

# How Did the COVID-19 Pandemic Affect Higher Education Learning Experience? An Empirical Investigation of Learners' Academic Performance at a University in a Developing Country

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## Abstract

COVID-19 has dramatically reshaped the way global education is delivered. Millions of learners were affected by educational institution closures due to the pandemic, which resulted in the largest online movement in the history of education. With this sudden shift away from classrooms in many parts of the globe, universities had to rapidly shift to virtual and digital strategies. Many believe that the adoption of online distance learning will persist after pandemic. A new hybrid model of education is expected to emerge, and, given the digital divide, new shifts in education approaches could widen equality gaps. This is one of the first empirical studies investigating the effect of the sudden shift from face-to-face to online distance learning due to COVID-19 lockdown at one of the universities in Egypt. Comparison of grades was made between 376 business students who completed a face-to-face course in spring 2019 and 372 students who completed the same course but fully online via distance learning mode in spring 2020 during the lockdown. T-test was conducted to compare grades of quizzes, course work, and final exam for the two groups. Chi-square test was used to compare grade distribution for both groups. The effect of gender, credit hours, age, and CGPA was assessed. The results suggested that there was no statistically significant difference in students' grades. In addition, the unplanned and rapid move to online distance learning at the time of pandemic did not result in a poor learning experience as was expected. The study also included a survey of 435 students and interviews with a sample of professors about their learning and teaching experience during the lockdown. The results of this study provide specific recommendations for universities, instructors, and higher education portal designers about future application of online distance learning. Since Egypt decided to make the shift to online distant learning in all future higher education plans, the results of this research would be especially vital for universities in Egypt and other developing countries. If administered correctly, this shift could lead to a larger learner population, more cost efficiencies, and more university revenue.

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