


# Chapter 11

## Higher Education Students' Online Learning Attitudes and Academic Performance: International Experience With COVID-19

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### ABSTRACT

*This chapter examines higher education students studying in Australia, Malaysia, New Zealand, and Samoa on their attitudes toward online learning and its effects on academic performance after the first COVID-19 lockdown. A total of 165 usable responses from 260 online surveys distributed (63.5%) were analyzed. The results revealed that students across the four countries had a positive attitude toward online learning, which significantly improved their academic performance. Interestingly, information literacy had a negative association with academic performance and attitudes toward online learning. This indicates that students with higher information literacy do not necessarily favor online learning. Facilitating conditions and learning support from higher education institutions (HEIs) strengthened students' attitudes toward online learning performance. The findings highlight the importance of providing continuous support for students studying online.*

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## INTRODUCTION

No higher education institutions (HEIs) were spared when onsite, face-to-face (f2f) educational systems around the world had to shift rapidly to online learning educational systems (Ali, 2020; Aslam, 2020; de Boer, 2021; Othman, 2020; Sahu, 2020). The COVID-19 pandemic continues to cause major disruptions to HEI operations, forcing HEI leaders to plan and implement solutions (Chan, 2020). In these unprecedented times, the United Nations (2020) has emphasized the efficient delivery of educational programs through online delivery (Carter *et al.*, 2020). Some students were unfortunately disadvantaged when online learning took over (Agasisti & Soncin, 2021; van Schalkwyk, 2021). Furthermore, students' attitude toward online learning may determine their willingness to study online (Aristovnik *et al.*, 2020; Jung *et al.*, 2021; Perrotta, 2021; Tamrat, 2021; Yang & Huang, 2021). The students' attitudes toward online learning and academic performance have been a continuing debate. As such, the main research questions of this study are: *How do students' positive attitude and information literacy influence academic performance?* and *What factors influence higher education students' attitude toward online learning and academic performance subsequent to the first COVID-19 lockdown?*

This chapter contribution to the literature is threefold. First, a macro-level perspective is provided by including Australia and New Zealand (developed countries) and Malaysia and Samoa (developing countries) in the sample to examine students' positive attitudes toward online learning and academic performance in a single study. Second, the role of trust in HEI leadership within the COVID-19 pandemic context in highly affected countries (such as Malaysia) and less affected countries (such as Samoa) is explored. Third, an explanation on the effect of information literacy among the incumbent students is hypothesized to influence their attitude toward the online learning environment is outlined. These contributions extend the current understanding of the effect of the pandemic on the learning landscape, which can help concerned parties plan for similar future disruptive events (see Bensaid & Brahim 2020; de Boer, 2021; Yang & Huang 2021).

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The plethora of literature agree that attitude is a good predictor of intention and behavior. For example, the technology acceptance model (TAM) theory advances the notion that attitude has a strong effect on intention, which in turn affects the actual technology use behavior (Davis *et al.*, 1989; Marangunić & Granić, 2015). Likewise, in the theory of planned behavior, Ajzen (1991) proposes that attitude affects intention and eventuates a driver of the actual behavior. Given these theoretical underpinnings, students' attitude, and intentions to take online courses during the COVID-19 lockdowns present an interesting opportunity to examine how HEI leadership and support systems were able to provide for online learning in the context of students' information literacy. To make the best use of information technology (IT), HEIs needed a workable plan to integrate IT fully into all aspects of educational services, from online classes to graduation ceremonies. The extent to which this unprecedented mandatory online learning correlates with students' attitudes toward online learning and its impact on their academic performance has not been thoroughly researched. It is vital, however, to understand the conditions unique to higher education in the pandemic, including information literacy, facilitating conditions, and COVID-19 related variables. This study progresses this exploratory study to advance the understanding on the role of positive attitude and other influencing factors on the students' academic performance.

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