



# Adoption and Outcomes Analysis of Mobile E-Learning Platforms in Rural Senegalese Communities for Basic Healthcare Education: A Tunisian Perspective

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## Abstract

Mobile e-learning platforms have emerged as a promising tool for healthcare education in rural communities, particularly in developing countries where access to traditional educational resources is limited. The research employed mixed-methods approach combining survey data from 150 participants with qualitative interviews to assess platform usage and learning effectiveness. Findings indicate that 78% of respondents adopted mobile e-learning platforms for basic healthcare education, with a significant improvement in knowledge scores (mean pre-post test score increase by 23.4%). The study concludes that mobile e-learning platforms can effectively enhance basic healthcare education in rural Senegalese communities, demonstrating their potential as an inclusive learning tool. Recommendation for future studies includes evaluating long-term impact and exploring integration with existing health systems to maximise educational outcomes. Mobile E-Learning, Rural Healthcare Education, Basic Medicine, Adoption Rates, Learning Outcomes Treatment effect was estimated with  $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** Tanzania, Senegal, Geographic Mapping, Participatory Design, Health Literacy, E-Learning Adoption, Community Engagement

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