

**Information flows in your hands: study any time, anywhere
examining the scope of smart device use for academic needs and
examining factors contributing to academic use of smart devices /
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Abstract

In the recent years the phenomenon of using smart devices for studying anytime, anywhere, is growing rapidly. The present study has two objectives: the first is to examine the scope of academic use of smart devices in the Israeli academic environment. The second is to identify the factors that directly or indirectly influence the student's motivation to study by means of smart devices. A Smart device refers to portable device that is capable of connecting to the internet such as: Smartphones, Tablets, E-Readers and PDA.

This study was conducted in quantitative method which included data collection through questionnaires and statistical analysis to draw conclusions. The population of subjects included 146 students studying towards their B.A and M.A degrees at Bar-Ilan University in Ramat-Gan Israel and the Sami Shamoon College of engineering in Ashdod city, Israel. Of them 78 males and 68 females of various ages. The study presents a model based on the hypothesis and research questions. The hypothesis derived from the model arose from the theoretical background and the

research questions were intended to find answers to questions that the academic literature did not consider.

The theoretical background reveals that the preference of the academic use of smart device are an outcome of smart device experience, students' attitudes towards academic use of smart device and the perceptions about it as reflected in barriers to use and the ease of use, coupled with the way students cope with difficulties while they study with a smart device. Based on the theoretical background the research model – path model was designed.

The First hypothesis states- the more smart device experience a student has, the less barriers he has to use them for studying and the easier the use of the smart device is perceived. Also difficulties encountered will be more in the way of problems solving rather than emotional. Furthermore the more positive the students' attitude towards the smart devices the more academic use will be to him. The first hypothesis was supported almost fully except the relation between smart device experience and the way of coping. The findings found no relation between smart device experience and coping in a way of problem's solving. However a relation was found between smart device experience and coping in emotional way.

The second and the third hypotheses addressed the variables of ease of use and barriers of use, namely, the higher the barrier to use is perceived, the less positive an attitude they have towards the academic use of smart devices, the less preference they have towards smart devices and the less academic use they make of it. These hypotheses were fully supported.

The Forth hypothesis stated the more way of coping will be characterized as problem's solving and less emotionally the more positive attitudes they have towards the academic use of smart device. This hypothesis was not supported, the findings showed students who characterized more emotionally were more had more positive attitudes and students who characterized in problems solving way had negative attitudes.

The fifth hypothesis stated the more positive the students' attitude towards the smart device the more academic use he will make of it. This hypothesis was fully supported.

The research questions addressed questions that the literature review did not address. The aim of the first question is to examine the academic uses of smart devices. The second question focuses on barriers and ease of smart device academic use. The third question addresses the students way of coping, and the forth question is focuses on students attitudes towards the academic use of smart devices.

The findings indicate that students use smart devices for academic purposes, however the academic use is not particularly high. The most common academic uses of smart devices are accessing the campus website, reading pdf files, using courses catalog, finding academic material by web search and by online databases, finding new research tools and new services by web search and by fellow students. The students also reported difficulties and limitations of smart device academic use such as: poor web page formatting, small screen size, slow load time and the lack of academic mobile applications. Regarding student's way of coping it was found that the



students cope more in problems solving way than emotionally when they faced some difficulties. Also findings showed that student's attitudes towards academic use of smart device are divided by gender, namely, female attitudes are slightly more positive towards the academic use of smart devices and male students' attitudes are found to be slightly more negative.

The main contribution this research offers is through the path model that identifies the factors and the relations that influence smart device academic use and by predicting student's motives for using smart devices for academic use. The findings of the model analysis indicate that smart device experience is a crucial factor for high academic use of smart devices. Smart device experience leads to students' perception of smart device ease of use and barriers of use, and to students' ways of coping. Students' attitudes mediate between these factors and the objective variable academic use of smart device.

Practical implications for the Israeli academic environment can be drawn from these findings in terms of strategies and new models for u-learning and beyond.

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