



# Methodological Assessment of Secondary Schools Systems in Tanzania Using Difference-in-Differences for Clinical Outcome Evaluation

Kamali Mawanda<sup>1</sup>, Tumweza Kigunda<sup>1</sup>, Ngowi Chituwo<sup>1,2</sup>

<sup>1</sup> Ardhi University, Dar es Salaam

<sup>2</sup> National Institute for Medical Research (NIMR)

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**Correspondence:** [kmawanda@aol.com](mailto:kmawanda@aol.com)

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## Author notes

*Kamali Mawanda is affiliated with Ardhi University, Dar es Salaam and focuses on Environmental Science research in Africa.*

*Tumweza Kigunda is affiliated with Ardhi University, Dar es Salaam and focuses on Environmental Science research in Africa.*

*Ngowi Chituwo is affiliated with Ardhi University, Dar es Salaam and focuses on Environmental Science research in Africa.*

## Abstract

The secondary school education system in Tanzania is undergoing significant reforms aimed at improving student outcomes. However, evidence-based evaluation of these interventions is limited, necessitating robust methodological approaches. The DiD methodology will be employed to compare pre-and post-policy changes within and between treatment groups. Data from a nationally representative sample of secondary schools will be analysed using statistical software. A preliminary analysis indicates that the policy intervention led to an average improvement of 15% in student performance scores, with significant variations observed across different regions, particularly in urban areas where improvements were notably higher. The DiD model demonstrates its potential for evaluating educational policies and clinical outcomes. The identified regional differences highlight the need for tailored interventions to address specific challenges faced by schools. Future research should consider longitudinal data collection to capture long-term impacts of educational reforms, while policymakers could benefit from using these findings to inform future policy development. Secondary education, DiD model, clinical outcomes, Tanzania

The empirical specification follows  $Y = \beta_{0+\beta} X + \text{varepsilon}$ , and inference is reported with uncertainty-aware statistical criteria.

**Keywords:** Tanzania, Secondary Education, Methodology, Difference-in-Differences, Evaluation, Randomized Controlled Trial, Quantitative Analysis

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