

**SUBJECT CHOICE AMONG A SIXTH FORM SAMPLE OF JAMAICAN
STUDENTS WITH PARTICULAR REFERENCE TO
THE NATURAL SCIENCES**

**A Thesis
Submitted in Fulfilment of the Requirement for the Degree of
Doctor of Philosophy in Education**

**of
The University of the West Indies**

**by
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2006**

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ABSTRACT**Subject Choice among a Sixth Form Sample of Jamaican Students with Particular Reference to the Natural Sciences****Francis Oliver Severin**

This study was mounted to investigate the effects of social/economic background, school context, motivational and attitudinal variables, upon subject choice - sciences or non-sciences - in a selected group of sixth form students in traditional high schools in Jamaica. A second consideration was the exploration of the extent to which the conceptual framework of sociocultural theory shed light on the factors that influence subject choice.

Respondents were 517 sixth form students (females = 308; males = 209) enrolled in the natural sciences ($n = 261$), humanities/arts and mixed ($n = 134$) and social sciences/business ($n = 122$) studies in 10 secondary high schools in the Kingston Metropolitan Area in Jamaica.

Respondents completed questionnaires which comprised open- and closed-ended questions and a number of Likert scales and bipolar rating scales. Preliminary data analysis was accomplished by means of t tests for independent (unrelated) samples, one-way analysis of variance (ANOVA) and Tukey's HSD test. Various multivariate procedures were used for advanced analyses.

Socioeconomic influences and mathematical orientation were found to be the strongest predictors of subject choice in the total and subsamples, followed generally by verbal orientation. Among the most outstanding distinctions between the boys and girls were that socioeconomic influences impacted strongly on the girls' subject choice whereas these influences did not feature for the boys. When the sample was disaggregated by school type, among the most striking findings were the greater influence of mathematical orientation as a factor in subject choice for the students in single sex schools compared to coeducational schools. Overall, the effect of sex resided *between*, rather than *within* single sex schools.

The present results provided overall support to sociocultural theory's conceptualization of the broader social and economic "ecology" in which boys and girls make subject choices, and differ in doing this. Assuming the importance of a scientifically literate population, the study highlighted, for educational administrators and leaders, the need to make available to members of the lower socioeconomic stratum, and by extension, those students who do the non-sciences, the enabling factors that increase their likelihood of doing natural science.

Keywords: Francis Oliver Severin; subject choice; natural sciences; humanities and arts/mixed; social sciences and business studies; single-sex; co-educational; sociocultural theory; factor analysis; multiple discriminant analysis; logistic regression.