

Promoting Compliance, Rule of Law and Anti-Corruption using Behavioral Science and Nudge

Nudge Lebanon

March 3rd 2020

The purpose of today's presentation

- Introduce the concept of "nudges" and behavioral insights
- Output: Share examples of applying behavioral insights to promote compliance, rule of law and anti-corruption worldwide
- Oiscuss how to integrate behavioral insights into your anticorruption strategies and methods

There is a wide gap between what we intend to do and what we actually end up doing ... *Intention-Action Gap*

- Exercising more
- Sticking to a diet
- Recycling your waste
- Saving for retirement
- Spending less time on Instagram
- Cleaning up the closet
- Quitting smoking
- Being more punctual
- Reading more books
- Learning a new language
- Starting a new hobby
- Going for health checkups regularly
- Backing up your computer
- Getting an insurance
- Etc.



Intentions





We have biases that affect our decision making abilities and the extent to which we act in our own best interests ...

NON-EXHAUSTIVE



We overvalue immediate rewards at the expense of longterm ones –we have **Present bias and do hyperbolic discounting of the future.** We make decisions today that our future self would not have made!

> We have a tendency to assess probability of some event by the ease with which such event comes to mind (availability bias)

The pain experienced from losses is twice as much as the pleasure experienced from equivalent gains – we have **loss aversion**

We prefer to keeping things the way they are (status quo bias)

We overestimate our own abilities relative to others and are **overconfident**

We have a tendency to search for information that confirms our existing beliefs (**Confirmation bias**)

We rely too heavily on the first value offered (the "anchor") when making a judgment

Nobel Prize Winner Daniel Kahneman: Two Systems in Judgement and Decision-Making



Source: QBIU and Nudge Lebanon Team Analysis

Behavioral economics is becoming mainstream economics

Conventional Economics

- For decades, classical economics assumed people's decisions and behaviors are based on deliberative thinking of system
 2, and that people are infinitely rational – or 'Econs'
- When a given a set of facts, Econs process everything to make the most optimal decision
- Most policies are designed with rational people (Econs) in mind, whereas majority are humans and have biases ...
- The fact that the very fundamentals of economics are based on wrong assumptions puts in question the current models for policy making

Behavioral Economics

- BE which is a discipline of economics that applies psychological insights into human behavior to explain decisions
- It rejects the overly simplistic and sometimes naive assumptions of classical economics about human behavior, and proposes more realistic model on how people actually behave
- In particular, BE takes into consideration that people are imperfect and are prone to making mistakes
- The golden standard for BE is experimentation and Randomized Controlled Trials (RCTs) ...

Nudge and BIs are complementary tools to traditional policy levers typically used to create behavioral change





R. Thaler & C. Sunstein

So the key characteristics of "nudge" are Four

Key Characteristics of Nudge

- 1 Small, architecture types of intervention: e.g., default rules, use of messenger, priming, reminders, feedback, salience
- ² That steer people in the right direction, in a predictable way
- ³ They are cost effective, that is, it does not significantly alter the financial incentive structure: a subsidy is therefore not a nudge
 - They are choice preserving, they do not take away other options

It seeks to counter biases and mental shortcuts that are generally the result of an automatic, fast and unconscious "System 1" in the human mind The rise of nudge and behavioral insights application to public policies has been phenomenal, driven by 3 factors

1 State Limitations	Limited enforcement powerAusterity measures
Intellectual Capital on Behavioral Economics	 Writings of well-known behavioral scientists such as Thaler, Sunstein, Kahneman even older economists Recognition through Nobel Prizes
Rise of Nudge Units	 First nudge unit in the UK Several countries followed In the Middle East, this has started to happen

Nudging gained popularity thanks to the establishment of nudge units worldwide particularly within government



Institutions inside government

Institutions outside government

Multi-national organisations

Source: OECD (2018); QBIU, Nudge Lebanon

In the Middle East, Qatar, Lebanon and Kuwait are leading the way ... with many others to follow



Institutions inside governme

titutions outside aovernment

Source: OECD (2018); QBIU, Nudge Lebanon

Nudging and BIs have been tested in a variety of public policy areas



... And many others

Corruption & non-compliance have behavioral roots



ILLUSTRATIVE

It's important to distinguish between structural and behavioral challenges:



Integrating **human behavior** insights



Using **experimentation** to know what works

SHAPE DIFFERENCE framework developed by Nudge Lebanon to tackle challenges with behavioral roots

S	SALIENCE	Drawing people's attention to stimuli that are novel, accessible, attractive and simple
Н	HASSLE FACTOR	Modifying a feature to the environment that makes a behavior easier or harder to accomplish
A	ACTIVE CHOICE	Requiring individuals to affirmatively choose between options and make implicit choice
Р	PRIMING	Exposing people to certain stimuli, words, sensations or sights to steer them towards specific behavior
E	EMOTIONS	Provoking affective reactions that are automatic and unconscious to influence people's decisions
D	DEFAULT	Providing default option that will come into force if no other active choice is made
1	INCENTIVE	Designing cost-effective incentive schemes as people tend to avoid losses rather than seek gains
F	FRAMING	Changing the way information is framed in order to affect people's behavior and perception
F	FEEDBACK	Giving clear feedback information on how people behaved in certain circumstances
E	EGO	Using cues and words that support a consistent and positive self-image
R	REMINDER	Providing cues to push people to perform certain action
E	Effect of MESSENGER	Selecting who communicates the information to influence the automatic reaction of people
Ν	NORM	Providing descriptive, factually accurate information about how peers behave in a similar situation
С	COMMITMENT	Using commitment to increase intangible cost of failure to act according to one's public commitments
E	EQUIVALENT reciprocity	Responding to others' positive actions with an equivalent one

SHAPE DIFFERENCE framework developed by Nudge Lebanon to tackle challenges with behavioral roots <u>Cognitive Biases</u>

S		
	SALIENCE	Limited attention - People can only focus on a limited number of things at a time
Н	HASSLE FACTOR	Lack of self-control – People have hard time deciding between what's good for themselves in the future
A	ACTIVE CHOICE	Status Quo Bias - People have a more general tendency to stick with their current situation
Р	PRIMING	Decision paralysis – When give too many options, people tend to make the most easiest option
E	EMOTIONS	Loss Aversion - People try to prevent losses more than they try to make gains
D	DEFAULT	Procrastination - People generally do not manage their time well and constantly wait until the last possible moment to do anything
	INCENTIVE	Intention – action gap - People don't actually do what they intend to do
F	FRAMING	Loss framing; Hyperbolic Discounting - People put an overly high value on the here and now and an overly low value on the future
F	FEEDBACK	Status Quo Bias - People have a more general tendency to stick with their current situation
E	EGO	Herding - People tend to do what others are doing
R	REMINDER	Procrastination - People generally do not manage their time well and constantly wait until the last possible moment to do anything
Ε	Effect of MESSENGER	Decision paralysis – When give too many options, people tend to make the most easiest option
Ν	NORM	Status Quo Bias - People have a more general tendency to stick with their current situation
С	COMMITMENT	Intention – action gap - People don't actually do what they intend to do
E	EQUIVALENT reciprocity	Procrastination - People generally do not manage their time well and constantly wait until the last possible moment to do anything

Increasing tax payments using social norms



BIT, in collaboration with HMRC Debt Management and Banking Team, increased tax debt payments by 23%, compared to the control group, by sending out letters that involve different variations of social norms (e.g. '9 out of 10 people in Britain pay their tax on time')



Increasing payment rate of electricity bills by the collectors' second visit



Hassle Factor

Original Slip (Control) Social Norms

National Pride

All treatments outperformed the control slip, with the 'National Pride' slip being most effective

🧕 Lebanon

Total Response to Reminder Slips by the 2nd Visit

(% of those who paid by the 2nd visit out of those who received the intervention)



* Statistically insignificant, ** Statistically significant with p < 0.05 Source: Nudge Lebanon Team Analysis

Reducing likelihood of prosecution by clearly stating goals



In 2015, BIT in collaboration with West Midlands Police and Dawes Trust increased the likelihood of paying road traffic penalties by 13.7% and decreased the likelihood of prosecution by 41.3% in comparison to control, through modifying the content of penalty notices and sending leaflets that make the consequences of speeding more salient



Payment Rates and Prosecutions Following Receipt of Penalty Notices

Control Received the standard penalty notice

Notice with Salient Consequences

Received leaflets with the penalty notice, that made the consequences of speeding more salient

Payment Rate

Increasing honesty in self-reporting by priming honesty



EXAMPLE

In 2010, a group of researchers in collaboration with an insurance company in the U.S. increased the annual reported car mileage figure by 10.3%, and hence the accuracy of self-reporting, by moving the signature box from the end to the beginning of the automobile policy annual review form



Source:Shu, L. L., Mazar, N., Gino, F., Ariely, D., & Bazerman, M. H. (2011). When to Sign on the Dotted Line?: Signing First Makes Ethics Salient and Decreases Dishonest Self-reports. Harvard Business School.

Increasing contribution using Hawthorne effect



In 2006 a group of researchers examined the effect of an image of a pair of eyes on contributions to an honesty box used to collect money for drinks in a university coffee room. People paid nearly three times as much for their drinks when eyes were displayed rather than flowers



Amount Paid for Milk Consumed on Flowers Weeks vs. Eyes Weeks

Source: Biology Letters (2006), Cues of being Watched Enhance Cooperation in a Real-world Setting; Team Analysis

Decreasing speed on Nahr El Kalb highway using the Hawthorne effect



Lebanon

In collaboration with the Ministry of Interior's Traffic Control Room in 2018, a Nudge Lebanon intervention led to a decrease in the average speed of cars on the Nahr El Kalb highway by 1.3% before midnight, compared to the baseline, by utilizing the Hawthorne Effect to trigger behavioral change through putting an image of eyes along with a message informing drivers that their speed is being monitored on Variable-Message Sign (VMS) over the highway



Control

Eves + Message

VMS showing rapidly changing messages about various issues (e.g. seat belt use, texting and driving, etc.)

VMS showing an image of blinking eyes along with a message informing drivers that their speed is being monitored

Thermal Image of Nahr El Kalb Highway



Increase percentage of adults registered as organ donors using default

A number of European countries have either used the opt-in default or opt-out option for individuals' decisions to become organ donors. The countries using the opt out default option have drastically higher proportions of their population in the potential organ donor pool.



Decreasing cyclists' non-compliance using social norms



The Behavioral Architects in the UK decreased the likelihood of cyclists jumping the red light by 21.4% at an intersection by placing a poster on the sidewalk with social norm message about jumping red light



Likelihood of Jumping Red light

Reducing demand of plastic cutlery using active choice

Lebanon

In 2017, NudgeLebanon reduced the demand for plastic cutlery with delivery orders from a local restaurant by almost 78% in comparison to the baseline, by prompting customers to make an active choice of receiving cutlery, delivered through a verbal prompt by the call centre staff before the call was concluded



Improving seatbelt compliance rates using timely reminders



Lebanon

In 2017, NudgeLebanon increased the number of drivers fastening their seatbelts by 83%, compared to the control group, through a verbal prompt delivered by valet parking attendants to drivers, reminding them to fasten their seatbelt as they enter the car



Baseline No verbal prompt given

Timely Reminder

Timely verbal prompts reminding vehicle occupants to fasten their seatbelt as they enter their cars

Increasing traffic to LTA's anti-corruption hotline ...

🚺 Lebanon

An initial experiment was conducted with a Land Registry of Baabda leading to a 6 fold fold increase in the use of the anti-corruption hotline during the 1st week - A replication of this experiment was conducted in Saida government complex leading to 27.7% increase in use of the hotline from this location





Photocopy Center



Parking Lot

Street



Many behavioural bottlenecks might explain the low traffic to hotlines because of low trust in the government and normalized perception of corruption

Potential Behavioural Bottlenecks

Relevant Behavioural Tools

	People might not be aware that they can report corruption by calling a hotline	Outlining defined actions to be taken
2		
2	Even if they were, they might feel that it won't make a difference, as nothing will be done about it	Increasing the saliency of the positive impact of reporting
3		
0	They might also feel that corruption is widespread and everybody does it	Emphasizing social norms Priming people to make an active choice
4	Additionally they might fear retaliation if they report a complaint	Increasing the saliency of anonymity
5	And they might perceive the cost of reporting as being higher than the cost of corruption they pay	Providing feedback about the time needed to solve complaints Increasing saliency of the free LALAC services

"Proudly Non-smoking" Utilizing Dynamic Social Norms



As part of its "Proudly Non-smoking" campaign, Nudge Lebanon launched an initiative to improve restaurants' compliance with Law 174 banning smoking in public spaces using dynamic norms which recent research has shown to be effective in promoting behavior change, even if that behavior is not currently the norm



Improving Compliance using Dynamic Social Norms

Distinguishing current compliant restaurants to trigger wider compliance and adoption ...



Physical Recognition (Quality stickers, *letters, ...)*



Digital Recognition (Culinary-related apps, emails, ...)

Using salience to nudge civil servants in completion of forms &reports



Attaching a Post-it note with a handwritten reminder to a survey packet increased the percentage of individuals completing the survey



Increasing tax reporting through increasing the salience of the perceived probability of getting detected



EXAMPLE

An RCT was conducted in Norway on 15,000 tax payer to increase the accurate reporting of foreign income through using behaviourally informed messages that introduced moral suasion and increased the perceived detection probability resulting in doubling the average self-reported foreign income. Additionally, the detection letter has large long-term effects on tax compliance.



The three treatment arms included:

- The **fairness treatment** that reminded tax payer that most of the Norwegians living in Norway report their income correctly
- The **societal benefits treatment** that included the results of the benefits of paying taxes on the society
- The detection treatment increased the perceived detection of the tax subject. The letter included: "The tax administration has received information that you have had income and/ or assets abroad in the previous years"

Source: Bott, K. M., Cappelen, A. W., Sorensen, E., & Tungodden, B. (2017). You've got mail: A randomised field experiment on tax evasion. Nudge Lebanon Team Analysis

Reducing misuse of public funds through making reporting easily accessible



Papua New Guinea

EXAMPLE

In 2014, UNDP in partnership with the Department of Finance launched "Phones Against Corruption" initiative to increase the reporting of corrupt practices through making the process free, simple and anonymous. Citizens were able to report cases of corruption via their mobile phones using SMS messages that would later thank the reporters and provide continuous feedback resulting in 251 cases of alleged corruption being investigated.



Source: Shephard, D. Applying Behavioral Insights to Organizations, EC-OECD Seminar Series on Designing better economic development policies for regions and cities. Nudge Lebanon Team Analysis

How to Embed Behavioral insights for Tackling Corruption

Source: QBIU and Nudge Lebanon Team Analysis

Develop a Behavioural Map

•	Key component	Process
	Key Stakeholders	Identify the key stakeholders and target groups for the intervention (e.g. Ministries, civil servants, citizens, etc.)
	Overall Framework & Processes Map	Map out the process by breaking down the policy challenge into various components, and visualising the key stakeholders journey to allow for the identification of potential entry points
3	Structural & Behavioural Challenges	Identify the behavioural and structural challenges at stake for every component of the value-chain
	Psychological Biases	Determine the biases and other psychological reasons for the identified behavioural bottlenecks
5	Behavioural Tools	List the proposed tools and nudges that could be utilized to overcome the identified behavioural bottlenecks

Co-create with relevant stakeholders

To test the impact of an intervention, an experiment is conducted using different methods

Ensure that you have put in place robust method to evaluate the effectiveness of the intervention TEST ADAPT LEARN Use this learning to adapt your policy intervention

Analyse the outcome of the intervention using rigorous statistical methods, in order to

- Identify what works, and
- whether the effect size is big enough to justify the cost of the intervention

WHY EXPERIMENT?

3

- Key to understanding what works, what does not work and why
- Gather empirical evidence on how behavior is influenced by context
- Policies need to be tested before being implemented, potentially affecting millions- just like medical drugs are tested before being placed on the market
- Emphasize evidence and avoid intuition-based policies and initiatives
- Randomized Controlled Trials (RCTs) are the golden pillar for experimentation in BE
- Other methods can also be applied, e.g. pre-post, differencein-differences, etc.
Celebrate failures and be transparent

Build capacity in behavioral insights that have been tested for Scale Up

- Workshops and seminars on behavioral insights and nudging in government, CSOs & citizens
- Build capacity to identify *biases* and *behavioral as well as regulatory bottlenecks*
- Review best practices on how to apply behavioral insights on anti-corruption measures related to compliance and prevention
- Includes *theoretical foundation* part as well as *practical* part on designing and conducting experiments to address policy challenges
- Tailor courses to equip professionals with the basic tools and methods to *design, implement* and *evaluate* interventions and nudges

Reciprocity
Social Influence Ego
Champion bias Procrastination Optimism Relativity Psychological distance Sunk cost fallacy Sunk cost fallacy
Ostrich Effect Present Bias Mental accounting Priming Hyperbolic discounting Overconfidence Hindsight bias Framing bias Status-Quo Bias
Lack of attention & Anchoring Bias mindless choosing Representiveness Availability Temptation
Decision-paralysis Affect heuristic Confirmation bias
Lack of self-control

Key considerations when applying behavioural sciences in the fight against corruption

- Corruption has structural roots, but has also behavioral roots, which in the case of Lebanon, is a key consideration
- 2 Given structural weaknesses namely lack of enforcement behavioral interventions are important tools
- 3 This said, behavioral interventions should be seen as complementary tools for policymakers, and not as perfect alternatives
- 4 Context matters what worked in one place, might not work in another
- 5 Experimentation is all the more important to test what works what works is not what we think works but what was tested to work, ideally in a RCT setting (analogy from clinical trials)
- 6 With the change in mind set to accept the concept of behavioral interventions and experimentation, comes the change in skillset to build capacity in these fields, not only for government staff but also for NGOs

Thank You

APPENDIX

Decreasing Average Speed Using Salience

USA USA

EXAMPLE

Philadelphia Municipality in the U.S. decreased the average speed by around 39% through adding visual effects resembling 3D bumps to prompt people to decrease their speed



SHAPE DIFFERENCE : Salience

USA

Decreasing Missed Steps in Operations using Checklists

EXAMPLE

A group of researchers in the U.S. reduced by nearly 75% the failure to adhere to critical processes of care among operatingroom teams participating in simulated surgical-crisis scenarios, compared to control teams, by giving participants critical-event checklists



Source: Arriaga, A. F., Bader, A. M., Wong, J. M., Lipsitz, S. R., Berry, W. R., Ziewacz, J. E., ... & Gawande, A. A. (2013). Simulation-based trial of surgical-crisis checklists. New England Journal of Medicine, 368(3), 246-253.

SHAPE DIFFERENCE : Effect of Messenger



Decreasing Meat Consumption Using Dynamic Social Norms

A prime example of dynamic social norms in action can be extracted from Sparkman and Walton (2017). Through an RCT, the authors were able to detect a significant impact of the likelihood of having a meatless lunch when presented with a dynamic social norm as a treatment with respect to the control group. This result held despite a probability for the static social norm treatment that is less than that of the control group, indicating the effectiveness of dynamism and norm framing.



SHAPE DIFFERENCE : Commitment



Increasing Book Donations using Commitment

EXAMPLE

In 2010, a group of researchers in the UK increased the proportion of people who donated books by 22% compared to the control group, simply by asking people to pledge book donations with an offer of public recognition



Increasing attendance of vulnerable youth to community support sessions

Nudge Lebanon, in collaboration with UNDP, increased the likelihood of vulnerable youth attending community support sessions by 23% using a commitment strategy accompanied with SMS reminders

Community Support Sessions Attendance

(in percentage, # of sessions attended out of a total of three)



The intervention was particularly effective on young male population increasing their total attendance by 55%

Control

Subjects received a simple flyer about the sessions

Treatment

Subjects received a salient flyer that includes a commitment section and later received SMS reminders

Improving academic performance of disadvantaged students enrolled in a Youth Literacy and Numeracy program



In 2018, Nudge Lebanon, in collaboration with Amel Association International, increased the performance of disadvantaged students enrolled in a Youth Literacy and Numeracy program by 11% on an Arabic test, using a values affirmation task designed to alleviate the psychological stress that results from stereotype threat



Control

Value Affirmation

Participants were asked to rate 10 values from most to least important **to others**, and then complete a dummy drawing task Participants were asked to rate 10 values from the most to least important **to them**, and **then draw the** value most important to them;

Source: Nudge Lebanon Team Analysis



Behavioural Intervention to Increase Traffic to our Call Centre in Baabda

In an effort to increase traffic to our call centre, we partnered with Nudge Lebanon, a nongovernmental leader in applying behavioural solutions to policy challenges in Lebanon and the region.

Nudge Lebanon deigned an intervention by installing LTA posters and banners in Baabda square, a hub for many service-oriented public institutions (*e.g. Cadastre, Ministry of Finance, Palace of Justice, General Security etc.*).

The salient posters were strategically placed to catch the attention of citizens visiting those institutions, in an aim to **nudge** them AT THE RIGHT TIME, into directly calling our Hotline, right after experiencing or witnessing an incidence of corruption in a pilot location.

The experiment is underway, but preliminary analysis, show that the **nudge** had a significant impact increasing traffic to our call centre. Before the intervention zero complaints were linked to the Baabda area. Within the first week of the intervention 6 calls emanated from Baabda, a result directly associated to the campaign.

We are planning with Nudge Lebanon to replicate this experiment in other government departments to assess sustainability of impact