

Leveraging Behavioral Insights to Address Ocean Sewage Pollution

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Rare



Over more than four decades Rare has joined with 100+ partners on more than 450 community-led behavior change projects in nearly 60 countries

Virtually every environmental challenge has at least one thing in common.



To solve them,
someone somewhere
has to start behaving
differently.

We have a spectrum of effortful and automatic ways of thinking and deciding.

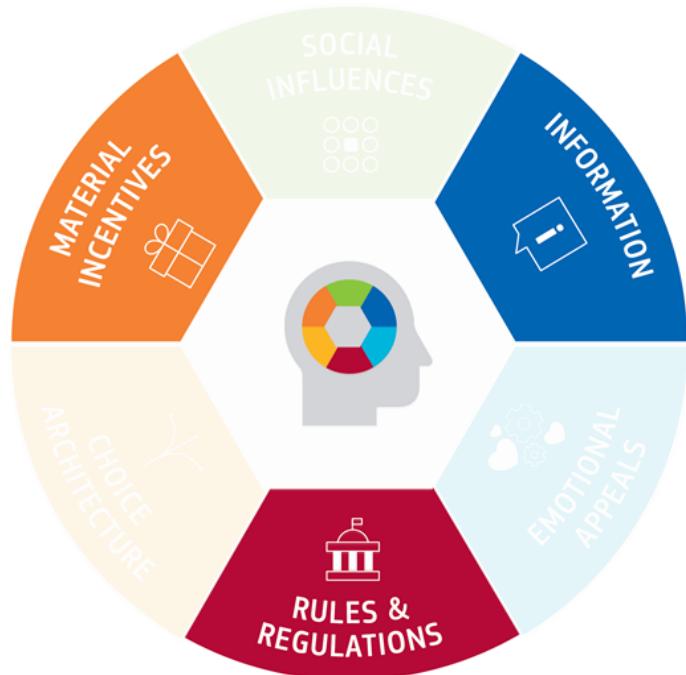


Weighing
options,
calculating
costs and
benefits

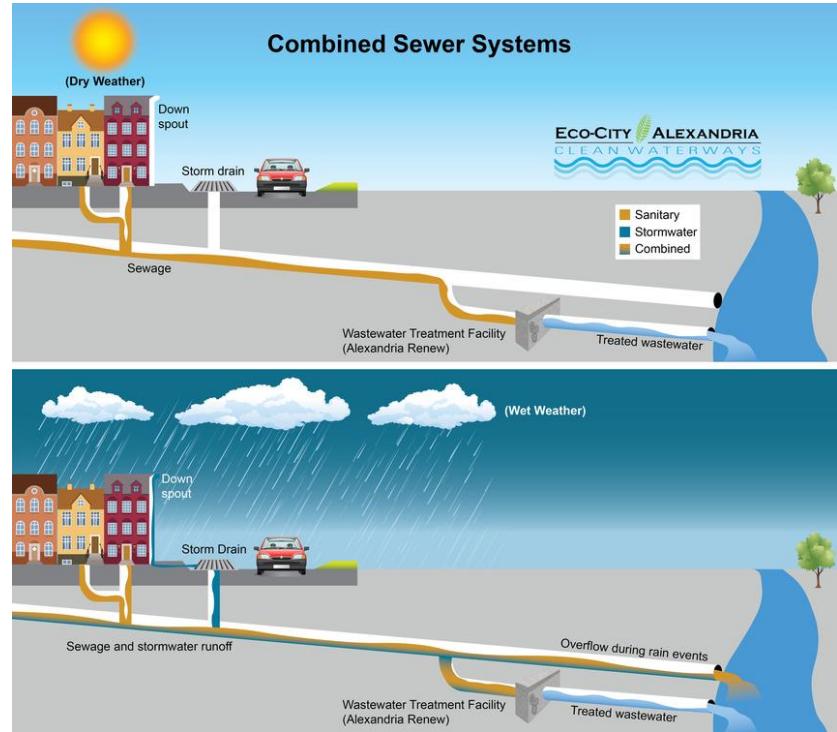


Reacting
automatically,
quickly

**The most common tactics for driving behavior change
are designed for one kind of thinking.**



These problems don't align with a rational mind.



The science of human behavior can be a game-changer.

1. Emotions are often more powerful than reason.
2. We are an inherently social species.
3. The context of our decision-making matters.



behavioral strategies checklist



EMOTIONAL APPEALS

Using emotional messages to drive behavior

Leverage emotions in specific contexts

- Use pride to motivate showing engagement when people have achieved a goal or can be recognized for doing the right thing
- Use joy to motivate sharing with others and reinforce desired behavior when people have achieved a goal or gained resources
- Use hope to motivate starting a behavior when people perceive an opportunity to achieve a desired outcome while facing a threat
- Use fear to motivate avoiding risky behavior or taking preventative action when people experience uncertainty or an immediate threat
- Use anger to motivate confronting others when people witness injustice or experience threats to personal autonomy
- Use amusement and surprise to motivate seeking information with when something is novel and complex
- Use the prospect of shame to motivate avoiding an action when other people might find out about socially-undesirable actions

Personalize the message

- Put a human face on campaigns and focus on a single story over abstract statistics
- Tailor messages to make them personally relevant, relatable, and appealing



RULES & REGULATIONS

Enacting rules that promote or restrict a behavior

Mandate behavior

- Enact mandates that require or encourage the desired behavior

Prohibit behavior

- Enact prohibitions that limit or forbid the undesired behavior



MATERIAL INCENTIVES

Increasing or decreasing real or perceived costs, time, or effort for doing a behavior

Make it easy or the alternative hard

- Make the desired behavior more convenient and accessible to do (e.g., remove barriers, provide substitutes)
- Make the undesired behavior more difficult to do (e.g., create friction points, barriers)

Give rewards or penalties

- Incentivize or reinforce the desired behavior
- Penalize or fine for cases of the undesired behavior



SOCIAL INFLUENCES

Leveraging the behavior, beliefs, and expectations of others

Make engaging or not engaging in the desired behavior observable

- Publicly broadcast who has and has not engaged in the desired behavior
- Provide a way for people to show they are doing the desired behavior

Make the desired behavior the perceived norm

- Highlight possibility of social sanctions for doing the undesired behavior
- Share that people are currently doing the desired behavior
- Create conversation around shared beliefs and expectations
- Promote cases of success with the desired behavior
- Leverage credible and trusted messengers doing the desired behavior
- Facilitate peer or community exchanges where others can observe and gain support for the desired behavior

Eliminate excuses for not engaging in the behavior

- Encourage public commitments or pledges to drive the desired behavior
- Provide visible indicators that signal support for the desired behavior (e.g., hats, badges)



CHOICE ARCHITECTURE

Changing the context in which choices are made

Direct attention

- Make the desired behavior the default option
- Draw attention to the desired behavior by making it salient

Simplify messages and decisions

- Streamline complex decisions to focus on key information or actions
- Provide shortcuts for a behavior with many steps or options

Use timely moments and prompts

- Target moments of transition and habit formation
- Provide prompts and reminders about the desired behavior

Facilitate planning and goal setting

- Provide support in making a plan to achieve the desired behavior
- Use commitments to bind or limit future decisions



INFORMATION

Providing information about what the desired behavior is, why it matters, and how to do it

Provide step-by-step instructions

- Offer training on the desired behavior
- Provide materials that give instructions on how to do the desired behavior

Build awareness and understanding

- Provide informational forums, meetings, or materials that describe the desired behavior and its importance
- Communicate about the desired behavior in a clear, concrete, and unambiguous way
- Give feedback on performing the desired behavior



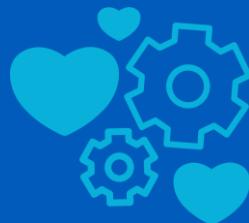
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1

Give people something to feel good about, and they'll actually listen.





Affective forecasting and self-control: Why anticipating pride wins over anticipating shame in a self-regulation context

Vanessa M. Patrick ^{a,*}, HaeEun Helen Chun ^{b,1}, Deborah J. MacInnis ^{b,1}

% that completely resisted eating the cake

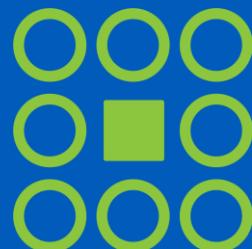


Affective forecasting and self-control: Why anticipating pride wins over anticipating shame in a self-regulation context^{b,1}

Vanessa M. Patrick^{a,*}, HaeEun Helen Chun^{b,1}, Deborah J. MacInnis^{b,1}

2

Show people where the herd is going,
and they'll want to go there too.





17%

MORE LIKELY

"People limit how much meat they eat"

34%

MORE LIKELY

"People have started to limit how much meat they eat"



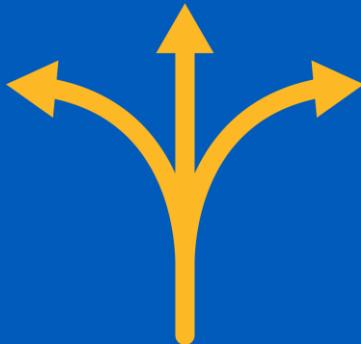
Dynamic Norms Promote Sustainable Behavior, Even if It Is Counternormative



Gregg Sparkman and Gregory M. Walton
Department of Psychology, Stanford University

3

**When it comes to choice,
less can be more.**





50 simple ways to make your life greener

Expert tips on how to be kinder to the planet
- from cooking and cleaning to fashion and
finance

1.



x6

40% stopped for a taste
30% purchased



When Choice is Demotivating: Can One Desire Too Much of a Good Thing?

1.



x6

40% stopped for a taste

30% purchased

2.



x24

60% stopped for a taste

When Choice is Demotivating: Can One Desire Too Much
of a Good Thing?

1.



x6

40% stopped for a taste

30% purchased

2.



x24

60% stopped for a taste

3% purchased

When Choice is Demotivating: Can One Desire Too Much
of a Good Thing?

1

Give people something to feel good about, and they'll actually listen.

2

Show people where the herd is going, and they'll want to go there too.

3

When it comes to choice, less can be more.

The Behavior-Centered Design Journey

1. FRAME



2. EMPATHIZE



3. MAP



4. IDEATE



5. PROTOTYPE



6. TEST



7. LAUNCH



8. ASSESS





Frame

What do I want my audience to *do*?



Empathize

What is *their* experience?



Map

What insights can I draw from their experience?



Ideate

What strategies might work best?



Prototype

What will that look like in real life?



Test

What happens when I try it at small scale?



Launch

How can I take it scale?



Assess

Is it working?

An Example: SOIL (Haiti)

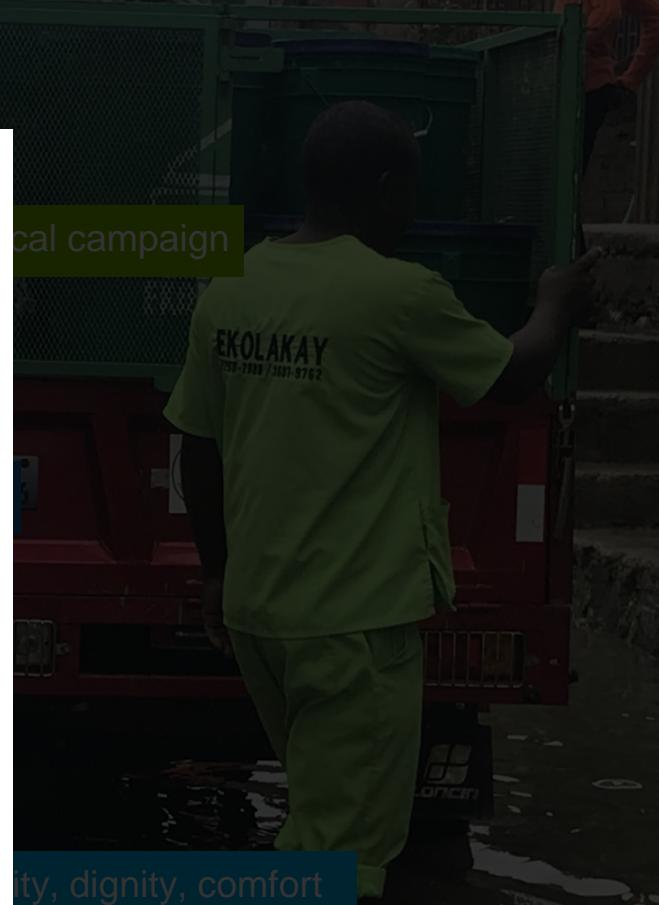


regulatory frameworks

city, dignity, comfort

convenience

local campaign



Wastewater dischargers care about their peers too!

<https://doi.org/10.1007/s10640-020-00522-0>



The Effect of Peer Comparisons on Polluters: A Randomized Field Experiment among Wastewater Dischargers

Dietrich Earnhart¹ · Paul J. Ferraro²

Accepted: 26 October 2020
© Springer Nature B.V. 2020

"X % of Kansas municipal facilities comply with their discharge limits to a greater extent than your facility complies with your limits,"

Abstract

Peer comparisons combine descriptive and injunctive messages about social norms. In experiments, these comparisons have encouraged pro-environmental behaviors among consumers. Consumers, however, are not the only sources of environmental externalities. Firms and other organizations also damage the environment. Yet organizations may not respond to peer comparisons in the same way that consumers respond because organizations have different objectives, constraints, and decision-making processes. In a pre-registered field experiment with 328 municipal wastewater treatment facilities in Kansas, we randomly sent some facilities a certified letter that contrasted, using text and a graphic, each facility's discharge behavior to the behaviors of other facilities in the state. We estimate the effect of these peer comparisons on the degree to which the recipient facilities complied with discharge limits under the U.S. Clean Water Act. On average, letter recipients reported discharge ratios 8% lower than non-recipients in the eighteen-month period after letters were sent (95% CI [-15%, -1%]), although we cannot detect an effect in all post-treatment quarters. We believe that the results warrant further experimental replications and extensions to examine the cost-effectiveness of reducing pollution through peer comparisons.

8%

reduction in the ratio of reported discharges to permitted discharge limits

Interested in learning more?



**Behavior-Centered Design
Training
June 2 – 3**

**World Water Week
Presentation + Workshop
August 24 – 25**

**BE.Hive Summit on behavioral
insights for water pollution
September 21 – 23**

Behavior Change for the Environment Starts Here



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