

## Chapter 3

# The Effect of Learning Expectations and Internet Speed on University Student Moodle Usage: The Mediating Role of Perceived Fun Features

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### ABSTRACT

*Several higher education institutions have combined Moodle and face-to-face instruction to support and assist student learning. However, the purpose of using Moodle will be appreciated if factors influencing the use of this learning platform are known. Therefore, this chapter investigated the effect of learning expectation and internet speed on university student Moodle usage and further examined the mediating role of perceived fun features of the Moodle. This present study employed a cross-sectional survey design with 327 selected university students. Data collected were analysed using structural equation modelling (SEM). The results revealed that internet speed, fun features, and learning expectation have a significant impact on university student Moodle usage. Furthermore, the findings from the analysis of mediation showed that Moodle perceived fun features mediate the relationship between learning expectation and Moodle usage in higher education. The implication of the results and further study avenues are discussed.*

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## **1.0 INTRODUCTION**

Modular Object-Oriented Dynamic Learning Environment (Moodle) is an open-source social network where teachers and students collaborate to construct the best collections of open educational resources (OER) to improve learning outcome. Moreover, the Moodle assists instructors to upload instructional materials, post assignment, and questions online while facilitating communication among teachers and students in diverse higher educational levels (Cabero-Almenara, Arancibia & Del Prete, 2019). Several higher educational institutions have integrated Moodle that provides an opportunity to design a course website to supplement the face-face instructions. Presently, Moodle is used by 239 countries and has introduced 30 million courses, 2962. 64 million quiz questions with 234 million users, 1322.48 million enrolments and 514 million forum post (Moodle.net, 2020).

Several studies in the literature have employed factors such as usefulness, attitude, perceived behavioural control, technical support and perceived self-efficacy to explain students' reasons for using Moodle (Damnjanovic, Jednak, & Mijatovic, 2015; Horvat et al., 2015; Sánchez & Hueros, 2010; Teo et al., 2019). However, from keen observation, literature is scarce on the students learning expectation and the mediating role of the Moodle fun features. Therefore, this present study investigated the effect of learning expectation and internet speed on university students Moodle and further examined the mediating effects of Moodle fun features on the relationship between learning expectation and Moodle usage.

## **2.0 LITERATURE REVIEW**

### **2.1 Technology Acceptance Model**

The current study adopted The Technology Acceptance Model (TAM). This is because TAM is one of the most cited and important models for clarifying the acceptance and usage of technology. The model has been used and received much support from other previous empirical studies (Venkatesh, Morris, Davis, & Davis, 2003). Davis (1989) was the first person to introduce TAM and indicated that the success of every technology is established by the acceptance of the person using that particular technology and measured by factors including perceived usefulness, perceived ease of use and attitudes towards the use of the technology. Davis (1989) reported that technology usefulness is the extent to which the user of the technology is convinced about the technology usage that improves his or her performance. Also, perceived ease of use refers to the extent to which an individual user is sure about using a specific technology, which is free of effort. Davis (1989) suggested that some external variable such as organisational training and aspect of technology are factors that affect the perceived usefulness and perceived ease of use. He indicated that user attitude and perceived usefulness affects behavioural intention to use the technology. Later, Davis and Venkatesh (1996) proposed a revised TAM model removing the attitude factor and suggested that attitude played an irrelevant role of user technology usage. They further introduced actual use of the technology as a final dependent variable of TAM model, which is defined as the period the person spends on using a specific technology (Smarkola, 2008; Wu & Wang, 2005).

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