
How Do Behavioural Economics–Informed Policy Tools Interact with Institutional Capacity to Reduce Implementation Gaps in Developing Countries?

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ABSTRACT: Developed and developing countries design multiple good, well intentioned policies, however these policies often fail during the implementation stage. This gap between the design part and the real outcome of the policy is called an implementation gap. Reports from the World Bank and UNDP show that weak governance, limited administrative capacity, and corruption reduce the effectiveness of welfare schemes, tax systems, and health programs. This study also shows that individuals within the system do not always act in a rational and logical manner. Their decisions and thoughts are influenced by daily habits, social norms, fear of loss, and limited information. For these reasons National governments of various countries are Using many behavioural tools such as nudges, default options, sending reminder messages, and campaigns to improve social policy outcomes on social norms. This paper argues that behavioural tools alone are not enough. The success of these tools depend largely on the capacity of institutions which are implementing them. Stronger institutions provide digital systems, trained personnel, monitoring systems and public trust to increase the impact of behaviour interventions. Whereas in weaker institutions, these tools may have only short-term or limited effects. This research paper mainly uses secondary data from reliable sources such as World Bank and mini government reports to do comparative case studies. Cases from India, Latin America, and Sub-Saharan Africa are examined to understand how behavioural tools perform under different levels of state capacity. It is found that when the behavioural tools are supported by strong governance and administrative measures are properly used the impact and outcome is better. Therefore, behavioural economics should be used as a complement to institutional reform, and not to replace it. Policymakers in developing countries should invest in both behavioural insights and institutional strengthening to reduce implementation gaps and to increase the effectiveness.

KEYWORDS: Behavioural economics, implementation gap, institutional capacity, governance, nudges, state capacity, public policy, developing countries.

INTRODUCTION

Background

Many developing countries across the globe design very strong public policies on paper. However, these policies often fail to achieve the desired outcome during implementation due to the gap between what governments plan and what actually happens on the ground. This problem is commonly referred to as the implementation gap. The World Bank (2015) study found that policies do not fail only because of a lack of financial resources. They also fail because of other factors such as weak institutions, poor governance, and human decision-making biases.

For example, India faced large scale welfare leakages and implementation gaps at ground level before the introduction of the Direct Benefit Transfer (DBT) scheme. Subsidy programs such as cash LPG subsidies benefited ghost beneficiaries and middlemen. Studies also estimated that leakage in some subsidy programs was around 40 percent before reforms (Government of India, 2019). Leakages reduced significantly after linking subsidies to Aadhaar and bank accounts of beneficiaries. This demonstrates that implementation challenges were not only about policy design and plan on paper but also the effectiveness of delivery systems.

Another example is low tax compliance in India and many Sub-Saharan African countries. The Tax-to-GDP ratios remain below 15 percent compared to OECD countries where it exceeded 30 percent (World Bank, 2023). Low compliance leads to lower government revenue collection and limits development spending. This can be attributed to the weak enforcement systems and low trust in government, which discourages individuals from paying taxes.

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Vaccination programmes also show this implementation gap. Even when vaccines are available many people who have access to them, do not take them. Behavioural factors such as fear, misinformation, lack of knowledge and forgetfulness affect their decisions. This is observed in mainly during routine immunization campaigns in low-income countries. To improve the effectiveness of these campaigns, interventions, such as reminder systems and community based messaging have been necessary to improve vaccination uptake (J-PAL, 2022).

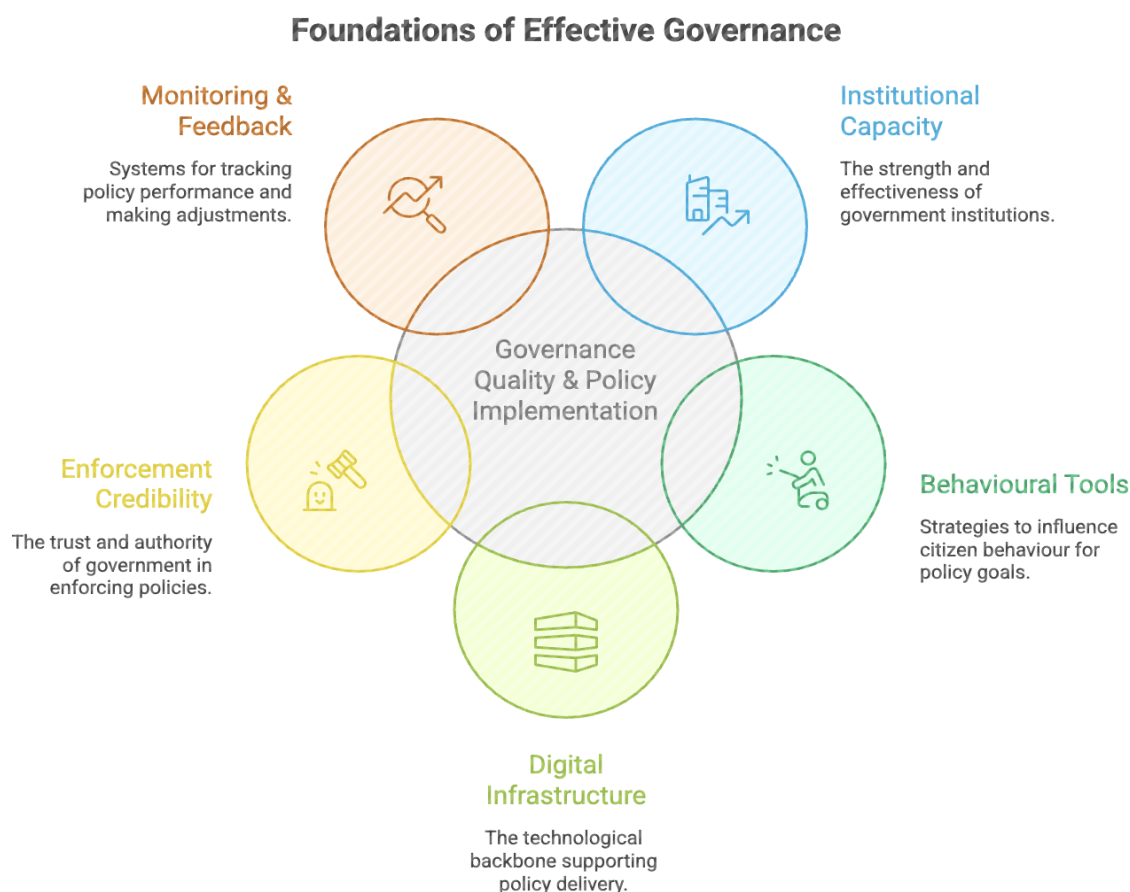
Similarly schemes related to Financial inclusion also faced significant challenges. Before the expansion of digital banking, many people had bank accounts but did not use them regularly. Behavioural barriers such as lack of trust, awareness and habit kept usage of bank accounts low (World Bank, 2015). These examples collectively show that policy design alone is not enough. Successful implementation depends on institutions and actual human behaviour.

Traditional public policy is based on the assumption that people and targeted beneficiaries are rational. It assumes that if benefits are provided, people will respond logically and utilize the available schemes. However, research in behavioural economics shows that people do not always act rationally and logically according to these assumptions. Instead, their decisions are influenced by habits, emotions, social norms, and limited information (Kahneman, 2011; Thaler & Sunstein, 2008).

In addition to that Mini developing countries also face the problem of weak institutional capacity. Mini Institutions or implementing authorities lack proper and advanced digital systems, capable and trained staff, mechanism to monitor the implementation progress of policies and public trust. As a result of weak institutions, even well designed policy plans and behaviour tools may fail and the outcome is poor.

This creates an important research problem. There is a need to understand how behavioural economics–informed policy tools interact with and correlate with institutional capacity. Do behavioural interventions work on their own to increase outcome and efficiency, or do they require strong state systems and support to succeed? Studying this interaction between can help reduce implementation gaps more effectively.

The main research question of this paper is: **How do behavioural economics–informed policy tools interact with institutional capacity to reduce implementation gaps in developing countries?** This includes key sub questions such as wether nudges can be effective without strong instructions, or wether higher institutional capacities enhances the impact of behavioural tools, and wether a minimum level of state capacity is required for these interventions to succeed. This study aims to understand whether behavioural tools can substitute for weak institutions or whether they mainly complement strong governance systems.



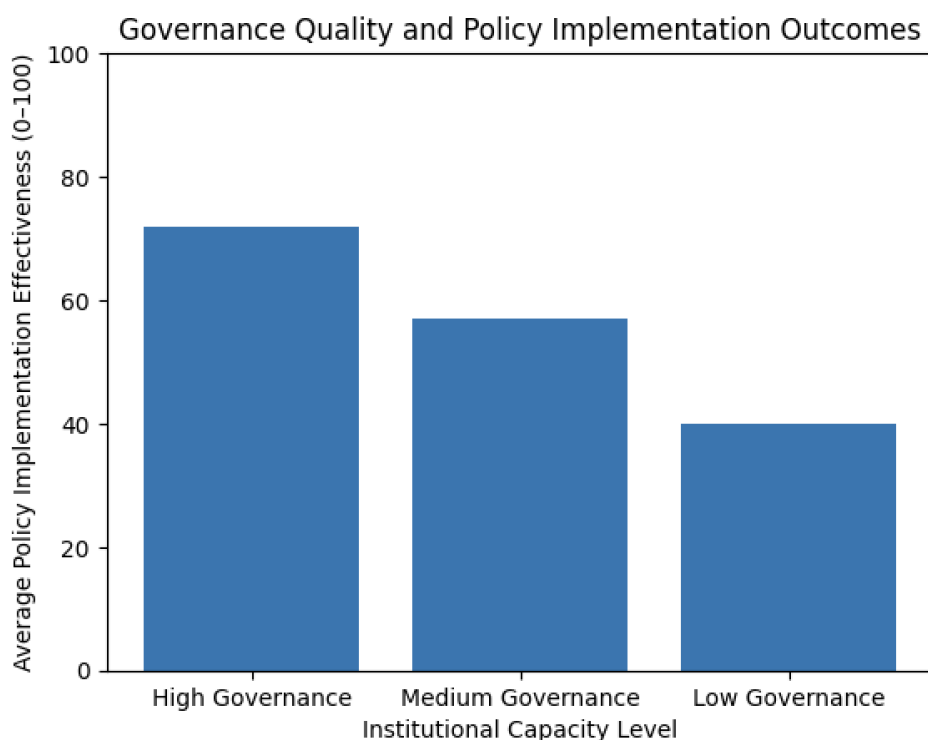
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LITERATURE REVIEW

The policy implementation gap is the difference between expected policy goals that policymakers intent to achieve and actual outcomes of policy. Governments and institutions may design strong policies, but results on the ground are often weak and much different than the expected outcomes. This is a very common problem many developing countries are facing. The World Bank (2015) explains that welfare policies often fail not because they are poorly designed, but because they are poorly implemented because of systemic inefficiencies and weak monitoring

One important reason is the principal-agent problem. In this situation, policymakers (principals) design programs but the authority and responsibility to implement that policy lies in the hands of local officials (agents). Local agents may not always be able to follow the instructions of policymakers effectively. Other factors such as lack of incentives, proper skills, or proper monitoring creates gaps between intention of policy makers and the actions on the ground. Another related idea is street-level bureaucracy. Lipsky (1980) explains that frontline officials such as teachers, police officers, and welfare officers make daily decisions that shape policy outcomes and the efficiency of the policy also depends on these decisions. The discretion and capacity of these officials also influence implementation.

Policy leakage is another big issue that leads to poor outcomes. Leakage mainly occurs when full benefits do not reach the intended recipients. For example, before India introduced Direct Benefit Transfers (DBT), subsidy programs had high leakage. Estimates suggested that 35-40 percent of some subsidies did not reach beneficiaries due to corruption, instead, it was received by many ghost accounts holders (Government of India, 2019). After digital reforms to identify the real beneficiary were introduced as a result, leakages reduced significantly.



In addition to that, governance quality and stability also affects implementation. The Worldwide Governance Indicators (World Bank, 2023) show that many developing countries score poorly on government effectiveness and control of corruption due to structural and institutional weaknesses. Weak governance systems create implementation failures and governance deficits. As a result, these problems decrease the impact of public policy even when funding exists.

Behavioural Economics and Public Policy

Traditional economic theory is based on the assumption that people are rational and logical. It assumes that people always make decisions that are in their best interest and maximize their benefits. However, many studies on behavioural economics do not support this idea. Kahneman and Tversky (1979) introduced Prospect Theory. It showed that people are loss-averse. They fear losses more than they value gains from a policy. Herbert Simon (1957) introduced the idea of bounded rationality. He argued that people have limited information and cognitive ability which restricts their understandings of policies.

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Thaler and Sunstein (2008) developed Nudge Theory. A nudge is a small change in choice made by people that influences behaviour without forcing it. Nudges include making something a default option, sending reminder messages, and social norm messaging. For example, when individuals are automatically enrolled in pension programs, participation level increases. Other Behavioural tools have also shown strong results in public policy. For instance, tax letters that inform citizens that most people in a particular area pay taxes have helped institutions to increase compliance in countries such as the United Kingdom and Guatemala (Behavioural Insights Team, 2016). Furthermore SMS reminders have improved vaccination attendance in several African nations (J-PAL, 2022). Social norm messages have also helped reduce electricity use in energy-saving programs in the United States. The World Bank (2015), in its World Development Report titled *Mind, Society, and Behavior*, also explains that policy must also consider how people think and behave. Behavioral insights can improve outcomes and reduce the overall cost. However, the success of these tools depends on institutional context.

Institutional Capacity Theory

Institutional capacity refers to the ability of a country or state to design, implement, and enforce policies effectively. This mainly includes bureaucratic quality, administrative capacity and competence, use of digital systems, and accountability mechanisms. It has been seen that strong institutions have well trained staff, clear and simple procedures, and reliable monitoring systems, which ensures that policies are implemented effectively.

Acemoglu and Robinson (2012) argue that inclusive institutions promote development because they create incentives for stakeholders and enforce rules fairly. Evans (1995) introduced the idea of embedded autonomy. He argued that effective states are connected to society but remain independent from private capture. Fukuyama (2013) emphasized that state capacity is about the quality of public administration, not just democracy.

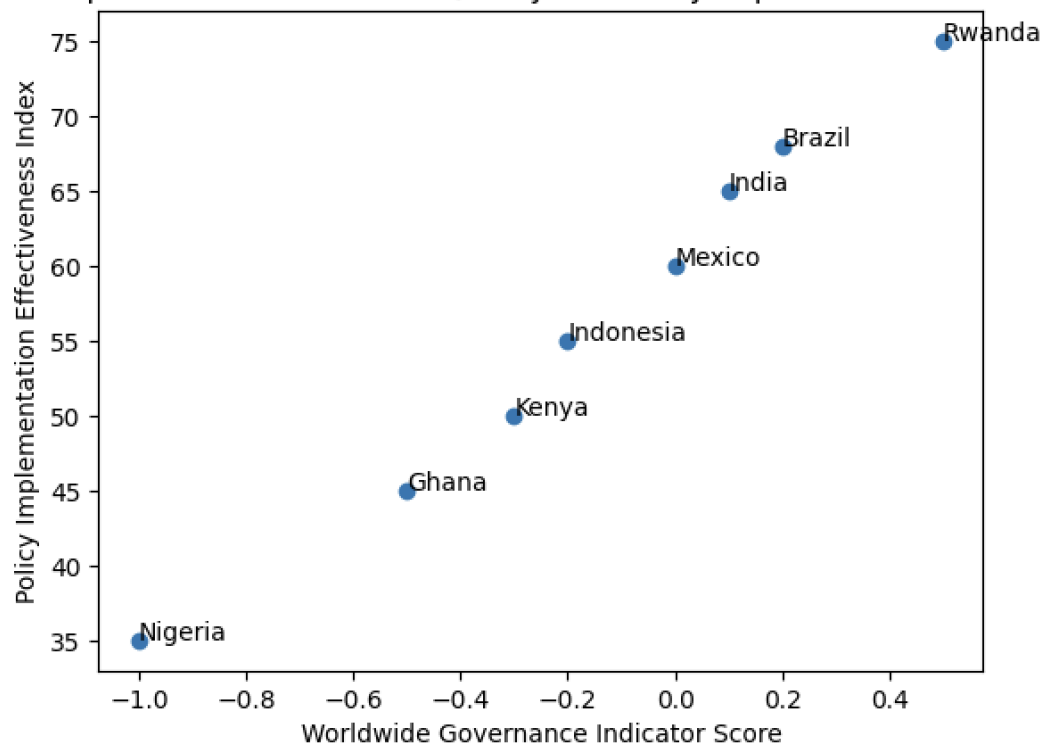
Data also supports the importance of institutional strength. OECD countries have tax-to-GDP ratios above 30 percent, while many developing countries remain below 15 percent (World Bank, 2023). This suggests that government are not able to collect their full revenue potential. The Worldwide Governance Indicators measure the effectiveness of government, regulatory quality, and rule of law. Countries with higher scores tend to implement policies more successfully.

Data Table

Worldwide Governance Indicator vs Policy Implementation Effectiveness

Country	Worldwide Governance Indicator (WGI Score)	Policy Implementation Effectiveness Index (0–100)
Rwanda	0.5	75
Brazil	0.2	68
India	0.1	65
Mexico	0.0	60
Indonesia	-0.2	55
Kenya	-0.3	50
Ghana	-0.5	45
Nigeria	-1.0	35

Relationship Between Governance Quality and Policy Implementation Effectiveness



Adoption and use of digital tools and digital infrastructure are also major part of institutional capacity. For example, India's Aadhaar system, which links bank accounts with Aadhaar ID's, not only improved identification and reduced subsidy leakages, but have also helped save significant public funds that could be redirected towards other welfare measures. Administrative competence and accountability mechanisms further strengthen implementation outcomes.

Gap in Literature

Most existing research studies behavioural tools in isolation. Many randomized controlled trials test nudges such as reminders or default options. These studies often focus on short-term effects. At the same time, institutional capacity is studied separately in political economy and governance literature. However, there is limited research that combines both areas. Few studies examine how behavioural tools perform under different levels of institutional strength. It is unclear whether nudges can compensate for weak institutions or whether they mainly complement strong governance systems.

This paper contributes to the literature by analyzing the interaction effect between behavioural economics–informed tools and institutional capacity. It argues that behavioural tools are more effective when supported by strong administrative systems, monitoring mechanisms, and public trust. Understanding this interaction is crucial for reducing implementation gaps in developing countries.

THEORETICAL FRAMEWORK

Conceptual Model

This study mainly explains and highlights the idea that behavioural tools and institutional capacity work together and interact with each other. Behavioural economics shows that small changes in policy design can influence the decisions made by beneficiaries. These tools include nudges, reminder messages, default options, and social norm communication (Thaler & Sunstein, 2008). However, these tools work within a larger system which is the institutional structure of the state. The main idea of this paper can be explained in a simple way:

Behavioural Tool Effectiveness = $f(\text{Institutional Capacity} \times \text{Behavioural Intervention Quality})$

This means that the impact of behavioural tools depends on both the quality of the intervention made by the agencies and the strength of institutions. If institutional capacity and competence is low, behavioural tools may produce only small or short-term results, showing limited effectiveness in the long run. On the other hand, if institutional capacity is strong, behavioural tools can produce larger and more sustainable effects.

This relationship can also be written in a simple interaction form:

Impact = $\beta_1 (\text{Behavioural Tool}) + \beta_2 (\text{Institutional Capacity}) + \beta_3 (\text{Interaction Term})$

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In this case The interaction term (β_3) shows that the effect of behavioural tools changes depending on the institutional strength of a country or implementing authority. For example, a tax reminder letter send to non taxpayers may increase compliance by 5 percent in a country with weak enforcement. The same type of reminder letter may increase compliance by 15 percent in another country with strong monitoring systems and follow up mechanisms (Behavioural Insights Team, 2016).

The World Bank (2015) explains that policies must consider both human behaviour and system capacity. Behavioural tools are not magic solutions for improving policy efficiency. They work best when supported by functioning administrative systems. Therefore, this framework argues that behavioural tools complement institutional capacity to reduce implementation gaps rather than replace it.

There are several mechanisms through which institutional capacity affects behavioural tool effectiveness.

1 Administrative Delivery Capacity

Administrative capacity is the ability of government agencies and systems to implement policies properly so that the benefits reach the intended recipients. Improving this capacity requires trained staff, clear and simple procedures, and efficient service delivery systems. In case the official members are poorly trained or overloaded with many tasks, behavioural tools may not be applied correctly. For example, an SMS vaccination reminder will increase effectiveness only if clinics are available and vaccines are in stock (J-PAL, 2022). If service delivery fails, the behavioural tool loses its impact and the gap between the policy goal and the outcome will still remain.

2. Information Infrastructure

Another Important mechanism is information systems. It includes Digital databases, identification systems, and reliable, updated data. These systems help improve delivery and accurately target beneficiaries. For instance India's Aadhaar-linked Direct Benefit Transfer system reduced subsidy leakages because it improved identification of intended beneficiaries and removed ghost or undeserving recipients. Similarly linking the bank account with PAN and Aadhaar has helped the government to track high value transactions and calculate the overall tax liability on individuals. This has significantly increased the tax collection of the government as the system can automatically identify taxpayers and generate notices. (Government of India, 2019). Behavioural defaults worked because digital systems supported them. Without digital infrastructure updated data and updated technology, defaults or reminders may not reach the right people.

3. Monitoring and Feedback Loops

Effective monitoring systems allow governments and implementing agencies to track outcome every stage of implementations so that corrective actions can be taken. Strong institutions collect data on regular basis to update the old data with new data and take relevant steps. They evaluate outcomes and correct errors. Behavioural interventions often need constant testing of ideas and adaptation according to the context. The UK Behavioural Insights Team uses randomized trials to test policy tools (Behavioural Insights Team, 2016). Without effective monitoring systems, governments cannot get the right idea to know whether behavioural tools are effective or not.

4. Trust in Government

Public trust in the government and the policies also affects how people respond to policy messages. If citizens trust the government, they are more likely to respond positively by participating in the programmes decision making, other important processes and to reminders or social norm messages. For instance, in countries with low trust and high corruption, citizens may ignore behavioural messages leading to large implementation gap. The Worldwide Governance Indicators show that government effectiveness and control of corruption are linked to better policy outcomes (World Bank, 2023).

5. Enforcement Credibility

Behavioral tools often work better and support the implementation when supported by credible enforcement. For example, a tax reminder letter is usually sent to remind tax payers who missed filing deadlines works only if people believe that non-payment has consequences. If enforcement systems are weak, reminders lose power to force people to make right choices and comply with the law. This shows that behavioural tools and institutional enforcement must work together.

METHODOLOGY

This study uses a mixed-method research design. It combines comparative case studies of developing countries with varying levels of governance with secondary data analysis. This approach helps to understand both patterns of governance implementation gap and impact of behavioural tools on policy implementation and real-world experiences. Comparative case studies allow us to examine how behavioural tools preform in different institutional settings. Secondary data from various reliable sources is collected, allowing verification and multiple perspectives. Secondary data analysis also helps to support findings with measurable indicators such as governance scores, tax revenue, and efficiency of service delivery and other outcomes.

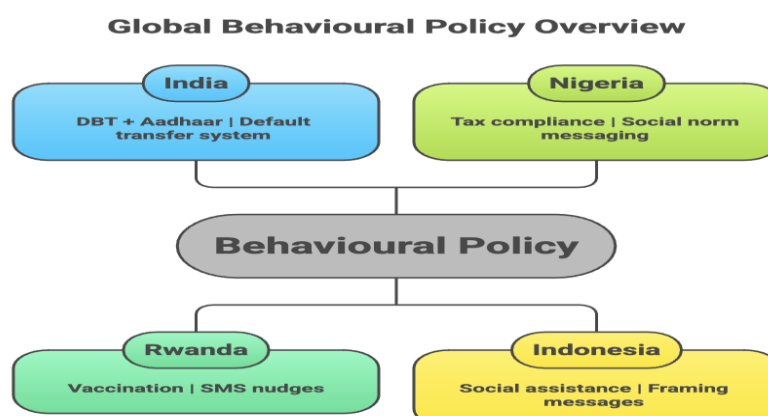
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The study does not rely on primary surveys. Instead, it uses published data from international organizations and government reports, ensuring reliability and comparability. It was less time consuming as data is available in public domain and easily accessible. Governance quality is measured using the Worldwide Governance Indicators (World Bank, 2023). Tax compliance levels in terms of percentage of people who are paying are examined using tax-to-GDP ratios from the World Bank and IMF databases (World Bank, 2023). Evidence on behavioural interventions comes from randomized controlled trials and policy reports from J-PAL and the Behavioural Insights Team (BIT, 2016; J-PAL, 2022). This research design allows the study to compare how behavioural tools correlate with different levels of institutional capacity and competence. It also allows identification of patterns and analyses of causes across countries.

Case Selection

The study mainly selects four countries with different levels of institutional strength and different types of behavioural tools. The reason behind selecting these is to compare how institutional capacity shapes outcomes.

Country	Policy Area	Behavioural Tool	Institutional Strength
India	DBT + Aadhaar	Default transfer	Medium
Rwanda	Vaccination	SMS nudges	Strong local admin
Nigeria	Tax compliance	Social norm messaging	Weak
Indonesia	Social assistance	Framing messages	Medium



India is selected because it introduced one of the large-scale digital reforms through Aadhaar and Direct Benefit Transfers, as part of major reform to implement the welfare scheme well. These reforms reduced subsidy leakages significantly (Government of India, 2019). India represents a country with improving but uneven institutional capacity.

Rwanda is selected because it has relatively strong local administrative systems compared to many Sub-Saharan African countries. It has successfully used SMS reminders in health campaigns (J-PAL, 2022).

Nigeria represents a case with weaker institutional enforcement and lower tax compliance rates. Social norm tax messaging has had limited impact where enforcement systems are weak.

Indonesia represents a middle case. It has used behavioural framing in social assistance programs but still faces administrative challenges.

These cases provide variation in institutional strength. This variation helps test the interaction effect between behavioural tools and institutional capacity.

Data Sources

The study uses reliable secondary data from international organizations.

Governance quality data comes from the Worldwide Governance Indicators (World Bank, 2023). These indicators measure government effectiveness, rule of law, and control of corruption. Tax data comes from the World Development Indicators database (World Bank, 2023) and IMF fiscal statistics, which provide tax-to-GDP ratios.

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Evidence on behavioural tools comes from reports by the Behavioural Insights Team (2016) and randomized evaluations by J-PAL (2022). These reports document the impact of nudges, reminders, and social norm messaging. Additional governance context is drawn from UNDP human development and governance reports (UNDP, 2023).

By combining governance indicators, fiscal data, and behavioural evaluation studies, this methodology allows a structured comparison. It helps identify whether behavioural tools produce stronger results when institutional capacity is higher.

Empirical Case Studies and Analysis

Case Study 1: India – Direct Benefit Transfers (DBT) and PAHAL LPG subsidy

Prior to DBT reforms, many subsidy benefits could not reach the poor due to leakages in the subsidy system. Problems such as ghost beneficiaries, duplicate connections and middlemen, a clear example of an implementation gap. In the LPG subsidy system, reforms were introduced through the PAHAL (DBTL) scheme and Aadhaar-linked payments. Instead of giving the subsidy included in the cylinder price, the government shifted to a direct transfer into bank accounts. Where people automatically received benefits in their Aadhaar-linked bank accounts.

The support of digital capacity is clearly evident in this shift. A government press release reported that **3.56 crore fake/duplicate LPG accounts** were identified under PAHAL (Press Information Bureau, 2017). Removal of duplicates and bogus accounts reduced leakage and improved targeting. Research on India's LPG subsidy reforms notes that PAHAL should be credited to improvement in efficiency and reduction in leakages when compared to earlier systems, leading to fiscal savings (Mittal, Mukherjee & Gelb, 2017).

A commonly reported estimate is that leakages in the earlier LPG subsidy system were very high (often described around ~40%) and later fell to much lower levels (often described below ~15%) after reforms. The key point is not only the technology. The key is the interaction: **digital institutional capacity + behavioural design**. Digital systems made it easier to identify real beneficiaries and remove duplicates. Default transfers reduced friction for households. People did not need to deal with complex paperwork for every refill. This lowered mental effort and reduced the chance of exclusion.

According to commonly reported estimates, the leakages in the earlier LPG subsidy system were around 40% (very high) and post implementation of reforms fell to around 15% (much lower level). The key is the interaction: digital institutional capacity and behavioural design. Digital systems made it easier to identify real beneficiaries and delete the duplicates. Automatic transfers made people's lives easier, soothed mental stress as now they didn't have to make rounds to public departments and banks to get the subsidy released.

This case shows that behavioural design worked because institutions could deliver it. Aadhaar seeding, access to bank accounts, and payment trails mattered. Without these, a default transfer would not function. In short, India's DBT reforms show how behavioural tools become stronger when state systems can implement them at scale (World Bank, 2015; Mittal et al., 2017).

Case Study 2: Tax compliance letters in Latin America (Guatemala + regional evidence)

Behavioural tax letters are one of the best-known policy nudges. Many people do not pay taxes on time because they delay decisions, feel confused by procedures, or underestimate enforcement risk. Behavioural letters try to reduce these barriers using simple language, reminders, and social norm messages.

The case in discussion is Guatemala. A large randomized controlled trial where reminder letters (redesigned behavioural letters) were sent to people (over 43000 taxpayers) who had not paid their income tax. It was reported that the trial which included original authority letter with the redesigned behavioural letters (World Bank, 2016), letters were adjusted using behavioural design such as: clearer wording, stronger motivation messages (Behavioural Insight Team, 2016), results show that some behavioural letters increase payment rates compared to standard letter or no letter, in particular, social norm messaging performed well in many settings.

There are important limitations, behavioural letters may show improvement in compliance in the short term but the effect may fade if poorly implemented. A broader review of evidence across many countries shows that reminder messages are most cost effective in short term compliance. For best results, messages linked to credible enforcement, such as audit risk, legal consequences (J-PAL, 2022) should be opted. As supported by the interaction logic: **nudges are stronger when institutions can enforce rules**.

As can be seen in the cases of Guatemala and parts of Mexico, behavioural letters can raise payment rates by meaningful amounts (5% to 15%), institutional weakness can negatively impact long term impact. Messages carry weight of credibility if penalties and consequences are uniformly applied. Difficulty to file taxes, vague norms, fractured system, favoritism, corruption are all the impediments in the path of improving compliances. Trust is a big asset.

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This case supports the main argument of this paper. Behavioural messages matter, but they work best when the government has administrative capacity, fair enforcement, and simple tax processes (World Bank, 2016; J-PAL, 2022).

Case Study 3: Vaccination reminders in Kenya (SMS reminders)

For the success of the vaccination program gaps have to be plugged such as date reminder, doubts resolution, cost of vaccination, side effects, myths etc. Kenya provides strong evidence through the randomized trials, how the reminder sms reduces forgetfulness. Kenya tested whether SMS reminders and small incentives could improve childhood immunisation uptake. The study- designed as a randomized trial- published in a major peer-reviewed journal (Gibson et al., 2017), found that reminders can improve timely vaccination, especially when paired with supportive conditions. In simple terms, reminders help parents remember schedules and reduce missed appointments.

The Kenyan study sheds some light, how effectiveness of reminders is directly linked with the delivery of services. Therefore researchers most often emphasize on demand and supply side preparedness. Evidence for the studies point that sms reminders can lead to moderate improvements, actual context and the functioning of the health system play a major role (Give Well, 2024). Kenya illustrates both strengths and limitations. Behavioural tools help with memory, planning, and follow-through. Institutional capacity determines actual completion of the action. Health worker availability, vaccine supply, data systems, and appointment tracking all matter. When these systems work, SMS reminders can raise vaccination. When these systems fail, the nudge effect becomes small.

This case supports the interaction framework: **behavioural tools reduce behavioural barriers, while institutions reduce system barriers**. Strong outcomes come when both barriers are addressed together (Gibson et al., 2017; World Bank, 2015).

Case Study 4: Nigeria – Limited success under weak enforcement and governance challenges

Nigeria's government constraints, weak institutions, lack of transparency highlight why strong institutional capacity is needed for success. A World Bank document focused on Nigeria notes a long standing perception of corruption and challenges on the governance front. Nigeria's non-oil revenue is subdued due to a narrow tax base and weak compliance, even though there is some improvement following a few reforms recently (World Bank, 2024).

A Reuters report on proposed tax reforms points that Nigeria's tax revenue (around 11% of GDP) is below African average (Reuters, 2024). This is a classic example of weak enforcement credibility. Many people don't pay taxes as they think that most people pay, what difference would it make if one doesn't pay? Effectiveness loses its power if non compliance doesn't come at a cost.

Major regional inequalities in vaccination, under immunised children are the glaring consequences of delivery problems in Nigeria. (Mohammed et al., 2024). Reminders alone can not fix structural problems such as trust deficit, supply constraints, access to clinic. Service delivery is at the base of overall intervention.

So Nigeria's case represents a "low-capacity" case where behavioural tools face stronger headwinds. This does not mean behavioural tools are useless, when paired with institutional strengthening, become stronger. Tax interventions work better with improved digital tax systems, fair enforcement, and easier payment channels. Health nudges work better with functioning clinics and reliable supplies. Nigeria's experience supports the main claim: **behavioural tools complement institutions, but they cannot substitute for them** (World Bank, 2024; Reuters, 2024).

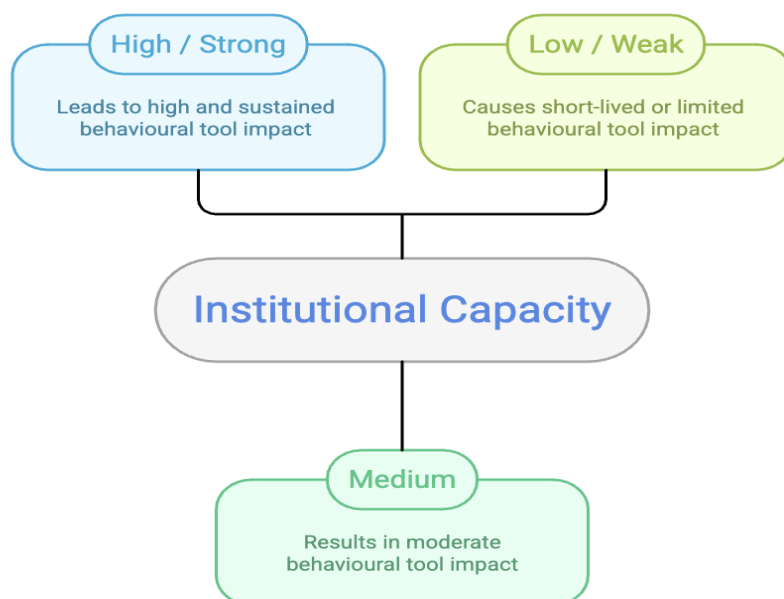
Comparative Analysis

From the four case studies, a clear pattern emerges. Behavioural tools work differently depending on institutional capacity. When institutions are strong, results are sustained. When institutions are weak, the effects are limited or short lived. Behavioural tools create strong and lasting results when coupled with strong institutions. When institutions are weak, the effects are small or short-lived.

The pattern can be summarized as follows:

Institutional Capacity	Behavioural Tool Impact	Example
High / Strong	High and sustained	India DBT
Medium	Moderate	Indonesia
Low / Weak	Short-lived or limited	Nigeria

Impact of Institutional Capacity on Behavioural Tools



Indian Direct Benefit Transfer (DBT) reform shows how digital institutional strength supports behavioural design. Aadhaar number linked bank transfers reduced duplicate accounts and improved targeting. The Press Information Bureau (PIB, 2017) reported that 3.56 crore duplicate and ghost LPG accounts were identified and removed under PAHAL. Automatic transfers are combined with the digital capacity. Behavioural design reduced friction while Institutional systems ensured delivery. As a result, leakage fell significantly (Mittal et al., 2017). This shows a high-capacity system creating sustained impact.

Indonesia's, a medium-capacity case. It has used behavioural framing in social assistance programs. However, administrative challenges remain. Results are positive but not as strong as in systems with higher digital integration. This suggests that behavioural tools can work, but the scale and sustainability depend on administrative strength.

Nigeria's, a low-capacity case. Tax compliance remains below average in Africa. Reuters (2024) reported that Nigeria's tax to GDP ratio (around 10–11%), below the African average. Behavioural tax messaging alone cannot solve this. Weak enforcement and governance constraints reduce the power of social norm messages. World Bank (2024) documents long-standing governance challenges in Nigeria. In such contexts, nudges may create very small improvements in outcome or results, but stronger institutions are required for long-term reforms. Kenya's vaccination reminder programs also support this pattern, Where SMS reminders improved participation when clinics were functioning (Gibson et al., 2017). But reminders alone cannot completely solve the problem of supply shortages. Institutional readiness is necessary for better results and to achieve intended outcome. The pattern emerged is that behavioural tools reduce behavioural barriers that lie among the people and stakeholders. While institutions can reduce these structural barriers. When both are strong, implementation gaps shrink significantly. behavioural tools cannot be seen as substitutes for enforcement, administrative capacity, or service delivery systems when institutions are weak. Therefore, behavioural economics and institutional capacity should be seen as forces that help each other to bridge the gap. One strengthens the other. They are intertwined.

Policy Implications

First: This study provides clear lessons that behavioural tools can be supportive but not serve as the foundation of their own. Policy outcomes depend on strong institutions supported by behavioural tools. India's DBT reforms worked because Aadhaar Identification and banking systems were already there (Mittel et al., 2017). Thus, the policymakers in the developing countries must direct their energy in strengthening both the institutional systems and behavioural designs together.

Second: Nudges(interventions) should be coupled with practical enforcement. Behavioural messages work better when the common public has trust in the system that rules are not selectively imposed rather are for everyone equally. For example, tax reminder letters increase compliance more when taxpayers believe audits and penalties are real (J-PAL, 2022). When enforcement

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is not proper, effects may fade. Strengthening the monitoring and legal system alongside behavioural reforms should be the second step.

Third: Behavioural diagnostics should be seriously considered before scaling interventions. It assists to identify specific barriers such as- procrastination, misinformation or lack of trust. If the World Bank's 2015 World Development Report(WDR) is to be believed, it is imperative to understand how people think before designing policies. Randomized trials and small pilot based projects can help in this.

Fourth: capacity development, incentives and skills directly affects outcomes therefore it is important that the implementers are trained. It is essential to improve service delivery and bridge implementation gaps.

Fifth: there should be behavioural insight units within Government ministries integrated with. The UK Behavioural Insights Team has shown how small policy labs can improve governance (Behavioural Insights Team, 2016). India's NITI Aayog endorses behavioral insights initiatives to improve governance. The World Bank has established behavioural science teams to support governments in policy design (World Bank, 2015).

If summarized, behavioural tools should not replace institutional reform. They should complement it. Strong institutions make behavioural policies more powerful while weak institutions limit their impact. Governments should therefore reinforce systems and behavioural design together.

LIMITATIONS AND FUTURE RESEARCH

This study has some important limitations. First, it relies mainly on secondary data from reports, governance indicators, and published research. These sources are reliable, but they may not capture region specific differences within countries. Which are bound to be present. Institutional capacity can vary across regions, states and departments. National-level indicators such as the Worldwide Governance Indicators provide broad measures, but they may not reflect local administrative quality (World Bank, 2023).

Second, measuring institutional capacity is complex and multidimensional. The state's capacity includes many elements such as bureaucratic quality, enforcement strength, digital systems, and public trust- all of which are difficult to measure precisely. One may get useful insights from indicators such as Tax-to-GDP ratios and governance scores, but they cannot fully capture informal practices, political influence, or corruption networks.

Third, it is difficult to establish clear causality. Behavioural tools, often introduced alongside other reforms, For example- digital systems, legal reforms and administrative training may happen at the same time. It is therefore hard to pinpoint the exact effect of behavioural interventions from broader institutional reforms.

Future research should use longitudinal studies to track behavioural interventions over a longer period. Short-term results may differ from long-term outcomes. More field-level studies within countries need to be conducted to understand regional differences. Additionally, future research could use experimental and quasi-experimental designs to better identify causal relationships between behavioural tools and institutional capacity.

CONCLUSION

This study examined how behavioural economics and informed policy tools interact with institutional competence and capacity to increase the effectiveness and efficiency of implementation of policies in developing countries. The evidence from India, Latin America, Kenya, and Nigeria shows a clear pattern: while appropriate policies and behavioral tools can improve outcomes, they cannot do so independently without strong institutional support

Therefore Behavioural economics helps governments to design smarter and better policies. For instance Nudges, regular interval reminders, and social norm messaging reduce behavioural barriers of beneficiaries such as procrastination, fear, and misinformation. Research from the World Bank (2015) and randomized trials in different countries also found that these tools can increase tax compliance, vaccination uptake, and welfare targeting.

However, the impact of these tools depends strongly on the institutional strength of the country. Countries where digital systems are reliable, staff are well trained and enforcement is credible, behavioural tools produce better strong and sustained results. For example India's Direct Benefit Transfer reform for sending the cash benefit directly to the account of beneficiaries shows how digital capacity and behavioural design together reduced subsidy leakage (Mittal et al., 2017). In contrast, where governance and enforcement is weak, behavioural tools produce smaller and short-term effects, as seen in cases like Nigeria (World Bank, 2024). The key finding of this research is the complementary relationship between behavioural tools and institutional capacity in reducing the implementation gap. Behavioural tools reduce behavioural barriers, while institutions address structural barriers. One

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strengthens the other. Without institutional capacity, behavioural interventions cannot scale effectively. Without behavioural insights, institutional reforms may overlook human decision-making biases.

Therefore, behavioural economics and tool should not be seen as a replacement for institutional reform. Instead, they should invest in both areas together. Strong governance and smart behavioural design create the best results. **Behavioural economics can sharpen the sword, but institutional capacity determines whether the sword can be wielded effectively.**

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