

Data Perspective

MICS6: Development of Three- and Four-year Old Children in Zimbabwe

1. Background

The 2019 Zimbabwe MICS6 survey interviewed over 11,000 households, with more than 6,000 mothers and caregivers of children under five interviewed. For the purposes of analyzing development trends specifically for three- and four-year-olds, the sample size narrows down to 2,517 interviews with mothers and caregivers of three- and four-year olds over the course of five months, from December 2018 to April 2019. The dataset used for the analysis contains data on the child's age, date of birth, date of the interview and responses to a total of ten questions to the four domains of the Early Children Development Index (ECDI).

The construction of a binary index (where =1 if developmentally on track and =0 if not) for each ECDI domain was guided by the [UNICEF Early Childhood Development Index 2030 technical manual](#). "Don't know" responses were coded to "missing" in the construction of the binary index for each domain, although they were kept for the disaggregated presentation of responses to each question.

The subsequent analysis first presents summary statistics of the sample, followed by disaggregation of responses to each ECDI domain question, and ending with an analysis of ECDI trends disaggregated by age.

2. Summary Statistics

Of the 2,517 interviews, a total of two surveys were excluded: one survey with inconsistent responses and one survey that was conducted in December 2018, as this was the only survey conducted during that month. Hence, the final number of interviews used for the analysis is 2,515.

The interviews achieved near-parity between three- and four-year olds: 51.4 per cent of the comprised of four-year-olds, while 48.6 per cent was comprised with three-year-olds. Furthermore, as shown in Table 1, the majority of interviews were conducted between January to March 2019, with only 2.3 per cent of the interviews taking place in April 2019. Hence, caution is warranted when interpreting April 2019 results, due to its relatively small sample size.

Table 1 – Responses to each ECDI domain question

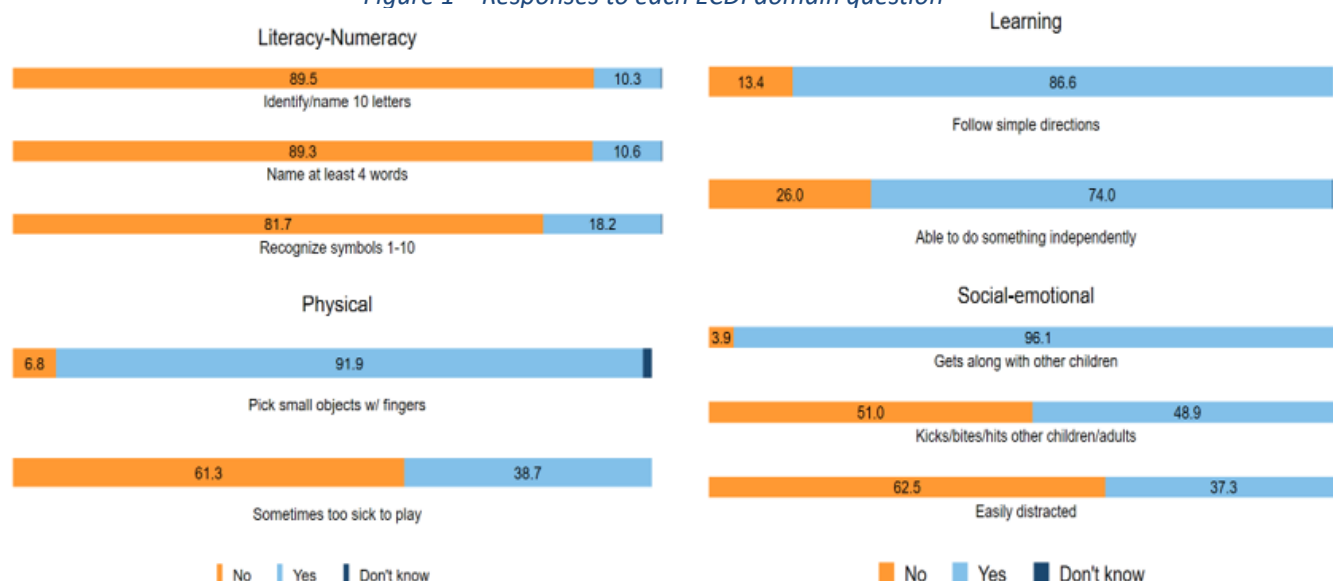
Date of Interview	Number	Percentage (%)
January 2019	758	30.1
February 2019	793	31.5
March 2019	906	36.1
April 2019	58	2.3
TOTAL	2,515	100

3. Results

In the aggregate, only 10.4 per cent of children aged three and four were developmentally on track in the domain of Literacy-Numeracy. On the other hand, 57.1 per cent, 69.5 per cent and 77.3 per cent of children aged three and four were developmentally on track in the domains of Physical, Learning and Social-Emotional, respectively. **The findings suggest that at least 57 per cent of Zimbabwean children aged three and four are on track in at least three of the four ECDI domains.**

The responses to each question by ECDI domain are presented in the figure below. It is worth noting that at least over 80 per cent of all children in the sample over four months were reportedly unable to identify 10 letters, name at least 4 words nor were able to recognize the numbers from one to ten. Additionally, it is also worth noting that while an overwhelming majority of children in the sample were able to pick up small objects with their fingers, a majority of the children were reported to be sometimes too sick to play.

Figure 1 – Responses to each ECDI domain question



Disaggregating these findings by month and by age, as shown in the figure below, there are notable variations between three- and four-year olds, such as a higher proportion of four-year-olds being on track developmentally on all four domains, compared to their three-year-old counterparts. **The figures also suggest relatively minimum variations over four months, while accounting for the small sample size in April 2019.** Noting the difference in the y-axis scales across the figures, in terms of the Literacy-Numeracy domain, the domain with the least proportion of children on track, only around 5 per cent of three-year old children were developmentally on track over the course of four months, while the proportion for five-year-olds hovered between 15 to 20 per cent. On the other hand, the figure suggests that the overwhelming majority of children aged four and five in Zimbabwe were developmentally on track in the Social-Emotional domain, where both groups had at least around 75 per cent who were on track, although the marked fall for four-year-olds in April 2019 may likely be due to the relatively small sample size for that month.

Figure 2 – Proportion of three- and four-year old children developmentally on track by ECDI domain

