



EXPLORE CHINESE LANGUAGE TEACHERS' ACCEPTANCE OF USING LMO QUIZ UNDER TAM

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INTRODUCTION

Virtual Learning Environment (VLE) in Xi'an Jiaotong-Liverpool University (XJTLU) has been developed, renamed, and upgraded several times for over 15 years since the university's establishment in 2006, currently referred as Learning Mall (LM) which is fully used by all faculties and students. There are around 50 plugins that have been embedded in LM for teachers to use for teaching and assessment. The outbreak of covid-19 has accelerated the development of online learning and teaching and its reflection in terms of technology-enhanced education from 2019.

Chinese language teaching has been moved online since the beginning of 2020 using LM, from the teachers' activities trace, we could see CLT lecturers have been utilized over 20 LM plugin activities of which 10 could be seen as the most frequently used, among these 10 plugins, **Online Quiz** has been turned out to be the top-ranking interactive plugin adopted by CLT teachers as their teaching tool. From the LM page, the **Quiz** normally has been used for two purposes, preview or review the vocab/phrase, in-class practice, and summative assessment part for listening and reading. A **survey** has been conducted to investigate teachers' using practice and perceptions of LM Quiz. This project is aimed to improve the distant teaching and learning experience in applying the online tools for international Chinese language education under TAM (Technology Acceptance Theory).

RESEARCH QUESTIONS

1.What factors influence the acceptance of the Quiz?

2.How effective they feel the Quiz can support their teaching and assessment?



TECHNOLOGY ACCEPTANCE MODEL

TAM which was originated in the psychological Theory of Reasoned Action (TRA), has evolved to become the key model in understanding predictors of human behavior towards potential acceptance or rejection of the technology (Marangunic, et al, 2019)

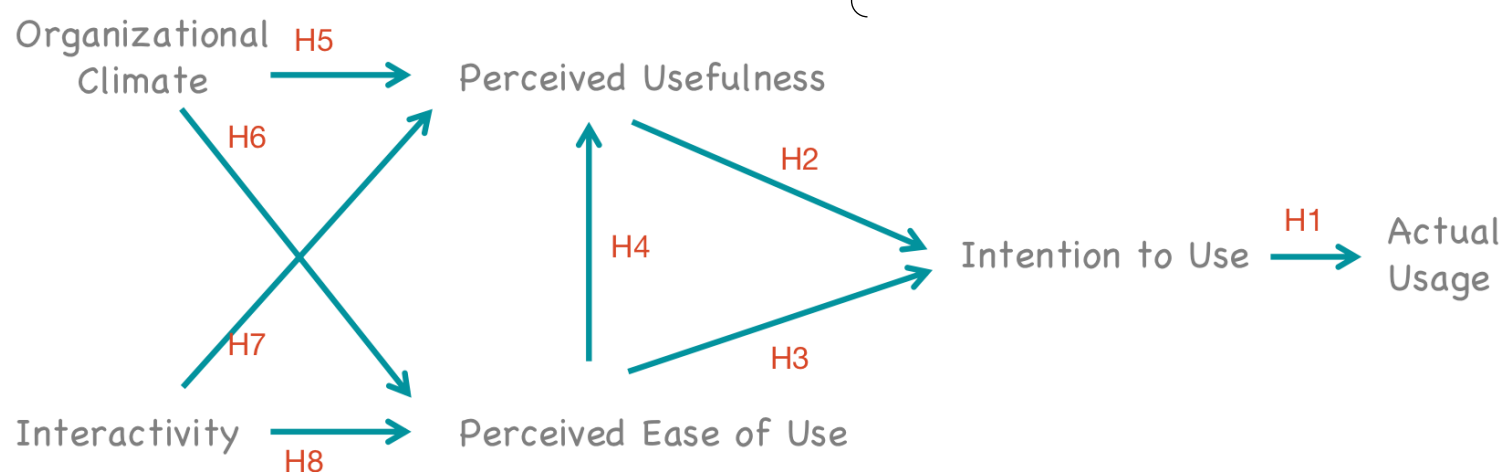


Fig.1 proposed extended TAM-based model

The research model for this study is an extended TAM-based model. The proposed framework has 6 variables as shown in Fig.1. The model introduces organizational climate and interactivity as external variable that are inherent in the core structure of TAM.

The variables are hypothesized to have a positive effect one another as shown in Fig.1. A 5 points Likert scale questionnaire was designed to test the hypotheses. 12 teachers from Chinese teaching division were recruited to participate in the survey.

RESULTS



Reliability and Validity

Cronbach's alpha	KMO
0.850	0.723
The statistics are of good reliability	The statistics are of good validity



Coefficient calculation results

Hypothesis	Path Coefficient	SE	CR	Description
H1: Intention to Use→Actual Usage	0.570	0.257	2.406	Accepted
H2: Perceived Usefulness→Intention to Use	0.492	0.159	2.382	Accepted
H3: Perceived Ease of Use→Intention to Use	0.423	0.132	2.047	Accepted
H4:Perceived Ease of Use→Perceived Usefulness	0.093	0.192	0.402	Rejected
H5:Organizational Climate→Perceived Usefulness	0.027	0.450	0.138	Rejected
H6:Organizational Climate→Perceived Ease of Use	0.514	0.540	2.608	Accepted
H7:Interactivity→Perceived Usefulness	0.789	0.150	4.257	Accepted
H8:Interactivity→Perceived Ease of Use	0.418	0.192	2.608	Accepted

DISCUSSION

Overall, according to the table above, most of the hypotheses (H1,H2,H3,H6,H7,H8) formulated based on the TAM model have a statistically significant relationship. The results show that the teachers hold a fairly positive attitude towards the Quiz.

In the H4, the path coefficient is 0.093 and the CR value is 0.402, which proves that the perceived ease of use has a positive effect on the perceived usefulness is not significant, so H4 is rejected. The result is not in line with previous studies. According to the descriptive statistics, the average score of perceived ease of use is 3.528, which is relatively low. It proves that most teachers think the plugin is not very easy to be used. But it is supposed to be useful (AVE 4.028). So the teachers have difficulty understanding the plugin and some of them spent lots of time mastering the plugin.

In the H5, the path coefficient and the CR value are 0.027 and 0.450, which proves that the organizational climate has a positive effect on perceived usefulness is not significant, so H5 is rejected. It seems that there isn't enough support from the organization for teachers to use the Quiz better.

CONCLUSIONS AND IMPLICATIONS

Based on the data, several aspects need to be improved in order to increase the acceptance of the Quiz. First, since many teachers feel difficult using the plugin, intensive, hands-on training for teachers could be conducted before using the plugin. Second, a community can be built so that there will be a better environment for everyone to use a certain educational technology. Users may have the best practices and communicate more often regarding the use of the plugin. More support should be offered by the institution, for example, a handbook introducing the plugins can be edited and given to each teacher.

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