



# Assessing the Impact of School-Based Deworming on Pupil Cognition in Sierra Leone: A Review of the Zanzibar Study

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## Abstract

School-based deworming is a widespread public health intervention in areas where soil-transmitted helminths are endemic. The reviewed book analyses a specific programme's effect on pupil cognition in Zanzibar, Sierra Leone, engaging with debates on the cognitive benefits of mass anthelmintic treatment. This review aims to critically appraise the book's analysis of the Zanzibar study. It evaluates the methodological rigour, interpretation of results, and the book's overall contribution to evidence on deworming and cognitive outcomes in school-aged children. The review uses a critical appraisal framework. It assesses the book's structure, its presentation of the original randomised controlled trial, and its synthesis of quantitative data on cognitive test scores. The clarity of argument and contextualisation within broader literature are also considered. The book offers a nuanced analysis, concluding that the deworming intervention did not produce a statistically significant improvement in standardised cognitive test scores among treated pupils. It highlights the complexity of isolating deworming's cognitive effects from other socio-economic and educational influences. The book serves as a valuable case study, indicating that assumed cognitive benefits from school-based deworming may not be readily realised or measurable in the short term. It emphasises the need to manage expectations for such programmes. Future research should employ longer-term follow-up and more sensitive cognitive measures. Programme planners should integrate deworming into broader school health and nutrition strategies, rather than implementing it as a standalone cognitive enhancement intervention. Deworming, cognitive development, school health, public health intervention, Sierra Leone, book review This review synthesises the book's critical insights for a public health audience, clarifying its position within ongoing policy and research discussions on deworming programmes.

**Keywords:** *School-based deworming, Soil-transmitted helminths, Cognitive development, Sub-Saharan Africa, Public health intervention, Programme evaluation*

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