A SYSTEMATIC LITERATURE REVIEW OF APPLICATION-BASED MOBILE LEARNING AMONG THE STUDENTS OF HIGHER EDUCATION OF PAKISTAN

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Research Highlights

Application-based mobile learning (ABML) has a significant impact on the university students learning process and results from the past decade. As a result, the high number of scientific papers have been published that focus on application-based M-learning globally. Thus, ABML related literature from the past 6 years has rather fragmented focusing on the advancement of LMS available on smartphones. In this context, a Systematic Review and Meta-Analyses (PRISMA) was developed that offers a holistic literature review of application-based M-Learning in Pakistan. The Systematic Review was done based on 65 systematically selected articles from 2 databases Elsevier and Springer Nature. The results of this study show that the number of scientific papers on M-learning has been increased from the past 3 years. Therefore, among many aspects application-based M-learning is the most popular research trend in Pakistan, also some of the occurring in the near future are also be illuminated in this research.

Keywords: Application Based Mobile Learning, Mobile Learning In Higher Education, M-Learning In Pakistan, Smartphones-Based Mobile Learning.

Literature and Methods

Mobile learning technology is rapidly growing among higher education institutions across the globe (Khalil-ur-rehman et al., 2018). The technology enhancement and the increasing demand from the learner are making it challenging for the higher educational institutions to enhance their mobile learning system (Khalil-Ur-Rehman, 2019; Khalil-ur-rehman and Farooq, 2018). The growing number of smartphones from the past decade have pressured the institution to make the availability of the learning materials on the smartphone platform. As smartphone is a mobile learning tool that has tremendously evolved with high-end software and hardware capabilities, which brought the need of application based M-learning for the students(Khalil-Ur-Rehman, 2015; Khalil-ur-rehman and Farooq, 2019). Furthermore, the systematic review in this research was carried not only to explain previous studies related to M-learning but also review different holistic review.

Inclusion Criteria:
The systematic review was carefully and strictly went through to a highly specific selection criterion. To assure the quality the papers were only selected from Elsevier and Springer Nature, also the scientific paper selection was strict to 2013 till 2018. The selection criteria were further narrowed down to specific region Pakistan and specifically, articles in English were selected to be reviewed.

Exclusion Criteria:
It was a detailed criterion to exclude articles published in low impact factor, also the published articles without access were excluded from the total number of obtained articles. Besides that articles focusing on E-learning and M-learning effectiveness, deployment and enhancement were excluded, since the core focus and objective was to include articles related to the application and smartphone-based learning.
Thus, the strict inclusion and exclusion criteria provide a scientific approach direction to this article.
Results

The study analyzed 65 publications from 2013–2018 on application-based mobile learning in Pakistan. After reviewing these articles in detail, the study was categorized into three groups: comparative, descriptive, and relational studies. The number of articles was excluded from this research that segment on another aspect of mobile learning. The descriptive analysis demonstrates the number of publications on application-based learning per year. The scientific research has grown between 2013–2018, reaching the topmost 54% of total papers in 2018. It was also noticed that the articles from 2016–2018 have a high number of smartphone and application-based learning aspects in Pakistan. As a developing country, Pakistani higher education institutions are facing financial difficulties to improve ABML system. The literature indicates that such institutions seek Government funds to sustain. However, the growth indicates that application-based learning related researches have significantly increased over the years. It can be predicted that over the years universities by failing to adopt smartphone-based learning will be ranked low and least preferred universities to study.

Findings

The systematic review of 65-article sample indicates that among different aspects of mobile learning effectiveness, deployment, usability, the ABML is the most studied area of research. The systematic literature findings also highlight that in the context of Pakistan the demand of ABML is very high, though the implication is yet to be applied. However, the literature highlights the future prediction is to effectively use the application-based LMS, which will result in improvement in student studies.
References


Khalil-Ur-Rehman, F., 2019. MOBILE LEARNING IN MALAYSIA: DEPLOYMENT IN HIGHER EDUCATION BENEFICIAL OR DISASTER. https://doi.org/10.13140/RG.2.2.29284.22403


