A Statistical Study of Children's Functioning and Foundational Learning Skills in Georgia: Methods, Tools, and Innovations

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Abstract

In 2024, a national statistical survey was conducted to assess the well-being and foundational learning skills of children living in households across Georgia. The research was implemented at the scientific base of Ivane Javakhishvili Tbilisi State University, with financial support from the Shota Rustaveli National Science Foundation. The study employed four distinct questionnaires: (1) a demographic questionnaire, (2) a household questionnaire, (3) a main questionnaire, and (4) a refusal form. The instrument covered a broad range of modules, including household demographic characteristics, education, child care, household income, receipt of social assistance, housing conditions, child-specific information (ages 7–14), maternal or caregiver functioning, parenting practices, child functioning, parental engagement, foundational learning skills, and reasons for non-response.

The methodology of the survey was grounded in internationally recognized frameworks, specifically those developed by UNICEF and Eurostat for measuring living standards. It incorporated the Washington Group's Short Set of questions on functional difficulties, as well as UNICEF's foundational learning skills assessment module, adapted in alignment with Eurostat's indicator framework.

Given Georgia's ethnic diversity—where, according to the 2014 national census, 86.8% of the population is Georgian, 6.3% Azerbaijani, and 4.5% Armenian—the survey was conducted in Georgian, Azerbaijani, and Armenian to ensure linguistic inclusivity. The proportion of all other ethnic groups individually does not exceed 1%.

A key innovation of this research was the assessment of foundational learning skills among children in Georgia. The foundational learning module consisted of two core components: reading literacy and mathematical skills. The mathematics section included tasks related to number recognition, numerical discrimination, basic arithmetic operations, and sequencing—adapted directly from the instruments used in UNICEF's Multiple Indicator Cluster Survey (MICS6). According to UNICEF guidelines, the mathematics tasks did not require modification, as mathematics is considered a universal subject and is not influenced by country-specific socio-economic or cultural contexts.

UNICEF provides two recommended formats for administering reading tasks: (1) a monolingual format, where the task is presented in only one language, and (2) a multilingual format, which allows children to attempt the reading task in a different language if they are unsuccessful in the first. The multilingual format was adopted in this study. The reading

module comprised four text-based tasks—two sentences and two short stories. Each child was required to read one sentence and one story, followed by comprehension questions. If the child was unable to complete the initial task successfully, they were given the opportunity to attempt an alternative version in one of the other two languages. The alternative tasks differed from those used in the initial attempt. The assessment measured both reading accuracy and reading comprehension.

In accordance with UNICEF recommendations, the texts used in the reading assessment were adapted using five established principles. This process included initial translation, followed by adaptation according to principles 1 through 4, guided by standardized manuals. Subsequent consultations were held with qualified experts from Georgia's Ministry of Education, Science and Youth.

Following a detailed review of UNICEF and Eurostat methodologies, an indicator framework was developed to ensure international comparability. A comprehensive tabulation plan was prepared in both Georgian and English, outlining the methodology for calculating each indicator using data collected through field instruments. Approximately 30 statistical tables are scheduled for inclusion in the final analysis and reporting.

Keywords: education, literacy and numeracy assessment, functional difficulty, living conditions, wealth index

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