

ABSTRACT

School Environment, Socioeconomic Status and Gender as Predictors of Cognitive and Academic Functioning in Young Jamaican Children

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The impact of gender, educational and social variables, on cognitive and academic outcomes was investigated in a cohort of Jamaican children.

Eight schools, in Kingston and St Andrew (four Primary and four Preparatory), were randomly selected. Participants (N = 71) were randomly selected from Grade 2, at Primary (n = 40) and Preparatory (n = 31) schools. Gender ratio was 34 boys to 27 girls. Cognitive functioning was assessed using four subtests of the WISC-IV; with academic achievement assessed using the Reading and Arithmetic subtests of the WRAT. Educational history and socioeconomic data was collected from parents.

There was high correlation between cognitive functioning and academic achievement. Substantial cognitive and academic differences were associated with socioeconomic status, school type, and type of early childhood institution. In all cases Preparatory students achieved higher cognitive and academic scores than Primary students. There were no gender differences in cognitive functioning or academic achievement. Type of early childhood institution was the main predictor of cognitive functioning; while Verbal Comprehension Index (VCI) score was the main predictor for academic achievement in reading and arithmetic. Socioeconomic status acted as a significant predictor for reading achievement; while type of early childhood institution was a significant predictor for arithmetic achievement. Children at the Preparatory schools scored at or above US norms; while children at the Primary schools scored considerably below. Children from both school types performed relatively poorly on the Block Design subtest; suggesting that all socioeconomic groups may have difficulty with visual perception and organisation; or that the test may be culturally biased.

These findings, considered with findings from previous Jamaican studies, suggest that: a) gender differences may not develop until during Grade 3 or 4; and b) low perceptual reasoning scores, seen in Primary school children may be related to difficulties seen in the secondary years.

Keywords: Michele Ann Alexander; Jamaican children; cognitive functioning; academic achievement; socioeconomic status.