

# Influencing Factors of Mobile Autonomous Learning and Mobile Self-Efficacy Among Law Atudents in Xi'an

Wenjuan Yuan<sup>1,2</sup>, Tong Wooi Chow<sup>1</sup>

<sup>1</sup> Malaysia University of Science and Technology, 47810, Malaysia

<sup>2</sup> Northwest University of Political Science and Law, Xi'an 710122, Shaanxi, China

**Abstract:** Although abundant literature can be found on autonomous learning, there is limited literature available for law major undergraduates' autonomous learning in Chinese context. The main purpose of this study is to examine factors influencing university law undergraduates' autonomous learning in mobile learning environment in Xi'an, China, taking into consideration of mobile self-efficacy. The data collected from the survey is put into SPSS 23.0, which is used to calculate descriptive as well as inferential statistical measures. The results denote that the four independent variables, namely Motivation, Learning Strategy, Goal Orientation, Teacher Support all have positive impacts of Autonomous Learning. The mediating test of Mobile Self-efficacy proves that Mobile Self-efficacy acts as a mediator in the relationships between Learning Strategy and Autonomous Learning, Goal Orientation and Autonomous Learning, Teacher Support and Autonomous Learning.

**Keywords:** Mediating effects; Autonomous learning; Influencing factors; Self-efficacy

## 1. Introduction

In the context of higher education, autonomous learning is applied since it promises unlimited participation and open access for anyone, which increasingly engaged Internet-based learning. However, very little was found on autonomous learning applied in other domains except for the discipline of English language learning. Therefore, it is necessary to investigate autonomous learning in other fields. It is also widely believed that university level education enables students to develop their post-university learning autonomously or independently (Fazey & Fazey, 2001). In addition, the characteristics of law major students are distinguished from other disciplines. Therefore, this study chiefly focus on Chinese university undergraduates majoring in law<sup>[1]</sup>.

Besides, Chinese scholars draw little attention to influencing factors of learner autonomy. Only a few studies investigate the mediating role of learners' mobile self-efficacy towards academic autonomous ability. Thereby, it is necessary to take account of the factor of mobile self-efficacy when discussing the influencing factors of students' autonomous learning. In general, this paper planned to examine university law undergraduates' mobile autonomous learning in the context of China, taking into consideration of mobile self-efficacy.<sup>[2]</sup>

## 2. Methodology

The target population of individuals are law major undergraduates in Xi'an, Shaanxi Province. The present study designed that the sample size would be 459 with cluster sampling method. This study uses a questionnaire survey as its tool. The questionnaire was mainly adapted and adopted from the questionnaires employed in many researches (Macaskill & Taylor, 2010; Liu, 2013; Chi, 2017; Wang, 2018) with modifications to adapt it to the context of Chinese higher education. The first part of the questionnaire is participants' background information and the second part includes six sections with 33 items, each belonging to one of the following sections: motivation (M), learning strategy (LS), goal orientation (GO), teacher support (TS), mobile self-efficacy (MS) and autonomous learning (AL). There are 33 items in these six sections. All items were in the Likert five-point agreeability scale format, ranging from 1 (strongly disagree) to 5 (strongly agree). After modification for the questionnaires in the pilot test, a formal survey was developed and conducted through the online survey platform Questionnaire Star.

## 3. Data Analysis Techniques

Descriptive statistics compass the number of participants, number of items, mean, standard deviation, minimum and maximum, median and mode. It described the status quo of university students' autonomous learning, the effect of autonomous learning and the correlation matrix between the dimensions of the factors. SPSS 23.0 and AMOS 24.0 was utilized to implement correlation analysis, Structural Equation Modeling and mediating effect analysis on the obtained data.

## 4. Test Results

Copyright © 2021 Wenjuan Yuan et al.

doi: 10.18282/l-e.v10i7.2972

This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License

(<http://creativecommons.org/licenses/by-nc/4.0/>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

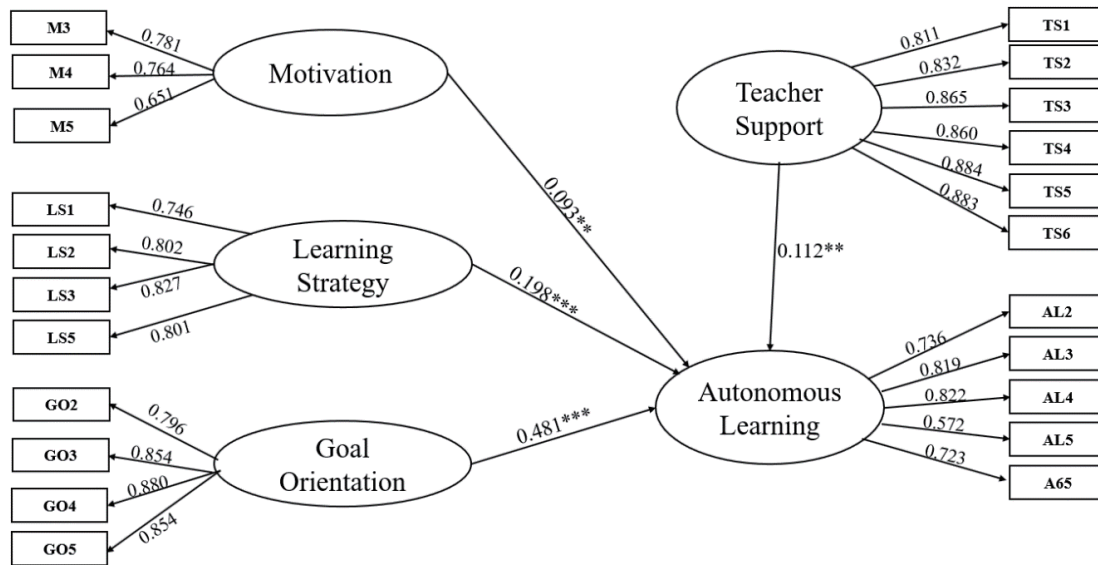


Figure: Direct influence model of four variables on Autonomous Learning (the arrow shows the standardized path coefficient; \*\*=  $P < 0.05$ , \*\*\*=  $P < 0.01$ )

The Figure above indicates that Motivation has a slightly significant positive impact on Autonomy Learning; Learning Strategy has a significant positive impact on Autonomy Learning; Goal Orientation has a significant positive impact on Autonomy Learning; Teacher Support has a significant positive impact on Autonomy Learning, among which Goal Orientation has the greatest impact on Autonomy Learning, followed by Learning Strategy and Teacher Support, Motivation is the least.

Table: 1 Indirect effect analysis

Mediating Paths	$a*b$	$c$	Boot SE	BootLLCI	BootULCI	Proportion of Effects
M $\Rightarrow$ MS $\Rightarrow$ AL	0.003	0.096**	0	-0.011	0.018	0%
LS $\Rightarrow$ MS $\Rightarrow$ AL	0.034	0.097**	0.001	0.010	0.062	17.16%
GO $\Rightarrow$ MS $\Rightarrow$ AL	0.022	0.098**	0.001	0.001	0.048	4.49%
TS $\Rightarrow$ MS $\Rightarrow$ AL	0.05	0.099**	0.001	0.025	0.083	87.6%

Note: \*\*  $p < 0.01$ ; BootLLCI refers to the lower limit of 95% interval of bootstrap sampling, and BootULCI refers to the upper limit of 95% interval of bootstrap sampling.

The Table above shows that Mobile Self-efficacy acts as a mediator in the relationships between Learning Strategy and Autonomous Learning, Goal Orientation and Autonomous Learning, Teacher Support and Autonomous Learning.

## 5. Discussion

Utilizing SEM analysis, this study discovered that Motivation, Learning Strategy, Goal Orientation, Teacher Support all have significant positive effects on Autonomous Learning. In terms of standardized path coefficients, Goal Orientation has the greatest impact on Autonomous Learning, followed by Learning Strategy and Teacher Support, and Motivation is relatively small.

First, Motivation has positive influence on Autonomous Learning in mobile environment. Nevertheless, the influence Motivation have on Autonomous Learning is relatively small compared with other three independent variables. In Chinese context, compared with middle school students who make endeavor to prepare for the college entrance examination, college students have reached adulthood. The majority of the respondents in this research are first and second grade undergraduates, they may feel freer and more relaxed than high school student. They are less likely to consider their further education or employment after graduation than three and four grade undergraduates, hence the degree of impact of Motivation on Autonomous Learning is slightly weaker

Second, Learning Strategy has positive influence on Autonomous Learning in mobile environment. This finding confirms the research conclusions of previous scholars (Magogwe & Oliver, 2007). In Autonomous Learning, students who have a high degree of Learning Strategy can actively construct their brains' knowledge and core cognitive activities. Therefore, Learning Strategy has positive influence on Autonomous Learning.

## References:

- [1] Fazey, D. M., & Fazey, J. A. (2001). The potential for autonomy in learning: Perceptions of competence, motivation and locus of control in first-year undergraduate students. *Studies in Higher Education*, 26(3), 345-361.
- [2] Macaskill, A., & Taylor, E. (2010). The development of a brief measure of learner autonomy in university students. *Studies in Higher Education*, 35(3), 351- 359.