UNFCCC

Evidence Gap Map and PICOS

- Intervention: Pro-social interventions informed by empirical research delivered at any administrative level, to any type of beneficiary
- <u>Comparison</u>: Counterfactual studies
- <u>Outcomes</u>: Knowledge outcomes, uptake and use outcomes, behavioural outcomes, and development results and impacts
- Study designs: Causal inference







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Exclude on no intervention or

irrelevant intervention = 24

Exclude on outcome = 6 Exclude duplicate = 3 Exclude on study design = 8

PDF not found = 2

Theory of change

United Nations



Distribution of intervention categories

<u>**Reminders</u>** - Involves messaging people (via email, SMS, etc.) in a timely way to call their attention to something, and/or to encourage them to take certain actions</u>

Feedback - Provides information, often tracked over time, about behaviours

<u>Salience (communication)</u> - Improves the ease and accessibility of adopting behaviours by making information/choices more prominent and relevant

Salience (experience design) - Focuses on how individuals interact with their physical and/or digital environment

<u>Goal setting</u> - Helps individuals consider what their priorities are, then specify a series of goals they would like to achieve

















Systematic review





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to provide an overview of causal











This study filled a knowledge gap on the

effectiveness of behavioural science interventions on environmental and development outcomes in developing countries

We completed an interactive evidence

gap map using a broad research scope

evidence covering 22 intervention types

To allocate limited resources effectively,

funding decisions can be enhanced by

learning from a robust evidence base

Conclusions and policy implications

We found evidence that interventions feedback and reminders are effective behavioural approach to improving outcomes

For the remaining three behavioural science interventions in the **systematic** review - goal setting, salience of communication and salience of **experience design** – more research is required to inform decision-making





USING EVIDENCE FROM BEHAVIOURAL SCIENCE FOR CLIMATE ACTION

ROUND TABLE



BENJAMIN CURTIS

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Rare inspires change so people and nature thrive.



Rare has run nearly 500 behavior change campaigns in more than 60 countries Rare's behavior change campaigns, on average, increase adoption by 18 percentage points



Transform the environmental field by equipping environmentalists everywhere with the science of human behavior









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Spotlight: Fishing for Climate Resilience





Food and Agriculture Organization of the United Nations





Solution: Managed Access with Reserves



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communities are engaged and actively implement ecosystem-based adaptation measures



sq km of coastal waters now co-managed fishing grounds

3,085

sq km of blue carbon ecosystems protected

70 communities have climatesmart resource management action plans

20,072

direct beneficiaries (47% women) reached with a total of 37,965 reached by behavior adoption campaigns













Approach: Behavior-Centered Design (BCD)











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The Behavior-Centered Design Journey



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Trivit,

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Q&A SESSION















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Thank you for joining us!

Contact us: innovation@ifad.org













