ABSTRACT

An Investigation of Four Factors on Student Achievement in Computer Programming in Secondary Schools in Trinidad

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This study sought to examine the impact of four factors on student performance in computer programming in secondary schools in the East West Corridor in Trinidad. Data were collected using the instruments a Self Esteem Scale, a Mathematics Self-Concept Scale, a Mathematics Self-Efficacy Scale, and a researcher-constructed Programming test, from 93 female and 62 male Fourth Form students attempting Information Technology at secondary schools in Trinidad. The findings suggested that there was a very weak relationship (r = 0.171) between students' self-esteem and their proficiency in introductory programming. There were also weak relationships between mathematics self-concept (r = .309) and mathematics self-efficacy (r = .349) and students' proficiency in computer programming.

Keywords: Computer science education; Academic achievement; Secondary school students; Computer programs; Trinidad and Tobago