

ABSTRACT

Factors Associated With the Mental Development and Nutritional Status Of Young Jamaican Children

Claudia Maureen Chambers

This study looked firstly at the levels of mental development and nutritional status of 149 middle-class Jamaican children, aged six to 60 months. The Griffiths' scales for babies, and for young children, was used in assessing mental development. This test also allowed for a differential assessment of abilities through its subscales - Hearing and Speech, Hand and Eye Coordination, Performance, and Practical Reasoning. For nutritional status, measures of weight, height, and head circumference, were recorded. The influence of a number of background variables including parental age, education and occupation, children's age, sex, birth order and school attendance, and housing facilities, on both mental development and nutritional status, was also investigated. Further, the relationships between mental development and nutritional status were analysed.

A second sample of children - lower-class Jamaicans aged six to 30 months, was compared with the middle-class children on all the above measures. These children had been tested with the Griffiths' on a different

study previously, and information on nutritional status and background factors recorded.

Results indicated relatively high developmental quotients (DQ's) for middle-class children (mean = 112.7) due mainly to high language scores (mean = 124.9). Scores tended to increase with age, and to be higher for girls than for boys. Generally, throughout the age range, and for both girls and boys, language scores were highest, and Performance scores lowest. Complex associations were found with most of the background variables for both mental development, and nutritional status. Weights-for-age varies significantly among the middle-class children, increasing with age, while weights-for-height decreased significantly in the age range. A number of associations were found linking measures of mental development to nutritional status.

It was in the social class comparisons however, that the relative influences of the various background factors were highlighted. The groups differed in DQ scores before 18 months, the difference being attributable mainly to the boys ($p < .05$). Class differences became much greater with age, and this latter variable proved to be the most important one next to SES, influencing DQ scores. In nutritional status, class differences were also observed in weight-for-age, and height-for-age, both increasing with age. Background factors showed complex associations with the principal indicators, and these seemed to differ according to class.

A threshold for development was postulated, wherein the factors likely to influence development had differential effects. It was concluded that the

social and economic environments of Jamaican children were critical factors in determining their rates of development, and that there seem to be particularly disparate features in this culture which lead to early and great differences in development based on socio-economic status.