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[52]

**EFFECT OF SOCIOECONOMIC STATUS ON NEUROCOGNITIVE
PERFORMANCE IN EARLY ADOLESCENTS LIVING IN GALLE DISTRICT, SRI
LANKA**

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ABSTRACT

Adolescence brain undergoes massive growth spurt and responsible for high order neurocognitive functions. Early experiences are crucial for shaping brain development. Socioeconomic status (SES) is associated with many different types of life outcome, including physical health, mental health and cognitive ability. The study aimed to investigate association of socioeconomic status with neurocognitive performance of early adolescents. A school based cross - sectional study was conducted on female adolescents (11 - 14 years, n = 200). Cognitive performance was assessed with Wechsler Intelligence Tests for Children (WISC) and Tests Of Nonverbal Intelligence (TONI -3). Children performed Computer based executive function test battery including inhibition task and visuo- spatial working memory task. Self-administered questionnaire was applied to assess socioeconomic status of parents. Mean Verbal comprehension index (VCI), Perceptual Reasoning Index (PRI), Working Memory Index (WMI) and Full Scale Intelligence Quota (FSIQ) were, 77.45 (SD±12.69), 69.71 (SD±9.27), 96 (SD±34.71), 78.78 (SD±10.21) respectively. FSIQ was significantly associated with family income (p=0.008), parent educational level (p=0.047) and employment status of father (p=0.019). VCI was strongly associated with mother's educational level (p=0.000) and father's occupation level (p=0.000). WMI was significantly associated with and father occupation level (p=0.000). PRI correlated with parent's educational level (p=0.013). Abstract and figural forming skill was correlated with monthly income level (p=0.028). VCI and PRI of high SES families significant difference from low SES families (P=0.005), Inhibition task performance of socially disadvantaged background is significantly differ from counterpart (p=0.032). Socioeconomic status is an important predictor of neurocognitive function in particular language, executive function and spatial skills.

Keywords: socioeconomic status, neurocognitive performance, early adolescents, Galle district