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## Students' Perception of Using an Android Smartphone Application as a Supplementary Learning Resource

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## Research Highlights

A great number of students has a smartphone. They prefer to use it for supporting learning process and the out of classroom activities (Oz, 2014; Simonova & Poulova, 2016). As well, Android is the most widely used operating system especially in Indonesia (Statcounter, 2018). In supporting the idea of using smartphone as a learning resource in educational objectives, some researchers has stated some benefits of using it. The findings revealed that the students were activated to learn, fascinated, energized, and enhancing the students' competence. It tends to be presumed that the students are normally inspired by mobile learning, specifically through smartphone (Cavus & Ibrahim, 2009, 2016; Cho, 2018; Hsu, Wang, & Comac, 2008).

In connection with the ownership of smarthpone and its advantages in learning process, the reseacher designed an android application as a supplementary learning resources. To figure out the students' perception of using this application, the study proposed a research question and the result indicated that the students positively repounded of using an android smartphone application as a supplementary learning resource.

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## Research Objectives

This study attempted to describe the students' perception of using an android smartphone application as a supplementary learning resource. In this study, the android smartphone application was developed and designed based on the subject that learned by students. The subject was English for office. the class was proceeded once every week. 100 minutes were for each meeting. This subject was done for 16 weeks. In the first meeting of the semester, the students were requested to install the application through Play Store. Further, the application organized a supplementary learning resource for eight topics. Then, the researcher asked the students to learn autonomously through the app before learning face to face in the classroom for each meeting.

Moreover, by designing and developing this application, then using it into classroom, firstly, it could be an additional or alternative learning resource for students besides printed book. Secondly, their prior knowledge could be pushed through pre-learning activity. As well, their interest enhances so they were ready to have face to face meeting in the classroom. Hence, this study was conducted to figure out the students' perception of using this application.





Specifically, the students' perception of perceived usefulness, perceived ease of use, attitude toward using, and actual system use.

## Methodology

The respondents were 28 students of the fifth semester at Universitas Islam Riau, Indonesia that selected using random sampling technique from 6 classes. Before conducting the study, the students were ensured that own an android smarthphone by distributing an online survey related to the ownership of android smartphone, its frequency, and purpose of using it. Based on the result, all of the students owned an android smartphone. Most of them used 5-10 hours in a day operating their smartphone. As well, they tended to use it for social communication and academic purposes.

Further, mixed method analysis was used in this study. To obtain the quantitative data the online questionnaire was administered to the students through google form. As well, an open ended-question was asked to some selected students as qualitative data. The 20 statements and 3 questions were adapted from Chuttur (2009) and Davis (1989). It was reliable based on the reliability testing with Cronbach's  $\alpha$  value .880. The five-point likert scale was used to identify the students' perception with range of means 1.00-1.50 for very negative, 1.51-2.50 for negative, 2.51-3.50 for moderate, 3.51-4.50 for positive, 4.51-5.00 for very positive. Then, the procedures of data analysis were used in analyzing the students' respond of an open-ended question.

## Results

The aim of this study to describe the students' perception of using an android application as a supplementary learning resource. Based on the result of calculating the data, the researcher found the means score of students' perception related to perceived usefulness, perceived ease of use, attitude toward using, and actual system use. Firstly, with regard to perceived ease of use which was 4.13, this indicated that this indicator was at positive with range 3.51-4.50. Secondly, with regard to actual system to use which was 4.03, this indicated that this indicator was at positive with range 3.51-4.50. Thirdly, with regard to perceived usefulness which was 3.98, this indicated that this indicator was at positive with range 3.51-4.50. The





last, with regard to attitude toward using which was 3.92, this indicated that this indicator was at positive with range 3.51-4.50. Additionally, The students' respond from answering open-ended questions confirmed that the results were correct. It implied that the students' perception was positive on perceived ease of use, perceived usefulness, actual system use, and attitude in using android application smartphone on English for office subject.

## Findings

The previous studies have revealed similar findings including Chung, Chen, & Kuo (2015) found that students who learned through mobile application had high positive regarding the compatibility of a mobile phone, self-efficacy, perceived ease of use. While the other indicator was at moderate level namely perceived of usefulness. Then, Tayan (2017) found that over 86% of students of the sample in the study had a positive attitude of the use MALL program in course. As well, the students were encouraged to learn. Last, Matimbwa & Anney (2016) also confirmed that the students admitted the usefulness and the ease of use of a smartphone in the learning process. In other words, these findings supported the current study.

## References

- Cavus, N., & Ibrahim, D. (2009). m-Learning: An experiment in using SMS to support learning new English language words. *British Journal of Educational Technology*, 40(1), 78–91. <https://doi.org/10.1111/j.1467-8535.2007.00801.x>
- Cavus, N., & Ibrahim, D. (2016). Learning English using children's stories in mobile devices. *British Journal of Educational Technology*, 48(2), 625–641. <https://doi.org/10.1111/bjet.12427>
- Cho, K. (2018). The Effects of Using Mobile Devices on Student Achievement in Language Learning: A Meta-Analysis. *Education Sciences*, 13–15. <https://doi.org/10.3390/educsci8030000>
- Chung, H.-H., Chen, S.-C., & Kuo, M.-H. (2015). A Study of EFL College Students' Acceptance of Mobile Learning. *Procedia - Social and Behavioral Sciences*, 176, 333–339. <https://doi.org/10.1016/j.sbspro.2015.01.479>
- Chuttur, M. (2009). Working Papers on Information Systems Overview of the Technology





Acceptance Model: Origins, Developments and Future Directions. *Sprouts: Working Papers on Information Systems*, 9(37), 9–37. Retrieved from <http://sprouts.aisnet.org/9-37>

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319. <https://doi.org/10.2307/249008>

Hsu, H. Y., Wang, S. K., & Comac, L. (2008). Using audioblogs to assist English-language learning: An investigation into student perception. *Computer Assisted Language Learning*, 21(2), 181–198. <https://doi.org/10.1080/09588220801943775>

Matimbwa, R., & Anney, V. N. (2016). Teachers' and Students' Perceptions of Self-Driven Acceptance of Mobile Phone Use as an ICT Teaching Tool. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 7(2), 91–106. Retrieved from <http://jeteraps.scholarlinkresearch.com/abstractview.php?id=1k>

Oz, H. (2014). Prospective English Teachers' Ownership and Usage of Mobile Devices as M-learning Tools. *Procedia - Social and Behavioral Sciences*, 141, 1031–1041. <https://doi.org/10.1016/j.sbspro.2014.05.173>

Simonova, I., & Poulouva, P. (2016). Learners Preferences in Mobile-Assisted Higher Education. *Procedia Computer Science*, 104(December 2016), 174–182. <https://doi.org/10.1016/j.procs.2017.01.099>

Statcounter. (2018). Mobile Operating System Market Share in Indonesia. Retrieved August 10, 2018, from <http://gs.statcounter.com/os-market-share/mobile/indonesia>

Tayan, B. M. (2017). Students and Teachers' Perceptions into the Viability of Mobile Technology Implementation to Support Language Learning for First Year Business Students in a Middle Eastern University. *International Journal of Education and Literacy Studies*, 5(2), 74. <https://doi.org/10.7575/aiac.ijels.v.5n.2p.74>