

ABSTRACTHome Environment and Achievement in Mathematics Among
Barbadian Secondary School Children: Determining
Factors and Pedagogical Implications

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The purpose of this study was to examine the influence of home environmental factors on children's cognitive and affective performances. The groups of home variables examined were those related to: (1) achievement motivation training; (2) independence training; (3) the educational environment; (4) family stability, unity and security; and (5) socio-economic status.

The sample comprised 105 third-year secondary school pupils - 44 boys, 61 girls - and their parents. It was drawn from a large Newer Secondary School in Barbados with a roll of approximately 1200 pupils. An interview schedule was used to examine the home environment. The cognitive domain was measured in mathematics at three levels: (1) computation, (2) comprehension and application, and (3) analysis. A 60-item multiple choice test was used, along with class scores from three common tests administered by the school's mathematics department during the year. The affective domain was examined using a five-point attitude scale of 40 items.

The major finding of the study was that a significant relationship ($r = .60$, $p < .001$) existed between

the home environment and mathematics achievement at the school under examination.

On the basis of this finding, it is suggested that parents should (1) show greater interest in the child's educational goals, (2) try to create opportunities for greater and more meaningful communication within the home, and (3) try to provide a rich and comfortable home environment which is conducive to study.