

## **IDENTIFYING THE FACTORS THAT INFLUENCE THE SELECTION OF BIO SCIENCE STREAM IN THE G.C.E ADVANCED LEVEL IN WESTERN PROVINCE, SRI LANKA**

**Ranitha Weerathna, Nilmini Rathnayake,  
Gautam Subendran, Elakcia Sivagnanasothy,**

**Lalithagini Naguleswaran and Rameesha Rathnayaka**

*Sri Lanka Institute of Information Technology, Malabe, Sri Lanka*

### **Abstract**

**Purpose:** Choice of stream in upper secondary education is important for students to be successful in future. However, there is a declining trend of students selecting Bio Science stream. The purpose of the study is to identify the factors that influence the selection of Bio Science stream in the G.C.E Advanced Level (A/L).

**Methodology:** This study is based on deductive approach and qualitative method. The researchers conducted structured interviews to collect data. The chosen unit of analysis for this study was students, from the 2020 G.C.E A/L batch who selected the Bio Science stream in the Western Province within the government schools. The researchers used convenience sampling method to conduct structured interviews for the sample of twenty participants to develop codes and themes. The observed outcomes derived from the structured interviews was adequate to reach the saturation point. The qualitative data was manually transcribed using thematic analysis with preconceived themes to be reflected based on existing theory.

**Findings:** The study identified factors such as self-efficacy, career opportunities, normative social influence, financial support, characteristics of the subject stream and gender for the selection of Bio Science stream. The results highlight the Findings as self-efficacy, career opportunities and normative social influence are the factors mostly influencing the Bio Science stream selection of the students in the Western Province. Further the outcome of the thematic analysis indicates that factors could vary in influencing the choice of streams based on the geographical areas, economic and social factors with the evidence through the respondents participating in the study.

**Research limitations:** Since the research is restricted to the Western Province and narrowed down to the subject streams of Bio Science stream, considering the time frame private schools was not taken into the analysis hence, the results cannot be generalized to the entire research area of the country.

**Implications:** The Findings of the study can be a guideline to get a better understanding of factors that influence in the selection of Bio Science stream, obtain the knowledge of

visioning and focusing on future opportunities and career path in the Bio Science field. The study can be adding value for a better administration of schools in terms of resource planning and allocation, upskilling of teachers, other academic staffs and academic strategies which is helpful to guide and support the students appropriately. The study will be useful for the government in improving the quality of Bio Science stream to meet with the expectations of employers and health sector. Therefore, government can use the study to aim and redesign an effective syllabus where in-depth learning experience could be facilitated in a broader scale to improve students for a balanced personality with qualities of creative, initiative, and critical thinking skills.

**Keywords:** Advanced level, bio science stream, selection of stream, Western Province