A KNOWLEDGE SHARING PLATFORM FOR TEACHING ASSISTANTS - INFORMATION SYSTEMS SUCCESS FACTORS AND LOCUS OF CONTROL

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ABSTRACT

Most TAs are anxious about executing the TA missions, leading that the tutoring qualities for college students are greatly jeopardized. This study innovatively introduced a blog-based TA knowledge sharing system for a university, and then constructed a theoretical model composed of IS Success factors, system satisfaction, system use, TA self-efficacy, and internal locus of control to assess the outcome of such a TA knowledge sharing system. After collecting 111 effective questionnaires of TAs using this system, we obtained the empirical testing results with employing the SEM technique. The results showed: (1) The IS Success model is again supported in this study; (2) the system use is positively related to TA self-efficacy; (3) the internal locus of control is positively to TA self-efficacy; (4) the internal locus of control is negatively related to system use and also weaken the influencing relationship of system use on TA self-efficacy. Implications are briefly discussed in this extended abstract.

Keywords: *TA, knowledge sharing, IS Success Model, self-efficacy, locus of control*

INTRODUCTION

The modern higher education is full of challenges and complexity. TAs can assist the professors in the design and implementation of the curriculum [2]. However, the differences in lifestyles, knowledge, and responsibilities between TA and professors could also be quite significant. The turn-over rate of TA is high. Professors often face with new TAs every semester. These issues prevent effective communications between TAs and professors, leading that TAs are not adequately informed and skilled for tutoring students. The blog-based system is characterized as easy to use and free to share information among users. This study innovatively introduced a blog-based TA knowledge sharing system at a major national university in central Taiwan. We also proposed a theoretical research model deducted from IS Success theory, self-efficacy theory, and locus of control theory. Using SEM technique to analyze the empirical observations collected form TAs, this research will test the proposed model and validate the outcome of introducing this TA knowledge sharing platform.

METHODOLOGY AND RESULTS

Through reviewing the extant literature from IS Success Model [1], self-efficacy [2][4], and locus of control [3], we set up the theoretical model composed of: system quality, information quality, service

quality, system satisfaction, system use, TA self-efficacy, and internal locus of control. We distributed the 5-point Likert scale questionnaire adapted from the literature to all TAs exposed to using this knowledge sharing system. Totally 111 effective observations are collected. The sample demographics showed that it is slightly skewed to male (57.7%), majorly senior or graduate students (70.2%), mostly with prior TA experience (69.4%). After checking the reliabilities and validities of the constructs within the research model, we tested the path model using SmartPLS 2.0 and found that the IS Success factors are again effective in driving the system satisfaction (R^2=0.738). The standardized paths are: system quality 0.475 (t=4.523***), information quality 0.201 (t=1.919*), service quality 0.233 (t=1.808*). The relationship between system satisfaction and system use is also evident (standardized path 0.817, t=17.299***). Inspiringly, TA knowledge sharing system use is effectively and positively influencing TA self-efficacy (standardized path 0.572, t=8.615***). Finally, we observed that internal locus of control is positively leading to TA self efficacy (standardized path 0.208, t=2.555**), however is negatively impacting on system use (standardized path -0.230, t= 4.143***) and significantly weakening the influencing relationship of system use on TA self-efficacy.

CONCLUSION

The conduction of this study successfully deducts the IS Success Model [1] for the TA knowledge sharing platform context and also firstly integrates the linkages with TA self-efficacy [2][4] and internal locus of control [3]. Such a validation not only preliminarily supports the performance of the implementation of TA knowledge sharing system, but also helps to foster the system deployment strategy. We recommend the system deployer to pay most attentions to secure the system quality and then encourage users to raise the knowledge quality, with sufficient system related services, such as system training and trouble shooting. The results also suggest that picking up TAs with high internal locus of control may help to raise the TA self-efficacy, however, may also be somewhat harmful to TAs' usage of this sharing system and thus jeopardizing the original effect of system use on TA self-efficacy. Therefore, seeking for the balance policy of screening TA's internal locus of control shall be one of the most valuable future research directions inspired by this study.

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