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## 論文 / 著書情報 Article / Book Information

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Title(English)	Study of Perceptions on Behavioral Expectation to Preserve World Heritage Site through Mobile Learning Application in Luang Prabang, Lao PDR
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## **THESIS SUMMARY**

This dissertation consists of seven chapters. The main research objective of this study is to determine the factors affecting world heritage site (WHS) preservation awareness among local young adults in the world heritage town of Luang Prabang through mobile learning application.

**Chapter 1 Introduction**: this chapter covers background of the study, problem statement, objectives of study and significance of the study.

**Chapter 2 Literature review**: Literature indicates mobile learning as a new form of learning following the increasing capability of mobile devices. One of the categories of mobile learning application is in development country context, in which the delivery of learning content using mobile devices will reach wider target audience than using other modes of delivery. The Protection Motivation Theory (PMT) posits that three factors influence protection motivation: 1) perceived severity, 2) perceived vulnerability and 3) perceived response efficacy. However, PMT has never been applied in the context of WHS preservation. Therefore, it is of interest of this study to test the applicability of PMT in the explaining the factors of preservation in Luang Prabang. Following extensive literature review, two additional factors are integrated in order to tailor PMT in this study context, namely perceived resident effectiveness and perceived benefit of inscription.

**Chapter 3 Summary of previous empirical study**: Past empirical findings show that the number of mobile phone ownership is the highest in Luang Prabang compared to other computing devices. In addition, mobile phone is the second most used device in conducting common digital activities. As a result, mobile phone was identified as the potential medium to deliver learning content to promote preservation awareness. Both past empirical findings and literature reviews have provided strong support on the use of mobile learning to promote WHS preservation awareness in Luang Prabang.

**Chapter 4 Theoretical framework and methodology**: A total of five hypotheses are derived based on extensive literature review and past empirical findings. Questionnaire

survey was used to collect data and consists of two sections, 1) demographic, and 2) PMT related question items. A total of twenty five question items are developed in six categories to assess PMT-related perceptions using 7-point Likert scale. Structural equation modeling is employed to analyze the perception data.

**Chapter 5 Mobile learning application development**: Following the result of past empirical findings, a mobile learning application, consists of a quiz component and a learning content component, was developed according to four principles: 1) reflecting local needs, 2) interactive and easy to use, 3) bilingual support, and 4) sustainable maintenance. Mobile learning content was developed based on the hypothesized PMT in this study. The final learning content consists of three pages with specific messages addressing the hypothesized elements.

**Chapter 6 Data analysis**: Data collection was carried out in October 2015 with students in two local higher education institutions. Demographic data based on 190 respondents shows that majority of the respondents are male, aged between 19 to 21 years old, possess mobile phone with internet connection capabilities, and they access to the internet using their mobile devices daily. Both the measurement model and structural model achieved good fit. Hypothesis testing result shows that four out of five hypotheses were supported. Qualitative interview findings of with 16 students and summary of policy makers' opinion and comment provide insights of mobile learning effect and importance in promoting WHS preservation awareness. Paired t-test was used to evaluate the mean difference of perceptions before and after the respondents view the hypothesized PMT-based learning content. Result shows that there is statistically significant difference among all constructs, except for perceived resident effectiveness.

**Chapter 7 Discussion and conclusion**: Overall, the modified PMT explains 34.7% of the variance of local young adults' behavioral expectation to preserve WHS. There are several new findings regarding the drivers of WHS preservation motivation. First, both perceived benefits of inscription and perceived resident effectiveness are found to be the determinant of preservation motivation. Second, original PMT variables significantly affect preservation motivation, except for perceived vulnerability. Third, mobile learning application has a potential to promote WHS preservation awareness. Finally, this study has validated the applicability of behavioral expectation as a measurement of protection motivation. The outcome of this study is useful in the design of public communication contents to promote

WHS preservation awareness. The findings of this research will not only help heritage management practitioners to develop better public communication strategies, but also provide insights into research on WHS preservation from social perspective.