

## PERSONALITY TEST PROGRAMME 2019 (Current Affairs Interview Issues)

### BEHAVIORAL ECONOMICS & ITS RELEVANCE FOR INDIA

#### INTRODUCTION

Traditionally, economics conceptualizes people as calculating, rational and unemotional people who tend to maximize their gains. Traditional economists (classical, neo-classical et al) defended this “unbehavioral” economic agent concept as it was easier to formalize and practically more relevant. Behavioural economics seeks to counter this above mentioned point of view.

#### DEFINITION

Behavioral Economics is the combination of psychology and economics that investigates what happens in markets in which some of the agents display human limitations and complications. It uses variants of traditional economic assumptions (often with a psychological motivation) to explain and predict behavior, and to provide policy prescriptions.

Behavioral economics is not a rejection of traditional economics rather a series of amendments to it. There are complementarities between the two. The core principles of traditional economics have been adopted & refined by behavioral economics. These are:

- *Optimization*: People try to choose the best feasible option for them.
- *Equilibrium*: People try to choose their best feasible option when interacting with others
- *Empiricism*: Economic models need to be tested with data.

#### CORE PRINCIPLES OF BEHAVIORAL ECONOMICS

- *People try to choose the best feasible option, but they sometimes don't succeed.* Training and experience help decision-makers to make optimal choices.
- *People care about how their circumstances compare to reference points.* People take decisions based on how their circumstances compare to certain self-determined reference points. For instance, people have more aversion to losses than affinity to gains. They tend to internalize losses more in comparison to gains even as they may be the same magnitude.
- *People have self-control problems.* Unlike traditional economic models, behavioral economics identifies a gap between a person's good intentions and their actions. The *present bias* amongst people tends to distract them towards present gains more than future rewards.
- *Although people mostly care about their own material payoffs, they also care about the actions, intentions and payoffs of others in the society.* These “social preferences” come in many systematic forms, especially negative reciprocity, behindness aversion, and social pressure.
- *Sometimes market exchange makes psychological factors cease to matter, but many psychological factors matter even in markets.* For instance, if biased investors compose a large portion of the total asset market (and marginal traders), their beliefs will matter.
- *In theory, limiting people's choices could partially protect them from their behavioral biases, but in practice, heavy-handed paternalism has a mixed track record and is often unpopular.*

#### THE BEHAVIORAL ECONOMICS OF ‘NUDGE’

Nudges refers to **positive reinforcements** that gently steer the people towards desirable behaviour even while preserving their



liberty to choose. Hence, it can be seen as lying somewhere in between the two extremes of the spectrum of choices available to the policy makers: Laissez Faire and Coercion/Mandate.

- Laissez faire, in essence means doing nothing and leaving individuals/firms to chart their own course. It works well only to the extent to which markets achieve socially desirable outcomes on their own. Consequently, where markets fail, *laissez faire* fails. For instance, individuals/firms in a free market would not restrain pollution.
- Coercion, on the other hand, mandates people to act in a socially desirable manner through incentives or disincentives.

The idea behind the ‘Nudge theory’ is that real people are not Homo Economicus. Real people are fallible. They won’t go for the most rational/optimal choices for they suffer from certain biases or lack information. Hence, the way in which policy makers **design the choice architecture** will have impact on their decision making. And since choice architecture is unavoidable, there is **no incentive in designing a bad choice architecture**. In the economics of ‘nudge’ there is **no compulsion**. Consequently, the agent’s **freedom of choice** remains well preserved.

### THE RELEVANCE OF BEHAVIORAL INSIGHT FOR INDIA:

Most people either want to behave or be seen to behave in congruity with social norms. Behavioral economics takes advantage of this observation and leverages the power of the “social norm”. People are more likely to change their behaviour if the changed behavior is seen as the social norm. Thus, the principles of behavioural economics can be tapped both to start new revolutionary campaigns and enhance the efficiency and impact value of several existing programs.

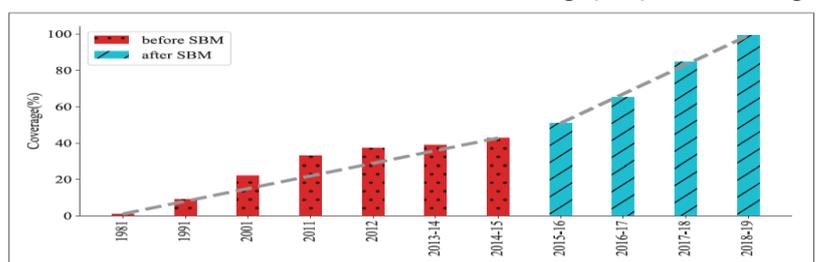
The Indian experience with behavioral economics guiding policy making has been remarkably successful. Many Indian schemes that employ insights from behavioural economics have met with success (see Fig). The Swachh Bharat Mission (SBM) and the Beti Bachao, Beti Padhao (BBBP) scheme are cases in point.

#### CASE 1: SWACHH BHARAT MISSION (SBM)

SBM is the first sanitation programme to emphasize behaviour change as much as infrastructural requirement. The success of the mission owes in part to the behavioral change techniques adopted by the same.

- **Choice of Symbol & Launch Date:**  
**Behavioral Insight:** The role of context is very important in influencing choices and decisions. **Method:** The launch day i.e. 2<sup>nd</sup> October, 2014 was chosen to leverage the values propagated by Mahatma Gandhi and thereby create a mass movement on the lines of ‘satyagraha’ for a cleaner India. The symbol used for SBM invokes Gandhiji’s ideas.
- **Appointing local Swachhagrahis:**  
**Behavioral Insight:** People are more likely to listen to and emulate someone they know. Hence, local ambassadors of change are more effective in getting through to people than mass media campaigns. **Method:** SBM recruited more than five lakh *swachhagrahis* to initiate behavioural change in usage of toilets. Each village has at least one *swachhagrahi*, who is a local resident.
- **Community Based Approach:**  
**Behavioral Insight:** The fear of community scorn or the desire to fit in led many non-conformers to give up open defecation. **Method:** Behavior change techniques like Participatory Rural Appraisal and Community-led Total Sanitation were adopted by SBM to induce people to come together, appraise their community’s open defecation situation and plan the next course of action.
- **Messaging:**  
**Behavioral Insight:** Appealing to people’s emotions has a better chance of moving people to change. **Method:** The messaging made use of by SBM often tried to attach a sense of disgust or shame people for defecating in the open. Many *swachhagrahis* delivered the message that open defecation is akin to eating one’s own excreta, as flies sit on excreta left in open spaces and then sit on food. As much as these campaigns have been criticized to be disrespectful, they have nevertheless been efficient.

Policy	Level of influence			
	Laissez faire	Nudge	Incentivize	Mandate
Give It Up	Yes	No	No	No
Aadhaar	Yes	Yes	No	No
Jan Dhan Yojana	Yes	Yes	No	No
Beti Bachao, Beti Padhao	Yes	Yes	Yes	No
Swachh Bharat Mission	Yes	Yes	Yes	No
Taxes on tobacco	Yes	No	Yes	No
Compulsory voting in panchayat elections in some states	Yes	No	No	Yes
Ban on alcohol in some states	Yes	No	No	Yes

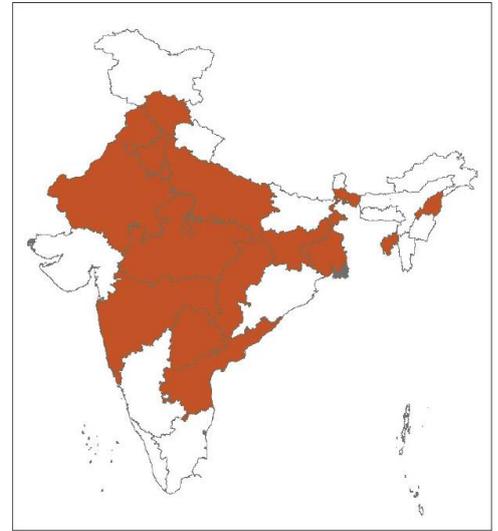


Within five years of the launch of SBM, household access to toilets has increased to nearly 100% in all states. SBM has achieved success in not only providing toilets but also in ensuring that these toilets are used. The National Annual Rural Sanitation Survey (NARSS) 2018-19 found that 93.1% of rural households had access to toilets, 96.5% of the households in rural India who have access to a toilet use it. This reconfirmed the Open Defecation Free (ODF) status of 90.7% of villages that were previously declared and verified as ODF by various districts/states.

### CASE 2: BETI BACHAO, BETI PADHAO

BBBP was started to check the declining trend of child sex ratio in India and generate social consciousness on the issues of empowerment of girls and women. The campaign was flagged from Panipat, Haryana, which had the worst child sex ratio at 834 among Indian states as compared with the national average of 919 in 2011.

- **Behavioral Insight:** It leveraged the use of messaging to correct 'failure bias' amongst agents. The failure bias is the tendency to focus on failures rather than successes, mostly because failures have greater visibility. Because failures get the spotlight, people tend to think failing is more prevalent than it really is.
- **Method:** The success of the BBBP Scheme owed much to the success of its 'Selfie with Daughter' initiative. The selfie campaign showcased examples of parents around the country who did not view their daughters as burden & were proud of them. The celebration of the girl child quickly became the norm. Most people wanted to conform, and more and more parents posted selfies with their girls.



States with improvement in Child Sex Ratio since 2015-16

Besides, SBM and BBBP, several other programmes have utilized behavioral insights particularly when it comes to clear messaging. The use of socially and culturally identifiable names gives a clear message of the objectives of the programme. Consequently, numerous government initiatives have started using culturally or socially identifiable names. E.g. NAMAMI Gange, POSHAN Abhiyan, Ayushman Bharat, Jan Dhan Yojana etc.

Behavioral economics thus provides us a framework to understand when and how people make errors. The lessons so learnt can be used to design a choice architecture that nudges people towards desirable outcomes for example health, education, savings etc. Thus behavioral insight has the potential to create impactful social change and balance societal inequalities.

### EXAMPLES OF BEHAVIOURAL PRINCIPLES RELEVANT TO POLICYMAKERS

- **Leverage Default Rules:** The agent can be made to choose the right default that aims to maximize welfare.
  - When presented with choice, people rather stick to the default action since there is tremendous inertia. If default action itself is changed in a cost effective manner to overcome this inertia, the desired behaviour can be encouraged without affecting people's choices.
- **Make it easy to choose:** The options can be made easy to comprehend and few to choose from.
- **Emphasize on beneficial social norm:** Drawing attention towards positive influencers can strengthen the cause of beneficial social norms. These positive influencers could include friends, neighbours etc that represent role models with which people can identify.
- **Disclose Outcomes:** Disclose the realized benefits of good behaviour.
- **Repeated Reinforcement:** People tend to continue their past behaviour, especially when reminded about the same. Elicit a pre-commitment for desired behaviour, and if possible, enable immediate action as per the commitment.
- **Leverage Loss Aversion:** Design incentives to reward good behaviour ex ante with threat to revoke reward later if behaviour fails to match expectations.
- **Make messages match mental models:** Train people to shift to new 'rules of thumb'. Make these rules of thumb catchy, easy to remember and intuitive.

### CHALLENGES TO MAINSTREAMING NUDGE AS A TOOL FOR EFFECTIVE PUBLIC POLICY

The adoption of behavioural insights as a policy tool, while welcome, calls for a critical evaluation of philosophical, ethical, and pragmatic dimensions

- It is important to prevent the nudge interventions from going down the slippery slope from education to outright manipulation to coercion and bans.

- The premise that the choice architect has the ability to ascertain the true preferences of individuals in helping them avoid welfare reducing decisions might be questionable at times.
- In a bid to steer people into doing what the government thinks is right for them, the focus shifts on the importance of the choice rather than the outcomes of the choice. E.g.
  - More workers with poor financial illiteracy committing ‘default bias’ in a retirement savings plan may be good for the metrics of the policy makers when subscription rate or national savings rate is the metric. However, a focus on such an outcome removes the need for safeguards and accountability.
  - Furthermore, a lack of concern about the opportunity cost of the choice and the dynamic implications on consumption and investment for the illiterate worker raises serious concerns.
- A ‘one size fits all’ nudge policy assumes that the level of irrationality is homogeneous. Such a nudge centric policy design also runs the risk of being narrow in focus about what works.

## IMPLEMENTING THE AGENDA FOR BEHAVIOURAL CHANGE

While social norms impact behaviour significantly in India, the power to employ behavioural change to alter these norms has not been adequately tapped. The prospects of employing the principles of behavioural economics to policymaking, especially in India where social norms so crucially influence behaviour are enormous.

To avail these benefits, the following measures are suggested for implementation.

- The proposal to set up a **behavioural economics unit** in the **NITI Aayog** must be immediately implemented.
  - Centralized hubs can be developed like UK’s Behavioural Insights Team (BIT) to advise UK government on incorporating findings from behavioural economics into its policies.
- Every program must go through a “behavioural economics” audit before its implementation.
- The behavioural economics team can work with various state governments not only to inform them about the potential benefits but also help them to improve the efficacy of the programs.

## BEHAVIORAL ECONOMICS & RANDOMISED CONTROL TRIALS

Use of randomized control trials to determine the best tweaks to existing policy has been critical to the success of behavioural economics interventions. In fact, 2019 Nobel laureates Abhijit Banerjee, Esther Duflo & Michael Kremer are considered to be instrumental in using randomised controlled trials to test the effectiveness of various policy interventions to alleviate poverty.

### DEFINITION

A randomised controlled trial is an experiment that is designed to isolate the influence that a certain intervention or variable has on an outcome or event. It is an experiment-based approach that breaks larger questions about policy interventions into smaller, easier to test studies. E.g. big questions like ‘poverty’ are broken down into its various dimensions like poor health, inadequate education etc. Within poor health, they look at nutrition, provisioning of medicines, vaccination etc. Within vaccinations, they decide what needs to be done based on experimental “evidence”.

This is of particular utility in low- and middle-income countries, where state capacity is quite limited and it is particularly necessary to be able to prioritise more effective policies over less.

### HOW RCTS WORK?

- For instance, if one wanted to understand whether providing a mobile vaccination van and/or a sack of grains would incentivize villagers to vaccinate their kids, then under an RCT, village households would be divided into four groups A, B, C and D.
  - Group A would be provided with a mobile vaccination van facility,
  - Group B would be given a sack of food grains,
  - Group C would get both, and
  - Group D would get neither.
- Households would be chosen at random to ensure there was no bias, the groups are equal, and that any difference in vaccination levels was essentially because of the “intervention”.
- Group D is called the “control” group while others are called “treatment” groups.
- Such an experiment would not only show whether a policy initiative works, but would also provide a measure of the difference it brings about.
- It would also show what happens when more than one initiatives are combined. This would help policymakers to have the evidence before they choose a policy.

### Some studies using RCTs

- **Vaccination:**
  - **Problem:** Low service quality one reason why poor families invest so little in preventive measures. E.g. staff at health centres responsible for vaccinations are often absent from work.
  - **Solution:** Mobile vaccination clinics, where the care staff is always on site – could fix this problem. Vaccination rates tripled in the villages that were randomly selected to have access to these clinics, at 18% compared to 6%.
  - This increased further, to 39%, if families received a bag of lentils as a bonus when they vaccinated their children.
  - Because the mobile clinic had a low level of fixed costs, the total cost per vaccination actually halved, despite the additional expense of the lentils.
- **Education:**
  - **Problem:** In many poor country's schools, curricula and teaching do not correspond to pupils' needs. There is a high level of absenteeism among teachers and educational institutions are generally weak.
  - **Solutions:** Reason for high level of absenteeism was lack of clear incentives and accountability for teachers. One way of boosting the teachers' motivation was to employ them on short-term contracts that could be extended if they had good results.
  - Experiments found that pupils who had teachers on short-term contracts had significantly better test results than that having fewer pupils per permanently employed teacher.
  - Studies suggested that additional resources are, of limited value whereas, targeted support for weak pupils had strong positive effects, even in the medium term.
- **Health subsidy:**
  - **Problem:** Whether medicine & healthcare should be charged for and, if so, what they should cost?
  - **Experiment:** A field experiment showed how the demand for deworming pills for parasitic infections was affected by price. 75 % of parents gave their children these pills when the medicine was free, compared to 18 % when they cost less than \$1, which is still heavily subsidised. It suggested that poor people are extremely price-sensitive regarding investments in preventive healthcare.

### LIMITATIONS OF RANDOMISED CONTROLLED TRIALS

- An unbiased event is one that if repeated many times, would give the closest to the actual outcome on an average. It is virtually impossible to achieve unbiased estimates with only one RCT and hence, the need to conduct **multiple such trials**.
- Randomization excludes the role of “prior information” about the sample, which is necessary to get precise results.
- The study population is often not the population that we are interested in, especially if subjects must volunteer to be in the experiment and have their own reasons for participating or not. Many of the differences in results between experimental & non-experimental studies can be traced to **differences in the populations** to which they apply.
- RCT outcome working in one situation might not work in the other. This is the **‘transportation’ problem**. It can only be addressed by using previous knowledge and understanding i.e. by interpreting the RCT within some structure. This is the same structure that the RCT paradoxically gets its credibility from refusing to use.

## Summary

Behavioral Economics is the combination of psychology and economics that investigates what happens in markets in which some of the agents display human limitations and complications. It takes a deviant viewpoint from traditional economics which conceptualizes people as rational and unemotional ('Homo Economicus') who tend to maximize their gains.

## Principles of Behavioural Economics

- People try to choose the best feasible option, but they sometimes don't succeed due to lack of training and experience.
- People take decisions based on how their circumstances compare to certain self-determined reference points. Also, people have more aversion to losses than affinity to gains
- People have self-control problems when choices and their consequences are separated in time
- Although people mostly care about their own material payoffs, they also care about the actions, intentions, and payoffs of others in the society.
- Many psychological factors matter in markets evident in the form of positive or negative sentiment

## Behaviour Economics of Nudge

Nudges refers to **positive reinforcements** that gently steer the people towards desirable behaviour even while preserving their liberty to choose. The idea behind these three claims is that real people often lack common knowledge & information comes at a cost. They won't go for the most rational/optimal choices for they suffer from certain *biases*. Hence, the way in which policy makers design the choice architecture will have impact on their decision making.

## Relevance of Behavioural Insight for India

People are likely to change their behaviour if the changed behaviour is seen to be upholding the 'social norms'. This principle can be used by policymakers to enhance the efficiency & impact value of several existing programs.

- The success of Swachh Bharat Mission (SBM) can be attributed to its using of Gandhian symbology to create mass movement, making sanitation a community level concern, appointing local ambassadors as *swachhagrahis* and appealed to the people's emotions.
- Similarly, Beti Bachao Beti Padhao (BBBP) showcased the examples of parents who celebrated the birth of a girl child through initiatives like 'Selfie with Daughter' for positive reinforcement.
- Numerous government initiatives have used socially and culturally identifiable names to give a clear message of the objectives of the programme. E.g. NAMAMI Gange, POSHAN Abhiyan, Ayushman Bharat, Jan Dhan Yojana etc.
- Policymakers can leverage default rules in favour of desired behaviour (as people tend to stick to default rules), highlight the role of positive influencers in society, disclose benefits of good behaviour to incentivize people, repeatedly reinforce positive behaviour, leverage the tendency of loss aversion and utilize catchy messaging.

## Challenges to mainstreaming nudge as a policy tool

- Preventing nudges to go down the slippery slope from education to outright manipulation to coercion and bans
- Ascertaining true preferences of individuals by the choice architect
- Excessive focus on choices rather than outcomes of those choices and lack of safeguards and accountability of choice architects
- 'One size fits all' nudge policy tends to be narrow in focus and ignores multiplier effects of the choice made
- Unclear if nudge should be used as a tool by private actors

## Behavioural Economics and Randomized Control Trials (RCTs)

RCTs can help to test the effectiveness of various policy interventions and design evidence based policies. In fact, Abhijit Banerjee, Esther Duflo & Michael Kremer were awarded Nobel Peace Prize 2019 for their work on randomized control trials.

## Examples of studies using RCTs

- **Vaccination:** Low service quality is one reason why poor families invest so little in preventive measures. E.g. staff at health centres responsible for vaccinations are often absent from work.
  - **Solution:** Mobile vaccination clinics, where the care staff is always on site – could fix this problem. Vaccination rates tripled in the villages that were randomly selected to have access to these clinics, at 18%

compared to 6%. This increased further, to 39%, if families received a bag of lentils as a bonus when they vaccinated their children.

- Similar inferences were drawn in the fields of education and health subsidies using the RCT methodology.

#### **Limitations of RCTs**

RCTs require multiple trials for complete randomization and 'prior information' for precise results. Moreover, randomization cannot ensure equal groups and there might be differences in the study population and the population that actually needs to be targeted.

VISION IAS

**Copyright © by Vision IAS**

*All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Vision IAS.*