



Data Perspective: Evolution of Educational Performance of Children Under 5: Literacy, Physical, Learning, and Socio-emotional Development

I. Introduction

This report analyzes how educational performance evolves in children aged 3 to 4 years, focusing on literacy and math, physical, learning, and socio-emotional skills.

The data come from the 2019 Zimbabwe MICS6 survey, which consists of responses of over 2,500 children, collected through mother or caregiver interviews.

The MICS survey in Zimbabwe interviewed over 11,000 households, with more than 6,000 mothers and caregivers of children under 5 interviewed. The objective is to assess development month by month across these domains and identify trends in the growth of key skills during this critical age range.

II. Methodology:

The dataset includes responses to 10 questions (EC6 to EC15) that assess various aspects of children's development, such as **literacy** (identifying letters, reading words, recognizing numbers), **physical skills** (picking up objects, being too sick to play), **learning** (following instructions, performing tasks independently), and **socio-emotional abilities** (getting along with others, displaying aggressive behavior, being easily distracted).

III. Key Findings:

The analysis reveals a gradual improvement in the overall educational index as children age, increasing from 49.6% at age 3 to 52.9% at age 4. While **physical** skills are notably strong, with over 90% of children able to perform tasks like picking up small objects by age 3, literacy and math skills lag significantly, showing minimal development until around 48 months. Learning skills also show consistent improvement, with increasing ability to follow instructions and complete tasks independently, particularly between 42 and 48 months.

Socio-emotional skills are generally strong, with over 95% of children getting along well with others by age 4, although aggressive behaviors remain relatively common, with nearly half of the children exhibiting such behaviors. These findings suggest that while cognitive and physical abilities improve steadily, there is a need for targeted interventions in literacy and emotional regulation to further support children's development during these early years.

IV. Discussion:

The analysis of literacy and math skills shows minimal development for children under 4, emphasizing the need for early interventions to promote letter and number recognition. These skills are crucial for future educational success, and addressing them early could bridge developmental gaps. On the other hand, physical abilities were found to be relatively strong, with most children demonstrating fine motor skills. However, the variation in physical well-being, indicated by children feeling "too sick to play," suggests potential underlying health disparities that should be addressed.

Cognitive development in learning and task independence is robust, with significant improvement between 42 and 48 months. This indicates that targeted cognitive activities during this period could enhance childhood development further. Meanwhile, socio-emotional skills are generally strong, though high levels of aggressive behavior and distraction highlight the need for social and emotional support. Programs that improve emotional regulation and social interactions could benefit children's overall development and future learning outcomes.

V. Conclusion and Considerations:

Children aged 3 to 4 show steady growth in their physical, learning, and socio-emotional skills, with significant improvements in learning and cognitive abilities after 42 months. However, literacy and math remain underdeveloped, signaling that they could benefit from more focused intervention.

Considerations:

- Early Literacy Programs: Targeted literacy and math initiatives should be introduced to improve these foundational skills early in life.
- Physical Health Support: Address variability in physical well-being by providing health interventions aimed at preventing illness and promoting physical activity.
- Emotional Regulation Programs: Encourage emotional development programs to help children manage aggression and improve focus, which may, in turn, enhance cognitive outcomes.

