

ABSTRACT

Correlations Among Selected Learner Variables and the Performance of Some Grade 13 Students in Organic Chemistry

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This study was designed to find out (a) if the level of performance of some Jamaican 13th-graders in an organic chemistry test was satisfactory or not; (b) the types of self-esteem they exhibited; (c) if the students' attitudes to chemistry were favourable or not; and (d) if there were statistically significant differences in the students' performance in an organic chemistry test linked to their gender, cognitive ability in chemistry, self-esteem, socioeconomic background (SEB), and attitudes to chemistry. The sample comprised 253 students (116 males, 137 females) selected from 14 high schools and 3 community colleges in urban and rural communities. Three instruments – an organic chemistry test, attitudes to chemistry questionnaire and the Cooper-Smith Self-Esteem Scale (1967) – were used to collect data. The results showed that the students' chemistry performance was unsatisfactory; many of them exhibited favourable attitudes to chemistry; there were statistically significant cognitive ability differences in the students' performance on the organic chemistry test in favour of students with high cognitive ability in chemistry, while there were no significant differences in their performance based on their gender, SEB, attitudes to chemistry and self-esteem. There was a positive, statistically significant but weak relationship between the student's (a) cognitive ability in chemistry and (b) attitudes to chemistry and their performance on the organic chemistry test, while there was no relationship

between the students' (c) gender, (d) SEB, and (e) self-esteem and their performance on the organic chemistry test.

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