Chapter 10
Investigating the Factors Influencing Pre-Service Teachers’ Acceptance to Use Mobile Devices for Learning: The Case of a Greek University

Georgios K. Zacharis
https://orcid.org/0000-0003-1158-9175
Aristotle University of Thessaloniki, Greece

ABSTRACT
This chapter determines the factors that significantly influence pre-service teachers’ acceptance to use mobile devices as resources for learning in a university context. Based on the methodological framework of the UTAUT, a modified contextualized model of evaluation was created. A data collection instrument was designed, validated contextually, and optimized for mobile learning in higher education. A total of 320 Greek university students from a Faculty of Education participated in the study. Results demonstrated that the instrument constructed showed a notable internal consistency, with a high validity for data collection in 8 of its 9 factors. Results indicated Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, and Empowerment in Learning as factors which affected participants’ Behavioral Intention to use mobile technology for learning. Behavioral Intention, Social Influence and Empowerment in Learning affected university students’ behavior to use mobile devices for learning.

INTRODUCTION
Mobile devices such as smartphones, tablets and laptops are gaining popularity as they are directly connected with our everyday life. Ownership of mobile devices is on the rise, with the majority of adults having more than one mobile device. It is worth mentioning that in the year 2012, the total number of...
mobile devices exceeded the human population. Most mobile device users are between 18-29 years old, which is the standard age of University students (Crompton & Burke, 2018). New versions of mobile devices bring innovative features that makes them more convenient and affordable.

Mobile devices constitute one of the most popular emerging technologies, as they are light and convenient to carry and give access to multiple applications such as those related to health, banking and mobile learning (Alalwan, Dwivedi, & Rana, 2017; Briz-Ponce, Pereira, Carvalho, Juanes-Méndez, & García-Peñalvo, 2017; Crompton and Burke, 2018; Muñoz-Leiva, Climent-Climent, & Liébana-Cabanillas, 2017; Nikou and Economides, 2017). As a result, they might influence how students learn. Mobile technology for educational purposes, often referred to as mobile learning, has attracted researchers’ attention for their pedagogical implications (Crompton and Burke, 2018; Hamidi & Chavoshi, 2018; Hamidi & Jahanshaheefard, 2019; Heflin, Shewmaker, & Nguyen, 2017; Kim et al., 2017; Nikou & Economides, 2017; Wu et al., 2012). The aim of mobile learning is to facilitate and extend teaching and learning anytime and anywhere to boost motivation, build knowledge, collect and exchange information, promote collaborative, as well as independent and lifelong learning (Sánchez-Prieto, Hernández-García, García-Peñalvo, Chaparro-Peláez, & Olmos-Migueláñez, 2019; Mojarro, Duarte, Guzmán, & Aguaded, 2019).

Undoubtedly, attitudes play an important role in our lives. On a daily basis, the way we accept people and situations determines our attitude and behavior towards them. The relationship between attitude and behavior not only matters in Interpersonal relationships but also in school environments (OECD, 2016). Over recent years, there has been an information and communication explosion in education. Therefore, stakeholders of the educational system - students and educators – must be prepared to use new technologies. This has brought studies on teachers’ attitudes towards technology to the forefront as a key factor in the acceptance and adoption of technologies in education and generally in learning.

For teachers, the use of mobile technology in the classroom setting provides an opportunity to redefine teaching and learning (Heflin, Shewmaker, & Nguyen, 2017; Wu et al., 2012). Any effort to integrate technology into the educational process depends largely on whether teachers themselves support this effort (Teo, 2011). It is reasonable to assume that if teachers themselves do not believe that the use of technology will satisfy their own teaching and learning needs, they are likely to avoid using it. In contrast with other technologies, and despite the use of mobile phones by teachers in their daily lives as well as the high rate of use of mobile devices among teachers, this does not seem to automatically affect their teaching practice, or methodology (Sánchez-Prieto et al., 2019).

An important factor that influences teachers’ intention to use technology is their attitude towards technology where research confirms that positive attitudes towards Information and Communication Technology (ICT) are directly related to their increased acceptance and use in the classroom (Scherer, Tondeur, Siddiq, & Baran, 2018). Students from the Faculty of Education (pre-school and primary education) of a Greek University were selected for the current study due to their position as current students and future vocation as teachers in addition to their active use of mobile devices in their everyday lives. Pre-service teachers as future teachers are the gatekeepers to technology integration in the classroom, including the inevitable use of mobile technologies in education and the development of mobile learning. In this context, the aim of the current study was to develop and evaluate an instrument based on Venkatesh, Morris, Davis & Davis’s (2003) Unified Theory of Acceptance and Use of Technology (UTAUT) variables in order to identify the factors affecting pre-service teachers’ Behavioral Intention and Use Behavior of mobile technologies for learning. Thus, the study at hand had a two-fold purpose: (a) to examine the factors of the modified UTAUT model that influence pre-service teachers’ acceptance
The Schooling Experiences of African Youth From Refugee Backgrounds in South Australia: Key Findings and Implications for Educational Practice


[www.igi-global.com/chapter/the-schooling-experiences-of-african-youth-from-refugee-backgrounds-in-south-australia/219646?camid=4v1a](www.igi-global.com/chapter/the-schooling-experiences-of-african-youth-from-refugee-backgrounds-in-south-australia/219646?camid=4v1a)