

FACTORS AFFECTING THE SUCCESS OF ONLINE EDUCATION OF PHYSICAL SCIENCE STUDENTS IN THE KANDY EDUCATION ZONE

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The current global pandemic situation has changed the teaching and learning environment of secondary education worldwide. The traditional classroom delivery method has been transformed into an online platform. The main objective of this study was to identify the online delivery methods that are popular among teachers and students, and the key factors that affect the success of online delivery. The data was collected using a self-administered questionnaire distributed among 219 Physical Science students from seven schools in the Kandy Education Zone where online lessons were conducted. The mode of online delivery, type of equipment used, gender, family income level and ownership of the equipment were the main factors explored in this study, which were identified based on a preliminary survey. A five-point Likert scale was used to measure the overall satisfaction of the online delivery. Of the four teaching methods used by teachers, the most popular method was presentations and live videos. Among the student population tested, 47% participated in more than 50% of online sessions while 33% in all sessions. Despite most male students having their own devices, female student participation in online sessions was significantly higher than the males. The overall satisfaction of the teaching-learning process was 52% (Male: 47%, Female: 56%), and there was a significant association between the level of satisfaction and gender. Overall, findings revealed that most students participated in lessons conducted by their schools *via* live videos and presentations. The level of participation in online classes and the satisfaction of the teaching-learning process are gender-dependent. The outcomes of this study can be used by the relevant authorities to improve the quality of the online teaching-learning process while addressing the difficulties faced by the student community.

Keywords: Learning environment, Online delivery methods, Student satisfaction