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Examining the factors influencing Pahang Mart portal using Technology acceptance model: the moderating effect of education level

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Abstract. The use of Pahang Mart portal greatly helps the people of Pahang to shop especially during the covid-19 season. However, if the system is not used optimally then waste will occur. Therefore, this study outlines the objectives that aim to identify the role of education level in moderating the relationship between perceived ease of use and intention to use Pahang Mart portal. The findings of the study have proven that performance expectancy has a significant relationship with the intention to use the Pahang Mart Portal application. However, the level of education does not play a significant role in simplifying the relationship between perceived ease of use and intention to use.

1. Introduction

The use of online shopping during the covid-19 season is common among the community. Movement control regulations enforced by the government have further strengthened the desire of consumers to choose an online platform for buying and selling purposes. In Malaysian context, specifically in the state of Pahang, the state government has provided an online platform for the people. This online portal is known as Pahang Mart portal. This portal has been designed to facilitate the daily affairs of the people of Pahang during the covid-19 season. There are various interesting features in this portal. Although the use of Pahang Mart portal was quite encouraging during the Covid-19, but there may be those who still remain using the face-to-face approach for buying and selling groceries. If this situation persists or worsens, then the Pahang Mart portal system will not be able to be used optimally. Thus, technology that is not used optimally is a waste. This is due to the investment for the facilities development is huge. Therefore, this study aims to identify the role of educational level variables in moderating the relationship between perceived ease of use and intention to use Pahang Mart portal.

2. Literature review

2.1. Perceived usefulness

The results of a study by [1] showed that the UTAUT core constructs all together account for 45% of the variability in people's behavioural intention to use open data technologies. Findings of studies conducted by [2] indicated that the significant relationships between "performance expectancy" and



“effort expectancy” and the behavioural intention of using an m-learning strategy. Another research by [3] showed that there is a direct positive predictions of intention to reuse from UTAUT anchors. A study by [4] once again found that cloud computing usage significantly explained by UTAUT core constructs. Another study by [5] showed that all the five UTAUT factors have significant effect on the adoption of e-government services in Jordan. While study by [6] revealed that the same key constructs of the UTAUT are significant predictors of student behavioural intention to use Web-based services. Thus we hypothesise:

H₁: Performance expectancy has a positive influence on continuance intention

2.2. Perceived ease of use

Perceived ease of use is referring to “the degree of ease related to the use of any particular system” [7]. According to [8] the relationship between the PEOU and multimedia technology adoption was found significant. While the study conducted by [9] found that the link between perceived ease of use and intention to use mobile internet was not significant. Due to the inconsistent relationships between perceived ease of use and behavioural intention, we thus developed the following hypotheses:

H₂: The relationship between effort expectancy and behavioural intention will be moderated by education level, such that the effect will be stronger for low education level group

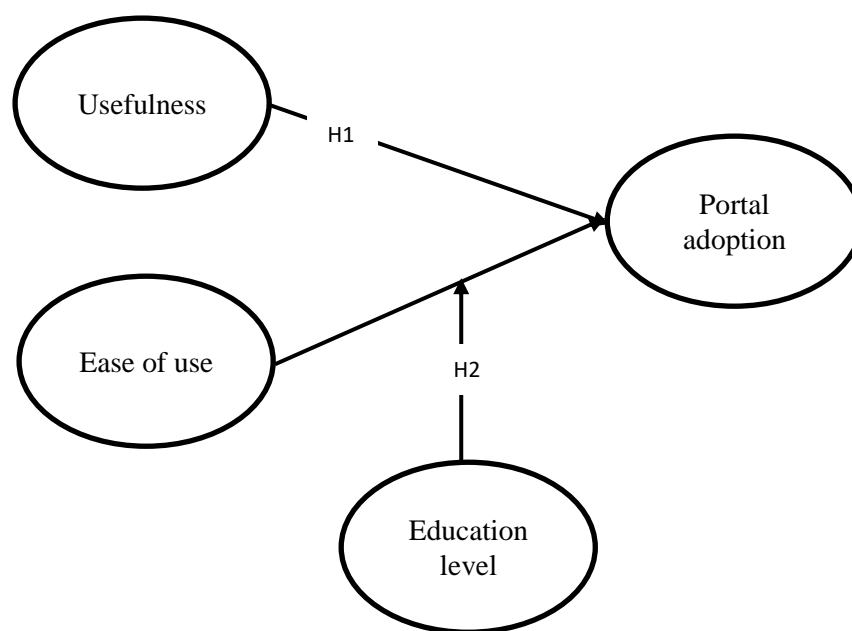


Figure 1: Research model

3. Methodology

This study is aimed to identify the role of education level in moderating the linkage between PEOU and Pahang Mart Portal adoption. This study is a quantitative study. Data were collected using questionnaire instruments. Questionnaire instruments were borrowed from previous researchers to ensure the validity of the content. Likert scale was used to measure all the research construct and a

five-point scale format which is 1 ‘strongly disagree’ until 5 ‘strongly agree’. The sampling technique used is non-probability sampling which is specifically known as convenient sampling. The sample size required in this study is a minimum of 119 based on the calculation in the G power software. This study is a cross-sectional study. Since this study was conducted during the MCO, we found that face-to-face methods could not be used for data collection purposes. Therefore, we decided to use an online platform. We managed to obtain 129 data for further analysis. The population of this study is consist of the residents of the state of Pahang who use the Pahang Mart portal.

4. Data analysis

The data of this study were analyzed using smart pls statistical software[10]. The analysis using smart pls will go through 2 phases of testing namely measurement model testing and hypothesis testing. Measurement model testing is important to ensure that the study instrument is in a state of validity and reliability. Based on the data obtained from this study, we found that the research instruments are in good condition of validity. For hypothesis testing, the data shows that the moderation hypothesis is supported. The interaction term of educational level and ease of use was not found to influence intention to use significantly ($\beta = 0.07$, $p > 0.05$) see Table 1

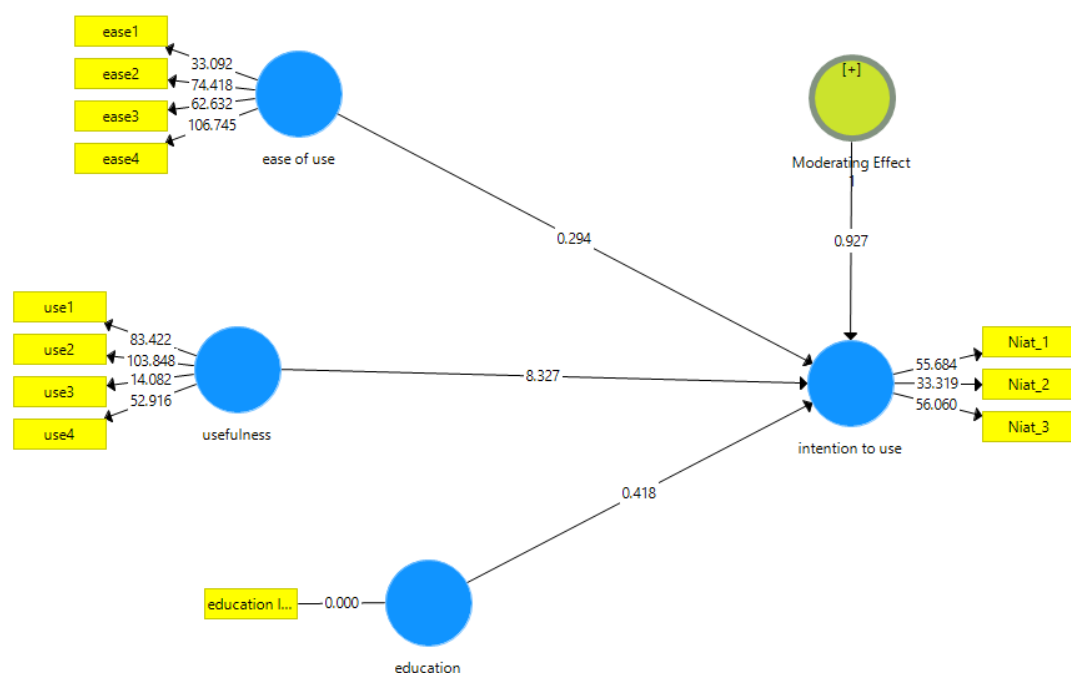


Figure 2: Interaction effect via product indicator approach

Table 1: Hypothesis testing result

	Beta value	Standard Deviation	T Statistics	P Values
Moderating Effect 1 → intention to use	0.07	0.07	0.93	0.35
ease of use → intention to use	0.04	0.12	0.29	0.77
education → intention to use	0.02	0.06	0.42	0.68

usefulness → intention to use	0.82	0.10	8.33	0.00
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5. Discussion

Studies related to the use of online shopping in Malaysia during the Covid 19 season were very limited. The findings of this study have proven that the research hypothesis is not supported. These findings prove that the linkage between PEOU and Pahang Mart Portal adoption does not differ significantly based on the level of education. These findings however probably due to the level of education of the respondents that are not so much different from each other where most of them have a Bachelor's degree. These findings are at once contrary to the findings of [11] which found that the relationship between PEOU and e-government adoption is different based on gender, experience and age.

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