Going Beyond School: An Assessment of Socio-Emotional Skills and MBIF Life Skills Program
School education is steadily rising in India, with enrollment levels for both boys and girls at an all-time high.
GROSS ENROLMENT RATIO, PRIMARY AND LOWER SECONDARY

As of 2019 according to UNESCO

For girls: 93.3
For boys: 90.7
Recent policies such as the NEP also emphasises on the need for flexible curricula, which will contribute to strengthening life skills like collaboration and gender sensitivity to create good, successful, innovative, adaptable, and productive human beings in today’s rapidly changing world.
This project seeks to broaden the understanding of factors affecting school attendance in light of Right to Education (RTE), and include gender attitudes, perceived self-efficacy, and resilience as potential determinants of an adolescent’s school-going behaviour.
Data is collected at 3 levels:

- **Baseline**: At the start of the program
- **Midline**: Approximately 18 months into the program
- **Endline**: Upon completion of the program
We focused on **12** projects across various locations between 2017 and 2019.

- Aditya Birla
- Eclerx
- Bajaj Auto
- HDFC Disha
- Hero
- Macquarie
- TMF (Kurnool, Bhandara, Joynagar)
- Shubh Aarambh
- Plastic Omnium
OVERALL, WHAT DOES THE PROGRAM DO?
By collating data across studies, we can generate powerful empirical results.

RIGOROUS EMPIRICAL ANALYSES OF DATA
Draw conclusions about baseline associations and changes in outcomes as well as
Baseline analyses
Variables on which we have baseline data

- **Child socio demographics**
  - Age, sex, caste, religion, class

- **School outcomes**
  - Regularity of attending

- **Behavioural scales**
  - Perceived self-efficacy, resilience, gender attitudes, self-management, and problem-solving
Figure 1: Scores on life skills / socio-emotional measures at baseline

This shows the fraction of children that have a particular score on each measure. The taller the bar, the higher the share of children in our sample that have the score on that particular measure.
Scores on resilience, gender attitudes, and perceived self-efficacy may vary by age, regardless of the programme.

Thus, any analysis of programme impacts will need to account for changes that could already be taking place due to age and developmental factors.
Figure 2: Scores on socio-emotional skills by class of education at baseline

This shows the average score on each measure for each class in which the child in our sample was studying at the baseline. A higher score means greater skill or ability.
Socio-emotional skills and school outcomes are closely linked

- For example, a child who likes going to school could *(before the programme is implemented)* have better socio-emotional skills.

- Conversely, a child with more resilience or self-efficacy could value what school means very differently, and therefore have completely different school outcomes compared to a child who scores low on these measures.
Socio-emotional skills and COVID-19

- With traditional learning disrupted due to the widespread closure of schools, children in the least developed and developing nations find themselves at a disadvantage.

- By equipping children with the necessary life skills, the Programme has prepared them to handle any challenging situation like the ongoing pandemic with resilience.
Figure 3: Behavioural parameters by liking coming to school at baseline

This is a box or ‘whisker’ plot -- it shows both the median level score on a measure as well as the highest and lowest scores, organized by whether the child said they liked going to school.
Figure 4: Behavioural parameters by regularity of attending school at baseline

This shows the distribution of socio-emotional skills and measures by how regularly the child said they attended school in a given week at the baseline.
Framework for baseline analysis

01 Socio-demographics
02 Socio-emotional skills
03 School outcomes
04 Study differences
MODEL DEVELOPMENT

Multiple linear regression variable framework, identify triggers for change at baseline
It means that the Instrument is measuring whatever it is measuring consistently.

If you stand on a weighing scale today, it shows 60kg. If you stand on it tomorrow, it should show 60kg again, and not 65kg.

Assessed via Cronbach’s alpha, where above .70 is reliable.
<table>
<thead>
<tr>
<th>Measure</th>
<th>Items</th>
<th>Scale</th>
<th>Lower Scores</th>
<th>Higher Scores</th>
<th>Cronbach’s α</th>
<th>Sample Size</th>
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</thead>
<tbody>
<tr>
<td>Gender Attitudes</td>
<td>7</td>
<td>Likert</td>
<td>Liberal</td>
<td>Conservative</td>
<td>.75</td>
<td>4143</td>
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<td>Perceived Self-Efficacy</td>
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<td>Likert</td>
<td>Perceived</td>
<td>Resilience</td>
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<tr>
<td>Resilience</td>
<td>12</td>
<td>Likert</td>
<td>Higher</td>
<td>Higher</td>
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</tbody>
</table>

For a measure to be considered internally consistent, we need Cronbach’s α > .7.
Psychometric Measures

For a measure to be considered internally consistent, we need Cronbach’s α > .7

Self-management comprises 9 items along a 4-point Likert scale (1 = strongly agree to 4 = strongly disagree); decision-making comprises 6 items along a 4-point scale.

Self-management Cronbach’s α = .65 (n = 4683)
Decision-making Cronbach’s α = .70 (n = 4683)

This scale is composed of 8 items along a 4-point Likert scale (1 = strongly agree to 4 = strongly disagree).

Cronbach’s α = .78 (n = 4683)
It means that the Instrument is measuring what it is supposed to measure.

If you wanted to know a person's weight, you would make them stand on a weighing scale, not measure their height.

Assessed via Factor Analysis.
Figure 5: Differences between boys and girls on behavioural parameters (socio-emotional skills) at baseline

\( N = 6591 \) for gender attitudes, self-efficacy, resilience; \( N = 4677 \) for problem-solving.
KEY FINDINGS

- Socio-emotional skills enable school attendance, especially for girls.
- Increased awareness of the RTE and aspirations in the short-term.
- Behavioural parameters are boosted by the program and boost school attendance.
- Long-term impacts are powered by a small sample, but are strong.
Socio-emotional skills enable school attendance, especially for girls.

- The National Education Policy (NEP) highlights the role of building life skills such as communication, cooperation, teamwork, and resilience as fundamental principles guiding the education system in India.
- Having good problem-solving skills improves the aspirations to study further as well as class participation.
- Magic Bus found that developing resilience in adolescence boosts the chances of a girl attending school by nearly 26%! Higher the resilience, greater the likelihood of attending school regularly.
Increased awareness and aspiration to study further

In the short-term (i.e., between baseline and midline, typically 18 months duration), participating in the program increased aspiration to study further and awareness of educational policies such as the RTE.

In particular, girls who participate in the program increase their regularity of attending school.
Socio-Emotional Skills matter for school outcomes!

- By boosting scores on socio-emotional skills such as gender attitudes and perceived self-efficacy, the programme gives a leg up to children in their school outcomes.

- Improvements in gender attitudes and resilience are particularly strong and positive for older children in the same cohort (>11 years of age).

- 8.2% increase in gender attitudes scores, in turn leads to more regular school attendance, aspiration to study further, and greater awareness of the RTI.
PROGRAM EFFECTS
Figure 9: Differences in scale measures between baseline and midline.
**Increased Awareness and Aspirations in the Short-Term**

- Robust effects of participating in the intervention on increased aspiration to study further and awareness of educational policies such as the RTE.

- Girl children in the short-term on average see a **54.8%** increase in odds of regularly attending school after participating in the program.
Behavioural parameters are boosted by the program and boost school attendance

- Improvements in gender attitudes and resilience are particularly strong and positive for older children in the same cohort (> 11 years of age).

- The largest increase in egalitarian gender attitudes comes for female children who participated in the program, resulting in an 8.2% increase in their scores.

- Similarly, large increase (22.8%) on self-efficacy scores in the short-term on average.
Long-term changes are strong

Findings from the Nestle Healthy Kids Project (NHKP) as well as other studies showed a further 20% improvement in gender attitudes score as well as perceived self-efficacy following the program at endline.
Socio-emotional skills (especially resilience) are important for enabling regular school attendance. If a child (especially a female child) scored higher on resilience, then she was 25.8% more likely to be regularly attending school. Thus, targeting the development and improvement of such socio-emotional skills is an important aspect of the program.
DATA RECOMMENDATIONS

**Panel identifiers**
Replicate the process for ShubhAarambh data (child identifiers available across baseline and midline) for all ongoing studies.

**Consistent scales**
Survey instruments can be trimmed as well to do away with less valid or reliable scales, such as self-management.

**Data recording**
- Streamlining the data collection process.
- A standard questionnaire format across studies.