

Critical Evaluation of Nudge in Indian Context

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ABSTRACT

Across many contexts, nudging has been successfully used to alter behaviour to achieve desirable outcomes. It is now seen as the beacon of behavioural reform and has been incorporated into various state-based policies across the globe, considering its universal success, as evidenced by a plethora of experiments. However, what these experiments have failed to capture is the broader cultural context in which nudges are employed. A popular failing of nudges comes to light in the case of organ donation. A mere default opt-in option does not always lead to increased organ donations, since it needs a larger socio-cultural infrastructure to aid with organ harvesting, transportation and then surgery. We use the same sociocultural lens to critically analyse the effectiveness of nudges employed by the Indian government to curb open defecation. We found that context-blind nudging led to the creation of multiple toilets that remained unused because the nudges were not aligned with the religious norms of disgust. However, later, the use of more context-savvy nudges did indeed lead to a significant reduction in open defecation across India. This paper puts forth the need for more culturally sensitive nudges to be developed to overcome the bias of Western contexts, such that culturally-appropriate nudges can be developed, without wasting government resources.

Introduction

Nudging involves using small, low-cost interventions that leverage insights from behavioural science to influence decision-making. This behavioural intervention has become increasingly popular since it has been shown to be effective in various policy contexts, steering behaviours towards beneficial outcomes in various domains contexts. Its popularity is so widespread that many governments have created a nudge unit to promote public policies. Famously, the UK employed the world's first nudge unit to promote healthier behaviours during the coronavirus crisis (Rutter, 2020). However, like much of psychological research, research on nudge is almost 80% (Azar, 2010), based on the study of participants from Western, educated, industrialised, rich and democratic (WEIRD) societies (Halonen, 2022). This, unfortunately, has led

behavioural researchers to develop what Chater and Loewenstein (2022) call 'i-frame' policies that focus on individual solutions, instead of 's-frame' policies that usually focus on systemic changes.

India, following the footsteps of the UK, has also created a nudge unit to improve the application of public policy (Sharma & Tiwari, 2016). However, the one-to-one application of western Nudging on the Indian context seems overly simplified, especially to me as a young-Indian researcher. This is because cross-cultural effectiveness of nudges is not as well investigated. Especially, its effectiveness in India remains understudied, despite its cultural contrast of holding more collectivist/ traditional ideas (Chadda & Deb, 2013). Using nudges that have been developed using a WEIRD-biased sample can have dangerous consequences to the Indian population and the Indian economy. As such, this paper aims to present nudges as a nuanced and culturally sensitive concept, weighing its pros and cons, with a critical lens on its applicability to the Indian context.

Nudging and its effectiveness:

Nudging was popularised by behavioural economist Richard Thaler and Professor Cass Sunstein in 2008. It is a design-based public policy approach which uses positive and negative reinforcements to influence a population's choices toward desired outcomes. Nudging is centred around the idea of choice architecture, according to which a manipulation in the way choices are framed and the order in which options are presented, should impact the behavioural decisions an individual makes.

Nudges use cognitive shortcuts called heuristics that aid in problem-solving and decision-making. Heuristics streamline the decision-making process by reducing the time and effort taken in storing and retrieving information. Hence, heuristics allow us to navigate an extremely complex social world more quickly (Cherry, 2024). However, these same heuristics also make us prone to poorer or less rational judgements. Hence, nudges take advantage of these human heuristics to subtly influence human behaviour in the direction that is desired.

A nudge that uses heuristics is the framing bias. It leverages the understanding that people may not always make purely rational decisions and can be influenced by subtle changes in the presentation of options. The framing bias occurs when decisions are influenced by the way information is presented to the decision-maker. These decisions focus on the way information is presented instead of the information itself as the same information may be more or less attractive depending on the features highlighted (Dolan, 2023). This nudge uses multiple different heuristics, one of them is the loss aversion bias. This bias inclines us to look for options with certain gains, and avoid a loss in any form - this could be financial loss, loss of time, loss of

energy, etc. The way information is framed can influence the certainty that it will bring either loss or gain. For example, emphasis that one will save more than one will spend is an example of a framing bias that uses the heuristic of loss aversion. Another heuristic used by the framing bias nudge is the availability heuristic plays a significant role. This involves favouring information and options that are easily understood and accessible over those that aren't. This bias is commonly seen in people generally fearing plane crashes over car crashes, even though the latter is more probable because the former is simply more vivid (Jama, 2019). Harnessing such shortcuts while influencing decision-making, contributes to the framing effect.

A successful example of nudging was demonstrated by a field experiment (Kroese et al., 2015) at the train station which revealed that nudging healthy food choices is an effective and well-accepted nudge. In the experiment, three shops were used - a control condition, a nudge condition where food products have repositioned the food to make healthy foods more salient, and a disclosure condition in which the nudge was implemented along with an explanatory sign, to inform the customers of what is being done. The results showed that customers reacted positively towards the nudge and more healthy food purchases were recorded in both the nudge conditions. Therefore, this study provides evidence that nudges such as salience are often effective in changing consumer behaviour.

A critique of nudges in the Western context:

The nudge theory has garnered significant attention for its innovative approach to influencing individual decision-making without resorting to coercion or mandates. While the theory has its merits in promoting positive behavioural changes through subtle interventions, we present a three-pronged critique as to why it may not be the best method to bring about successful behaviour change. The first prong is concerned with the ethics of nudge. The second prong is concerned with the inter-personal and cultural differences in the reception of a nudge and the third refers to broader cultural and societal forces that may not allow a nudge to be successful. All of these will be discussed in the section below.

The first major concern is the potential for paternalism as critics argue that nudges may infringe upon human autonomy by guiding choices, with a particular agenda in mind. This critique is guided by ethical considerations regarding the transparency of nudges (Schmidt & Engelen, 2020). Individuals may not always be aware of the external influences shaping their decisions, causing some to believe that the application of nudges in a real-life setting may involve deception. However, as can be seen in the aforementioned study, explicitly telling people about nudges still can prompt behavioural change- in the case of the selection of healthy food. As such, the autonomy that nudges infringe on is not its biggest flaw.

Interpersonal cultural differences can also pose a significant challenge to the effectiveness of nudges as behavioural interventions. Nudges operate on the assumption of shared understanding and interpretation of cues, but diverse cultural backgrounds can lead to varying responses to the same nudging strategy. Communication styles, social norms, and perceptions of authority differ among individuals from different cultural backgrounds, impacting how they interpret and react to nudges. A nudge that might be well-received and influential within one cultural group might be met with resistance in another (Selinger and Whyte, 2011).

Cultural contexts play a crucial role in shaping the effectiveness of nudges, as seen prominently in the realm of organ donation. The success of nudges varies significantly across different cultural settings due to varying beliefs, values, and societal norms. What may be perceived as persuasive in one culture could be ineffective or even counterproductive in another (Goman, 2010). In Western cultures, where autonomy is highly valued, nudges that emphasise individual decision-making and personal agency in organ donation may be more effective in encouraging people to register as donors. This is best witnessed by the opt-out systems, where individuals are automatically enrolled as organ donors unless they actively choose to opt-out, and have shown success in countries like the United States and the United Kingdom (Etheredge, 2021). These systems leverage the default option to nudge individuals towards donation while still allowing them the freedom to opt-out if they wish, aligning with the cultural emphasis on personal autonomy.

Conversely, in collectivist cultures where group harmony is prioritised, nudges that emphasise communal values may be more effective. In these cultures, the decision to donate organs is often influenced by familial and societal expectations. Campaigns that highlight the collective benefit of organ donation and appeal to the sense of community responsibility may make the nudge more successful in countries where the cultural norms emphasise interconnectedness and societal well-being.

Unfortunately, at present, there isn't readily available literature to support this, which in itself is a reflection of how cultural differences have been neglected in the study of nudges. It is yet unknown but suspected that years of socialisation may have the power to override the influence of a nudge, undermining its intended impact. However, as not much is known about what happens when these possibly opposing forces clash, we can't confirm that lack of cultural sensitivity is the biggest flaw of the nudge theory.

There is, however, ample empirical evidence to question the long-term impact and scalability of these interventions. Larger societal pressures may contradict the effect of nudges, making the effectiveness of nudges in religious and cultural contexts, much like the Indian context, a subject of debate. This is again best exemplified by the organ donation opt-in vs opt-out nudges. A

recent study by Robitaille et al. (2021) shows that in fact there are no statistically significant differences between countries that choose the opt-in system vs the opt-out system. This is because rates of organ donation cannot be changed by a simple nudge. It requires the ‘s-frame’ policies (Chater and Loewenstein, 2022) that depend on the support of large institutional frameworks to actually be successful. Currently, Spain is a county with one of the largest rates of organ donations despite having an opt-in system, opposite to what the nudge theory proposes. This is because Spain has invested a significant amount of money and effort into developing a national transplant network across hospitals that coordinates organ donation across the nation, facilitates in an early identification of potential donors, and promotes donation of organs after circulatory death (Etheredge, 2021). It is these larger governmental systems that play a role in enabling significant and sustainable behavioural change, and not a simple nudge that can go unnoticed by many.

This suggests nudges are inconsequential at best and harmful at worst if not supported by larger societal and cultural frameworks.

Nudge in the Indian context:

The cultural and social framework within India, where universal access to safe sanitation is a huge challenge, underlies the longstanding problem of open defecation (Ghosh & Sarkar, 2023). India ranks number one in the world for open defecation (Mahapatra, 2023). Looking from a macroscopic lens, the most prominent obstacle to the elimination of the open defecation problem is that it is culturally and communally acceptable, with the practice taking the form of a deeply entrenched cultural norm. Religious beliefs have also played a role, with some communities associating open defecation with purity and cleanliness, believing that this practice is more hygienic than using enclosed toilets (Gauri et al., 2020). In addition to the ingrained nature of this practice, the lack of awareness about the associated health risks has further reinforced its acceptance.

To counter this the Indian government launched a public health initiative known as ‘Swachh Bharat’ (translated to ‘Clean India’). The government spent \$30 billion towards this initiative, which involved not only building toilets in rural houses, but also a marketing campaign that involved celebrity campaigns combined with nudging (Rubin, 2020). The government claimed it to be a great success and government data showed that open defecation had been eliminated in a number of states, and reduced by approximately 450 million people (*Water, Sanitation and Hygiene | UNICEF India*, n.d.), following the construction of the toilets. This number was determined based on the number of toilets that were built, assuming that construction of a toilet in the household was associated with a lack of open defecation. Additionally it was also found that a lot of the governmental data was fabricated (Akhilesh & Gudavarthy, 2022). The reality is

that most latrines go unused, and 89% of rural India continues to defecate in the open (Deller, 2018).

The government initiative failed to succeed because it failed to realise that open defecation is a systemic issue that cannot be solved with individual-level policies and resolutions. The government offered only \$160 for the development of each toilet in India. This, while enough to develop mediocre latrines, is not enough to build toilets that automatically drain the excreta into the sewer. In India, the job of removing excreta is seen as something that lower castes, the Dalits, previously known as the Untouchables did. As such, engaging in this behaviour would be going against the caste system, which makes up the very fabric of Indian society. Moreover, cleaning the sewer would bring impurity to the family and the caste (Raval, 2019).

However, later the government reformed their policies to include awareness campaigns to combat casteist ideologies and bring awareness towards the health problems with open defecation, which resulted in a significant reduction in open defecation. This included nudge interventions including 'Darwaza Band' a TV and radio campaign, and the use of disgust as a tool to encourage rural communities to stop defecating in the open. Aligning with the context of sanitation in India, this nudge intervention utilises religious imagery to deter unhygienic sanitation behaviours and taps into the deeply ingrained social norms of purity and degradation. By leveraging the power of cultural symbolism, this nudge influences sanitation practices positively as it aligns with prevailing beliefs. Through campaigns highlighting health, sanitation and societal benefits of using toilets, the nudge seeks to shift cultural perceptions around open defecation, while also employing community mobilisation by encouraging collective responsibility for maintaining cleanliness.

According to an independent survey conducted by the Research Institute of compassionate economics in 2018, approximately 42% to 57% of rural people over the age of two continued to defecate in the open. This was a reduction from the earlier 70% of rural people partaking in open defecation in the 2014 survey (Gupta et al., 2020). Thus, it was seen that structural improvements substantially reduced a problem driven by community behaviour.

Overall, open defecation in India is largely a behavioural issue, made worse by systemic challenges, and reformatory measures which do not seek to tackle behaviour are not going to solve such an issue, which is highly driven by social norms. The incorporation of cultural parameters into policies, in the form of nudges, allows for behavioural modification, which is seen as the root cause of the open defecation problem. As supported by statistical data from multiple surveys, an increased focus on behavioural change, by instituting change to the key parameters of caste and culture alleviates the practice of open defecation.

Conclusion

In conclusion, the findings from this research highlight that nudges, while universally applicable as behavioural interventions, are heavily affected by the cultural contexts in which they are deployed. While current literature presents nudges as a powerful tool, it fails to capture how its effectiveness is sensitive to cultural contexts. This research reveals that the effectiveness of nudges is not static but evolves with cultural shifts and societal changes. In analysing the nudges implemented to tackle open defecation in the Indian context, this paper offers a comprehensive review of the relationship between culture and nudges, and presents the need for alignment of nudges with the larger cultural system. While, this research does not take into account gender and caste based dynamics, and present an evaluation of the cultural sensitivity of nudges across other cultures, it does put forth the idea that nudging, as an economic intervention, has many nuances and that its effects are not as generalisable as current literature may suggest. Thus, this paper may serve as a precedent for further research on nudges, offering evidence to probe researchers to consider the impact of culture on behavioural interventions.

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