

Emerging factors influencing motor skill development among preschool learners in the West Coast of South Africa

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Introduction: Motor skill development is essential for successful learning in primary school. Our recent study found a high prevalence (14.5%) of motor dysfunction among pre-school children attending state schools of the West Coast region of South-Africa. Scarce resources mean individual occupational therapy sessions are not feasible for these children. Instead, a comprehensive population-level intervention is needed to limit the impact of this dysfunction on future learning

Objectives: The aim of this study was to identify factors which may influence the development of motor skills among pre-school children in the West Coast area of South Africa.

Study design: Secondary analysis of cross-sectional descriptive (prevalence) study data

Method: The prevalence study (2015) involved multistage cluster sampling to identify 6 schools from which all pre-school learners were invited to participate. N=138 children were assessed using the M-ABC-2. Prevalence estimates and 95% confidence intervals were determined. For this study, demographic and other factors were recorded and analysed descriptively. Pearson's chi square tests were used to explore associations. Level of significance was set at $p < 0.05$.

Results: Children attending schools with a limited or no playground had significantly more difficulties with manual dexterity and balance than those attending schools with an extensive playground. Low weight was another associated risk factor. Boys were more likely to have difficulties with manual dexterity.

Conclusion: Occupational therapists need to consider environmental factors such as access to playground facilities and adequate nutrition alongside personal factors when developing school-based programs to improve motor skills in low and middle income countries.