



# A Methodological Review for the Data Must Speak Positive Deviance Research

## Executive Summary

### 1. Introduction

The global learning crisis is striking. Fifty-three per cent of children in low- and middle-income countries (LMICs) cannot read and understand a simple text by age 10 (World Bank, 2019). The COVID-19 pandemic has aggravated the crisis, with school closures resulting in a significant loss in learning (Azevedo et al., 2020). These low levels of foundational reading skills provide an early warning that all global educational goals and related Sustainable Development Goals (SDGs) – including gender equality in education – are in jeopardy (World Bank, 2019).

Nonetheless, even in the most challenging educational contexts, there are positive examples of schools that outperform (in terms of education outcomes such as learning, retention, equity, and gender equality) other schools located in similar contexts and with an equivalent level of resources. These outliers are known as ‘positive deviant’ schools, and the improved outcomes they achieve are likely facilitated by specific practices and behaviours employed either within the school (e.g., school management practices and/or pedagogical approaches) or in relation to the school (e.g., parental and community involvement).

The UNICEF Office of Research – Innocenti, through Data Must Speak (DMS) – a global initiative implemented since 2014 – aims to address the evidence gaps in education to mitigate the learning crisis. DMS provides country-specific technical support and capacity strengthening to Ministries of Education for more effective and transparent data systems use (central and decentralized) at school and community levels.

The [DMS positive deviance research](#) will rely on mixed methods to generate knowledge about the positive deviant practices and behaviours of high-performing schools, alongside practical lessons about ‘what works’ and ‘how to’ scale grassroots solutions for national policymakers and the broader international community of education stakeholders. Inspired by the Positive Deviance approach, the DMS research will be co-created and co-implemented with the Ministries of Education in participant countries<sup>1</sup>.

This Executive Summary of the DMS methodological review presents the highlights of the methodologies and approaches that will be used for the DMS positive deviance research. It outlines key relevant recommendations from positive deviance, behavioural sciences, implementation research, and scaling science and how to effectively apply them in each of the stages of the research.

1. At the time of writing, the DMS Positive Deviance Research was being implemented in 13 countries: Brazil, Burkina Faso, Cote d’Ivoire, Ethiopia, Ghana, Lao PDR, Madagascar, Mali, Nepal, Niger, Tanzania, Togo and Zambia.

## 2. What is the DMS Positive Deviance Research?

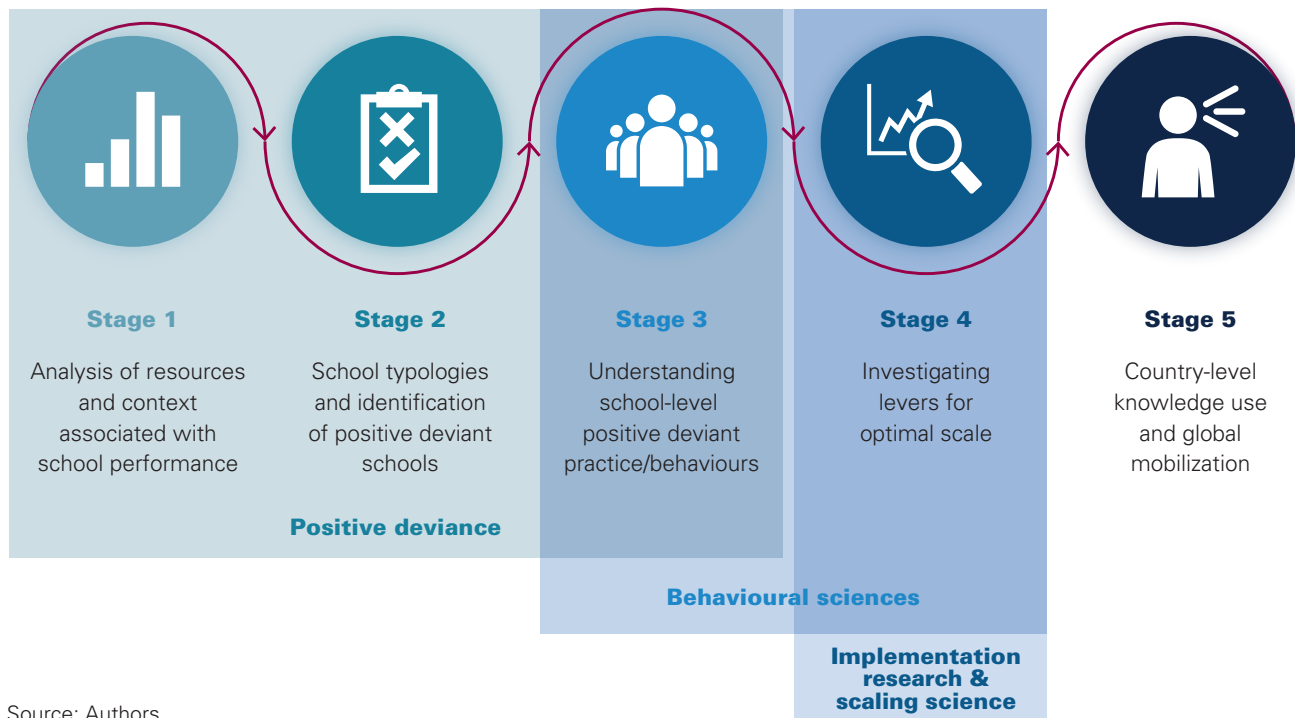
The main goal of the DMS positive deviance research is to identify schools that outperform peer schools in similar contexts and with an equivalent level of resources.

The research team will support Ministries of Education to first classify schools into typologies based on administrative and contextual information found in existing education data sets (e.g., learning assessment data, EMIS<sup>2</sup>, and other administrative data sets) and to identify the positive deviant schools within those typologies based on various measures of school performance. Then, field research will be conducted in a sample of positive deviant and non-positive deviant schools, and the practices and behaviours in place at these schools will be compared to identify the positive deviant practices/behaviours that contribute to improved performance. Finally, levers for the optimal scale of the identified positive deviant practices/behaviours will be explored through further primary research. Priority will be given to investigating locally rooted existing solutions in each country.

Throughout its five stages, the research will be based on the proven principles of the DMS global initiative, which include being demand-driven, engaging in peer-to-peer learning, scalability, learning by doing, openness and replicability. Thus, research activities, including data collection instruments, will be co-created and co-implemented with Ministries of Education, research participants, and other country-level education stakeholders. While co-creation is generally more time- and resource-consuming, it ensures that research:

- is well aligned with participating governments' priorities,
- critically engages with the context,
- maximizes use of the findings for policy design and implementation, and
- facilitates national research capacity strengthening, which paves the way for autonomous replication of the research by the national partners.

**Figure 1. Stages of DMS Positive Deviance Research**



Source: Authors

### 3. What is the DMS methodological review?

The DMS methodological review aims to gather, in one place, a wide variety of studies to provide guidance on best practices and lessons learned from positive deviance, behavioural sciences, implementation research, and scaling science.

It offers a common reference and standard language for the DMS positive deviance research and provides guidance for its application at the country level.

The research questions that guide the review are the following:

1. How have the methodologies used in Positive Deviance been applied in education and other sectors? What are some of the factors underlying their success? Which ones could be relevant for (or adapted to) the DMS research at the country level?
2. How have behavioural sciences been used to understand behaviours and identify their drivers? How can they be used to identify levers for change in the education field? Which of these levers could be relevant for (or adapted to) the application of DMS research at the country level?
3. How have the methodologies used in implementation research and scaling science been applied in education and other sectors? What are the success factors for the identification and contextualization of levers for optimal scale? How can these methodologies be adapted and used by the DMS research at the country level?

### 4. Snapshot of methodologies and approaches of DMS Positive Deviance Research

The following subsections summarize the DMS methodological review findings by research question. They include conceptual explanations of the respective

methodologies and approaches as well as select key recommendations on how to adapt them for the DMS positive deviance research.

**Table 1. Examples of data collection methods for identifying positive deviant practices and behaviours**

<b>Questionnaires</b>	Questionnaires/surveys could be administered to different stakeholders about their perceptions, beliefs, motivations and/or practices. These can be applied by interviewers or be self-administered depending on the context and characteristics of the targeted group.
<b>Interviews/FGD</b>	Interview guides should be context-specific, with questions directed to various actors (teachers, students, headteachers, parents and community members), posed in a way that respects societal norms and cultural traditions, and covering dimensions such as staff relationships, gender composition of the classroom, etc.
<b>Classroom observations</b>	Classroom observations allow us to observe behaviours in practice. The observation instruments can differ between participating countries to ensure that the research leverages on what already exists and is contextualized.
<b>School observations</b>	School observations should aim to understand the role of the different stakeholders in the management and organization of schools, teaching practices, and interactions between students and teachers.
<b>Other</b>	Participatory sketching and list randomization may be necessary tools if addressing sensitive topics in research (e.g., corporal punishment, bullying, sexual harassment).

## a. Positive Deviance

Positive Deviance is a practical approach to identify and promote exceptionally high performance in a given area of interest (Bradley et al., 2009). It is grounded on the premise that, in every community, there are individuals (or units) whose practices and behaviours enable them to find better solutions to a problem than their peers who are in similar circumstances and have similar access to resources (Herington et al., 2018). In the DMS research, positive deviance is used to identify schools that consistently perform well on foundational learning outcomes, that display good retention rates, and show good equity indicators in relation to other schools within their reference groups (rather than all schools in general). Their 'deviance' is assessed using econometric techniques – controlling for a wide range of independent variables.

For the successful identification of positive deviant schools, the following best practices identified in the methodological review are relevant for stages 1 and 2 of the DMS research:



**Elaborate a clear identification strategy to identify positive deviant schools.** This can be done through a mix of quantitative and/or qualitative methods, including participatory approaches (e.g., selection carried out by community members).



**Involve in-country partners and stakeholders** when defining the criteria for identifying positive deviant outliers. A key tool may be holding workshops where a facilitator provides background on the research and the positive deviant approach and poses questions to help attendees understand what positive deviance means in a specific context.



**Consider the use of different sampling strategies** to include positive deviant outliers that might be otherwise marginalized, stigmatized, or hard to reach in their communities.



**Use statistical methods accompanied by qualitative appraisals in collaboration with education authorities** during initial stages.



**Use value-added econometric models** to select positive deviant schools (e.g., comparing the performance of the schools to their 'expected' performance based on their student population and context).

The full list of recommendations can be found in the full DMS methodological review.

Once the typology of schools and identification of positive deviant schools have been completed, the DMS research focuses on identifying the positive deviant practices and behaviours. Table 1 shows various research methods that can be leveraged in the DMS research.

## b. Behavioural Sciences

Behavioural Sciences include insights from various disciplines such as economics, psychology, sociology, neuroscience, etc., to deepen understanding of how human beings behave and make decisions (Adhikari, 2016). It employs an inductive approach, based on empirical observations about individual and collective behaviours, to provide evidence and inform initiatives that can be leveraged to promote behavioural change (Lunn, 2012; OECD, 2019b). Accordingly, this approach provides practical tools to develop strategies that promote the uptake or abandonment of certain practices in a variety of fields such as education, poverty, gender, environmental care, health, and tax collection (Sunstein, 2014). In the DMS research, behavioural sciences are used to identify school-level positive deviant behaviours and their underlying drivers, as well as the levers to optimally scale them.

For the understanding of positive deviant behaviours and their drivers in schools, the following learnings from Behavioural Sciences are relevant for stage 3 of the DMS research:



**Ensure that the sample of schools allows for comparison** of adopted practices and behaviours between positive deviant and non-positive deviant schools in similar contexts. Perform an analysis to differentiate positive deviant and non-positive deviant schools accounting for demographic differences, particularly those based on gender.



**Do not assume the reasons or motivations for behaviours.** Sometimes there is a disconnect between what people think, feel, say, and do. Therefore, it is important to **include a variety of data collection methods** to understand the individual and collective behaviours.



**Identify ways to facilitate and simplify behaviour compliance** as behaviours are often unconscious and conditioned by the environment. When facing collective aspects that affect behaviours, focus on who is influential (reference network) for the people whose change is being targeted.



**Consider demographical specificities** to understand positive deviant behaviours and practices. Adopting a gender lens is essential when it comes to practices that are affected by differentiated expectations for men and women.



**Identify individual biases and social influences** from researchers and implementers in the research process.

The full list of recommendations can be found in the full DMS methodological review.

## c. Implementation Research and Scaling Science

Implementation Research is defined as an innovative approach to systems strengthening in which decision makers and implementers lead the generation and use of research. Also, it considers the local context, priorities, and system complexity, including a) positioning research within existing programmes and systems, b) meaningful engagement and leadership roles for decision makers and implementers, and c) aligning research activities with programme implementation cycles. In other words: “The basic intent of implementation research is to understand not only what is and isn’t working, but how and why implementation is going right or wrong and testing approaches to improve it. This form of research addresses implementation bottlenecks, identifies optimal approaches for a particular setting, and promotes the uptake of research findings” (Peters et al., 2013).

Scaling Science is an approach that aims to increase the likelihood of making significant changes and optimizing results in ways that matter to people. It tries to increase the scope of positive innovation impacts while systematically accounting for the entire path to scale (IDRC, 2016). Evidence suggests the importance of considering the context, not only for designing an innovation but also for its implementation and scaling up. Thus, plans to scale successful programmes, practices and behaviours need to consider the local circumstances in which they are to be applied (UNICEF, 2016). This approach will be used in stage 4 of the Positive Deviance research, complemented with behavioural sciences and implementation research to identify the incentives and levers to put in place for scaling up the identified positive deviant practices and behaviours.

Implementation research and scaling science are based on a multilevel approach that considers core implementation components, organizational capacity and contextual factors (politics, economics, and cultural considerations). Due to the scope of the DMS research, the focus will be primarily on identifying positive deviant behaviours and practices and their interaction with broader factors that are crucial to ensure the sustainability of the implementation and its subsequent escalation.

Below is a summary of some of the factors that the review found to have contributed to the successful implementation and expansion of identified positive deviant practices and behaviours and that can be applied in the scale-up of positive deviant practices and behaviours for the DMS research (stage 4):

- ✍ **Contextualize, adapt, and align research** with participating countries’ education strategies and sector plans (ESPs), emerging needs, and other contextual factors to ensure relevance and take-up.
- ✍ **Secure buy-in from all relevant in-country stakeholders** and/or community members from the outset of the research (i.e., co-creation and co-implementation).
- ✍ **Embrace new approaches and build a strong culture of research** and development involving all relevant stakeholders (including at the school level).
- ✍ **Document successful stories** for different stakeholders through different communication means; this can be useful to convince others of the benefits of using the Positive Deviance approach.
- ✍ **Identify and steward both technical and high-level champions** within and outside government and schools.
- ✍ **Collect data throughout the research journey** to measure and learn ‘what works’, ‘what does not work’, ‘why’, ‘how to’ deliver those innovations, and ‘how much’ they cost.
- ✍ **Share insights through a network of idea hubs.** These hubs should include stakeholders of different sectors, regions, nations and subnational levels that could share effective approaches to improve quality learning and optimally scale them.

The full list of recommendations can be found in the full DMS methodological review.

### For more information:

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