IDOS POLICY BRIEF 22/2024

Smart Packages: Six Steps to Design Effective Behavioural Policies

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Summary

Changing human behaviour can be crucial for the success of development policies. Understanding the drivers of behaviour and designing policies that are supported by target groups is thus key to development cooperation effectiveness. Moreover, considering the intended and potential unintended effects of policies on behaviour is essential at all government levels.

To guide policymakers in creating behaviour-centred measures, policies, or programmes, IDOS has developed a six-step procedure. This procedure is the result of more than 10 years of experience with behavioural field research in countries of the Global South. Below, we illustrate the procedure with practice cases from our work.

1. Define the **overarching aim** of the policy.

   The first step is to achieve clarity and agreement on the policy's overarching aim among all stakeholders. This ensures a unified understanding and helps to identify necessary elements for accomplishing the aim, which often include infrastructure, regulation, skills, technology, and human behaviour.

2. Understand **people and their status quo**: Who do we need to have on board, what do they currently do, and why?

   Step two involves identifying and understanding the behaviours of specific groups crucial for achieving the policy's aim. This requires prioritising key behavioural issues and conducting detailed target group analysis.

3. Understand the **target behaviour**: What do we need them to do so we can reach our overarching aim, and why would they do it?

   Understanding the target behaviour involves identifying the chain of necessary behavioural steps. This requires "putting oneself in the shoes" of the target group to comprehend the behavioural process and identify barriers and drivers.

4. **Co-develop targeted behavioural policies** with local partners to enable and incentivise the shift from current to target behaviours.

   Once current and target behaviours are understood, policymakers must co-develop behavioural policies that facilitate the shift. Following the COM-B model, such policies should address capability, opportunity, and motivation.

5. **Test and improve** behavioural policies

   Before rollout, the different elements of the behavioural policy should be tested to identify the most effective elements and to improve the policy accordingly. Appropriate methods include randomised controlled trials, surveys, and before-and-after comparisons.

6. **Scale** the tested and proven policies

   Once intervention packages are tested and optimised, they are ready to be rolled out.

Collaboration with local partners is crucial for all the above steps, and the results should be shared to allow for learning and knowledge transfer.

Why and how to change behaviour?

Successful development policies require acceptance or even active support from targeted populations. Understanding the drivers of human behaviour (and its changes), and designing policies that are likely to be supported by the targeted groups, is therefore vital for effective development cooperation. Since policies at every level of government can influence behaviour, considering potential intended or unintended effects on behavioural contexts can be key for measures at all governance levels. This is particularly important when human behaviour change is either part of the solution to a particular policy problem (for example, in health-related issues, crime prevention, or environmentally friendly consumption), or when policies can have negative, unintended behavioural consequences (for example, when regulating the use of a certain product leads to psychological reactance, i.e., the feeling of being pressured, which thus can increase consumption). IDOS, therefore, has developed a simple procedure with six steps (see Box 1), which can guide policy makers through the process of designing a behaviour-centred measure, policy, or programme. This procedure stems from more than 10 years of experience in cooperation with development practitioners and is thus particularly geared towards the needs and challenges of actors in development policy. In the following sections, we describe the six steps and illustrate them with two practice cases from our own fieldwork. While these practice cases are both in the area of waste management behaviours, the underlying procedure can be used to design any policy aimed at behaviour change.

Box 1: Six steps to a behaviour-centred policy

1. Define the **overarching aim** of the policy.
2. Understand **people and their status quo**: Who do we need to have on board, what do they currently do, and why?
3. Understand the **target behaviour**: What do we need them to do so we can reach our overarching aim, and why would they do it?
4. **Co-develop targeted behavioural policies** with local partners to enable and incentivise the shift from current to target behaviours.
5. **Test and improve** elements of behavioural policies.
6. **Scale** the tested and proven policies.

Defining the overarching aim

The first step should always be to achieve clarity on the overarching aim of the measure or policy, and to attain an agreement on this with all involved stakeholders. This step is particularly relevant because, when teams are involved, there can be as many interpretations of the overarching aim and its implications as there are participating team members. Making these understandings explicit, and finding agreement in case they diverge, is fundamental to all subsequent steps.

Once the overarching aim is clear, it becomes much easier to identify the missing elements required to achieve it. Such elements can pertain to infrastructure, regulation, skills, or technology, and sometimes human behaviour. But usually it involves a combination of several. Close cooperation with local partners is central to the identification of missing elements. In our practice cases, the overarching aim was to close the recycling loop for plastics and other materials in certain areas in Argentina (Pegels et al., 2022) and Indonesia (Forthcoming: Pegels et al., 2024). In Argentina, we cooperated with the municipality of Trelew in the Province of Chubut, and in Indonesia with a waste management service provider in Telaga Kahuripan, a gated community in Bogor.

Understanding the target group and their behavioural status quo

Once it is clear that behaviour change needs to be part of the solution, step two follows. In this step, policy makers and their behavioural teams need to identify the group(s) of people whose behaviour is most important for the achievement of the overarching aim. For step two, and indeed all subsequent steps, it is important to prioritise the most important behavioural issues and the group(s) that can contribute most to the solution. These groups need not necessarily be the largest involved, but can sometimes be particularly influential minorities. Moreover, a fine-grained identification of target group members can be necessary. For example, it is often not enough to define "households" as a target group; instead, it can be essential to identify specific members within the households whose behaviour has a particular influence on the achievement of the overarching aim. These can include heads of households (e.g., those involved in investment decisions), house cleaners (e.g., those who make waste management decisions for middle and upper-class households), or mothers (e.g., who are in charge of child nutrition).

After a specific group has been identified, its current behaviour must be understood – what do they do, and why do they do it? In our practice case in Indonesia, current behaviour did not include waste separation, because no system of differentiated collection existed. Instead, households (i.e., usually housewives) disposed of their mixed waste in containers at the front of their houses.

To develop a deeper understanding of the target group, development practitioners need to form a team with local stakeholders who are invested in the behaviour change and who can provide access to and information about the target group. In terms of methods, field visits, qualitative interviews, focus group discussions, and explorative quantitative surveys can be used.

Understanding the target behaviour

Third, the target behaviour needs to be understood. This step can be complex, as it often requires not just a single behaviour change, but rather a whole chain of behavioural steps to come together. This means understanding the new behaviour from the initial action required, such as acquiring a new bin for recyclables, through intermediate steps in the chain, like finding space in the kitchen for the new bin and disposing of materials correctly in it, to the final step of correct disposal. To fully grasp this chain holistically, it is necessary to "put oneself in the shoes" of a representative of the target group to identify potential barriers to the new behaviour.

In Argentina, we required households not only to separate their waste into the "dry" (recyclable) and "wet" (non-recyclable) categories but also to dispose of the recyclables in front of their houses on a particular day of the week. On that day, and *only* on that day, the recyclables would be collected and transported to a processing plant. On all other days, the collected materials would be brought directly to the landfill. This meant that not knowing about the correct day, or forgetting to put the recyclables out on that day could be major barriers. Our intervention, therefore, focused on these two aspects.

The situation in Indonesia was slightly easier, since households could dispose of both waste categories on any day, but needed to use the correct container for each. Here, the challenge was rather to establish a completely new behaviour and concept, even though all necessary infrastructure was convenient to reach and the separation rules were relatively simple (separation of organics and non-organics).

Co-developing the behavioural policy

Fourth, once the current and the target behaviours are clearly understood, policy makers are required to develop a behavioural policy to change the behavioural context in a way that facilitates a shift from current to target behaviours. These policies need to be based on the understanding of

enablers and barriers faced by the target group, and they usually take the form of intervention packages designed to address several enablers and barriers simultaneously (see Box 1). Behavioural theory often uses the COM-B model to develop options for effective intervention packages (Michie et al., 2011). It states that to change a behaviour (B), a person needs capability (C), opportunity (O), and motivation (M). Capability includes the internal factors of a person that contribute to being able to perform a behaviour, i.e., the mental as well as the physical capabilities. Opportunity refers to external factors that enable a behaviour, for example, infrastructure. Lastly, motivation includes conscious and unconscious cognitive or emotional processes in a person that motivate a certain behaviour.

All three elements can contribute to or hinder a shift from the current to the target behaviour. For example, only with sufficient knowledge about a specific behaviour, such as which materials belong in which waste category, or on what specific day to dispose of recyclables, can individuals gain the capability to perform the behaviour. Here, it is important to keep things simple: few and clear categories for waste are easier to adhere to than many, which may even require specific knowledge of different plastic materials.

Opportunity for recycling is only provided if containers for recyclables, or other suitable infrastructure, are within reach. Here, convenience is key: If containers are far away, difficult to open, or too full to easily add more material, it is much less likely that they will be used correctly.

Capability and opportunity are necessary conditions for behaviour change, but these conditions are only sufficient if capability and opportunity are complemented by motivation. Only if motivators such as social norms, peer influence, or a preference for a clean environment are present, will a person actually change their behaviour and start to recycle. Motivation can also be monetary, but this is often challenging due to a lack of funding, or the difficulty of attributing behaviours to individuals, which complicates the allocation of individual rewards or fines. However, non-monetary motivators can be just as effective, and sometimes even more so, than monetary ones. Making a new behaviour fun through gamification, creating trust and credibility in the other actors in the system, generating a sense of reciprocity, or using the human need for recognition through peers can be very powerful motivators. In the search for impactful interventions, the empirical literature can offer inspiration, but the intervention ideas need to be grounded in an intense exchange with local partners.

Box 2: Designing a successful behavioural policy package

Successful behavioural policies often consist of a package of interventions to address all three aspects of the COM-B model (capability, opportunity, and motivation). In designing these packages, it is important to prioritise the removal of the most important barriers, and the implementation of the most effective motivators. In this regard, it is also relevant to keep an eye on cost, and to see which issues can be addressed most easily and cost-effectively.

In addition, it is also important to consider that every behavioural policy is implemented in the context of an already existing environment of policies and infrastructures. This environment and its potential interactions with the new policy need to be taken into account. When there is an interaction, the policies can either reinforce or contradict one another. For example, new regulations for building insulation can be complemented by a reinforcing behavioural intervention package. This package could, for instance, limit the hassle associated with house renovations, such as providing a service to support homeowners in freeing the attic space needed to insulate their house's roof. It could also include an easy-to-reach helpline to assist in searching and applying for house insulation subsidies. Policy contradictions, on the other hand, can lead to reduced effectiveness. For example, subsidies for job-related commuting, such as the German "*Pendlerpauschale*", can contradict behavioural campaigns aimed at limiting the use of cars.

In designing the intervention package in Indonesia, the IDOS team cooperated with the local waste service provider Waste4Change. In this case, we needed to install a recycling system from scratch. To address aspects pertaining to capability, we provided simplified information on waste separation. With regards to opportunity, we distributed additional bins for recyclables. In addition, to motivate neighbours, we established trust in the differentiated waste collection by clearly marking each compartment for recyclables and non-recyclables on the waste collection truck with posters, and installing a compartment separation wall painted in red. In addition, we organised a recycling cooperation game as part of a community festival as a potential reward. This intervention package increased the rate of household participation in waste separation from zero to about 40%.

In the case of Argentina, a waste separation and recycling system was already in place, but rarely used. The IDOS team in cooperation with the Municipality of Trelew found scant information as one of the main barriers to achieving the target behaviour. Many neighbours already separated their waste, but they were not fully aware of the correct day of disposal. Our solution of providing neighbours with a simplified overview of the required behavioural steps and the slogan “Recyclables only on Thursdays, on Thursdays only recyclables” doubled the rate of households who performed the target behaviour to over 30%. Our partners at the municipality also had the idea to distribute the information in the form of fridge magnets, which are used widely across Argentina. These magnets provided a timely reminder in the right place, i.e., in the kitchen, where waste separation typically occurs in most households.

Testing interventions

In the fifth step, policy makers need to test their planned intervention package. Testing can sometimes yield surprising results, as measures believed to be effective may fail in reality, while others, which are relatively inexpensive but not expected to be impactful, may achieve a sufficient impact to justify a positive cost-benefit ratio. After testing, interventions can still be adapted to increase their impact before they are rolled out.

In the practice cases described above, the IDOS team tested the intervention packages in randomised controlled trials. This methodology gives clear evidence about actual causality (i.e., proof that it was the intervention that caused the behaviour change), and can provide information about the size of the expected behavioural effect. In turn, all this can make a cost-benefit analysis much easier to carry out.

However, randomised controlled trials can be complex to implement. Other methods may be easier, quicker and cheaper, albeit they are not as robust in the provision of causal evidence. These alternatives include surveys, or simple before and after comparisons.

Rolling-out and scaling the intervention package

Once the empirical basis has been established and the intervention package is optimised as far as possible within the given financial and time limits, the package is ready to be rolled out.

Conclusion

The successful rollout of behavioural interventions requires a methodical approach, grounded in a thorough understanding of the local context. As far as possible, intervention design and rollout decisions should be based on a solid empirical foundation to ensure the selection of the most effective intervention options. Furthermore, collaboration with local partners is essential. While behavioural researchers can guide and support implementation partners in framing the right questions, the actual answers must come from those on the ground. Local partners and the target population have the necessary insights and contextual knowledge to provide accurate and relevant responses. The involvement of the target population is particularly vital to ensure that the interventions are tailored to specific needs and circumstances, increasing the likelihood of success.

These upfront investments in contextual knowledge and detailed planning may appear costly, but they are likely to pay off in the long run. Skipping these steps risks designing a sub-optimal system, where key components may not function properly, or key actors lack the possibility or incentives to contribute. Once a sub-optimal system is established, it can be very costly and time intensive to modify. Therefore, it is advisable to invest time and resources in designing a robust system from the outset, ensuring that all key partners can operate effectively and the measure is accepted by the target population.

Any lessons learned in the process should be shared, and transparency vis-à-vis stakeholders needs to be ensured at all times. While interventions usually cannot be transferred to other contexts without adaptations, there is always information to take away that can inform similar endeavours and inspire the search for effective intervention packages in other contexts.

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Published with financial support from the Federal Ministry for Economic Cooperation and Development (BMZ), based on a resolution passed by the German Bundestag.

Suggested citation:
Pegels, A. (2024). *Smart packages: Six steps to design effective behavioural policies* (Policy Brief 22/2024). IDOS. https://doi.org/10.23661/ipb22.2024

IDOS Policy Brief / German Institute of Development and Sustainability (IDOS) gGmbH

ISSN (Print) 2751-4455
ISSN (Online) 2751-4463

DOI: https://doi.org/10.23661/ipb22.2024

Tulpenfeld 6, 53113 Bonn
Email: publications@idos-research.de
https://www.idos-research.de

Printed on eco-friendly, certified paper.