

**TO LEARN BASED ON DIGITAL LEARNING PLATFORM AND VR TOOLS: A SURVEY OF COLLEGE STUDENTS IN HAINING AND HANGZHOU**

**Li-Wei Lin\* , Su-Rong Yan and Yu-Xin Teng**

Zhejiang University of Finance and Economics Dongfang College, Zhejiang China

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**ABSTRACT**

The purpose of this study is to investigate the students' online learning platform and resources in Haining, and to improve their willingness to learn and achievement. This research breaks the traditional concept of education through the idea of overturned education. Through the online platform, students can study spontaneously and spontaneously. From the research process, students will be able to receive world-class courses through online platforms, or interact with teachers or classmates online through online learning. In this study, the correlation analysis was conducted through the regression analysis. The number of the samples was  $N = 471$ , and the rule-related analysis was made by the combination of online survey and direct interview.

**Keyword:** online learning, learning intention, flip education.

**1. INTRODUCTION**

The become a new way for university students to learn. Many students learn and manage knowledge through their digital learning platform. Huerta (2012) proposes that teachers in the United States are increasingly using educational technology to apply their content in the classroom. From this point of view, we can understand that through the promotion of its digital learning platform by teachers, it can bring the positive learning influence to college students. The digital platform is provided to college students for use. The most important purpose is to improve their learning motivation, learning performance, and learning participation. Seale et.al (2010) proposes that a digital learning environment can improve the motivation and performance of their students. Wu Songliang (Min 94) proposed that the digital learning platform should provide some functions and services to learners to further enhance their learning performance.

Liang Jialing (Min 91) pointed out that there are several key factors affecting the effectiveness of online learning, such as the richness of textbook design, curriculum interaction strategies, student satisfaction, and student performance. Yang Mingxi (Min 92) proposed two concepts of E-learning in both general and narrow sense. This study mainly uses a digital learning platform to investigate whether it can improve the motivation and participation of its students. We use Haining college students as the target of investigation. Digital learning is mainly transmitted through the Internet, and students can be short of learning resources without being restricted by the region. Keris (2011) proposed that digital learning can introduce new teaching methods and

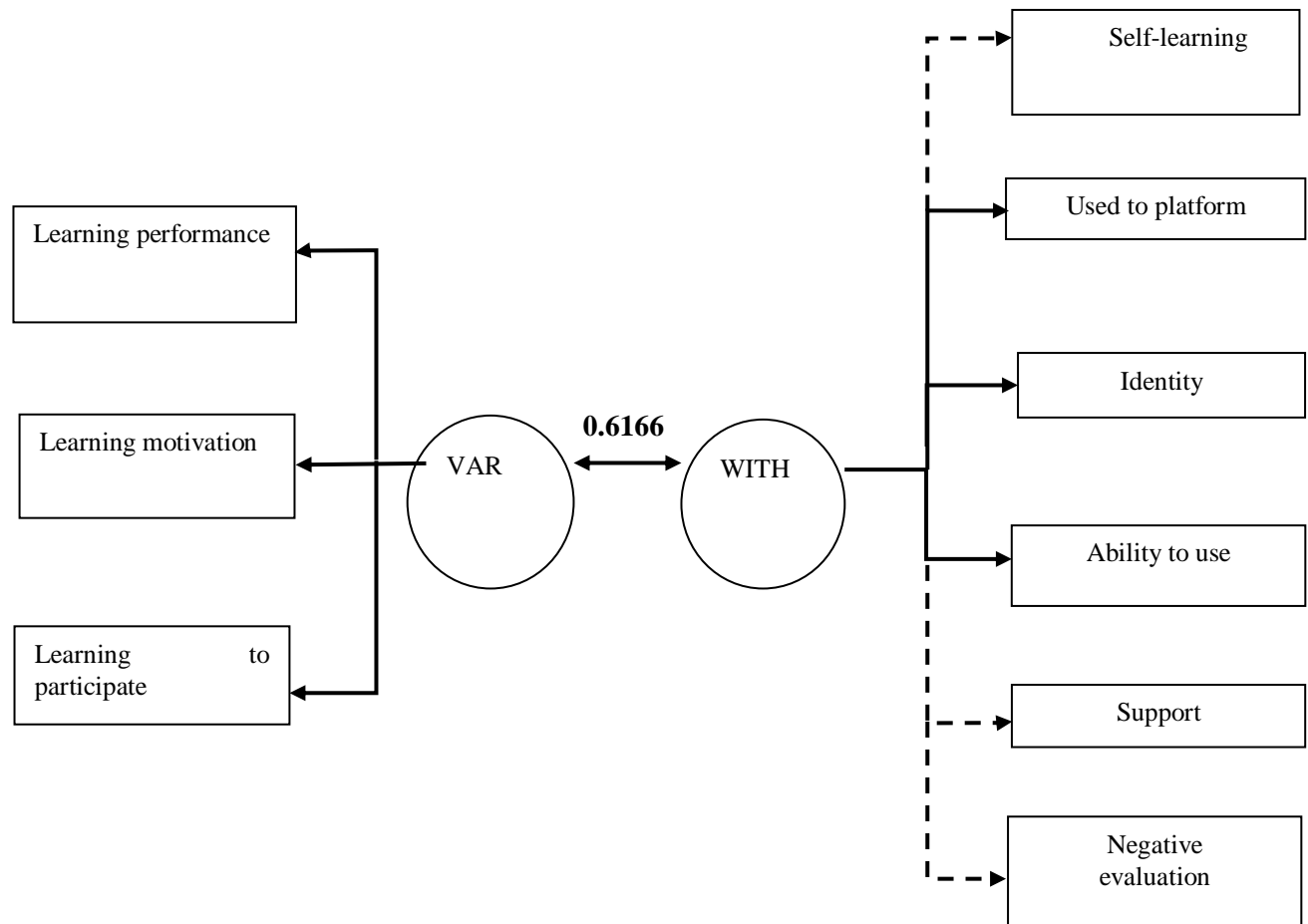
concepts to students. Keller (1983) proposed the ARCS learning motivation model, which stimulates the learners' motivation and interest through this learning motivation model. .

## **2. LITERATURE REVIEW**

The biggest goal of this research is to establish its motivation, learning participation, and learning performance through its digital learning platform. Atkinson (1964) suggests that individual learning opportunities are influenced by environmental factors. Learning motivation includes ways to measure students' learning habits, learning goals, learning performance, and so on. Students learn through their digital learning platform, and the ultimate goal is to look at the performance outcomes of their learning. Rogers (1980) suggests that learning motivation is primarily about growing up and fulfilling individual desires. Alderman (1990) believes that there are four motivations for leading students to successfully learn: (1) short-term goals (2) successful experiences (3) learning strategies (4) success factors. Through its relevant literature, we can understand the motivation and participation of its students. It requires the relevant digital platform content and design to attract its students to learn related knowledge learning and management. Huang Yonghe (2013) proposed the correlation between cooperative learning and learning motivation. The digital learning platform can solve the learner's problems immediately through its message and discussion.

## **3. THE RESEARCH MODEL**

### **3.1 Research architecture**



3 Figure 3.1 Research Architecture

### 3.2 Research hypothesis

H1: Digital learning platform is savvy and learning performance is significant

H2: Digital learning identity and learning motivation are significant

H3: Digital learners' ability to use and learning participation is significant

**4. DATA ANALYSIS**

**4.1 Select by variable**

1. The source of the analysis data set is the same as the "willingness to learn online learning platform, but the use of "personal attention to the level of the question and the actual situation of the individual's actual learning experience", the combination of "face interview" and "online" information , finishing as a research analysis.

2. The variable C2-C48 adopts a total of 24 variables of “double number items”. The factor analysis is verified by reliability and validity, and is attributed to three factors, which are organized as follows.

factor	variable	Cronbach CoefficientAlpha	Reliability check	Convergence validity	Differential validity
Factor1	12	original	0.911577	Passed	Passed
		standardization	0.912013		
Factor2	7	original	0.852951	Passed	Passed
		standardization	0.853408		
Factor3	5	original	0.776875	Passed	Passed
		standardization	0.776829		

3. The research also raises the level of the variable, and uses three factors as the criterion variable. As the dependent variable of the relevant analysis, the variables are organized as follows.

factor	name	variable	Factor Score
DV1	Learning performance	c4 c14 c2 c16 c6 c20 c12 c8 c10 c32 c18 c34	$c4*0.23029 + c14*0.21376 + c2*0.20485 + c16*0.19682 + c6*0.17717 + c20*0.15688 + c12*0.17187 + c8*0.13215 + c10*0.09481 + c32*0.08876 + c18*0.08338 + c34*0.04309$
DV2	Learning motivation	c48 c40 c38 c46 c42 c44 c36	$c48*0.39108 + c40*0.32192 + c38*0.31743 + c46*0.30007 + c42*0.1886 + c44*0.19072 + c36*0.11598$

DV3	Learning to participate	c22	c24	c28	c26	c30	c22*0.41418+	c24*0.37695	+	
							c28*0.31877	+	c26*0.26268	+
							c30*0.22570			

## 4.2 Sample number test

### 4.2.1.Scale.

Only the Interval and Ratio scales can be used for CCA. Due to the analysis of previous factors, the data set has been processed through the Coding mechanism, and the data type has been converted from Non-Metric to Metric data (Sample size=471 has formed a large sample, which is in line with the threshold of converting Non-Metric data into Metric data). The selected independent variables and dependent variables are in line with CCA's scale requirements.

### 4.2.2.Sample number verification

CCA minimum sample size limit  $(DV+IV)*10$ , this study depends on variables (3) + independent variables (6), a total of 9 variables  $(9*10 < 471)$ , less than 471 samples, then CCA Sample requirements.

## 5. CONCLUSIONS AND RECOMMENDATIONS

This study can find that habitual use, identity, and ability to use have a significant impact on learning performance, motivation, and participation. Therefore, we can clearly understand the learning effect brought by the mathematics learning platform. Therefore, we clearly understand that Hypothesis 1, Hypothesis 2, and Hypothesis 3 have significant relationships.

The biggest limitation of this study is that it is only for the college students in Haining, China. It is an important problem in the process of issuing questionnaires. If you want to include other universities in Zhejiang Province, you need to have great manpower and material resources. challenge.

### 5.1.Research implications

The purpose of this research is to respond to the measurement of the performance of digital learning in college students. We are mainly filling the gap in the research of digital learning in the existing traditional teaching and learning. Nowadays, the research of digital learning mainly studies the research of cross-national learning methods and learning performance.

### 5.2. Future research directions

McGrath (1992) does not have any research that all scholars can agree with. It is recommended that follow-up researchers can build their innovative variables in the design research architecture. Because of the lack of human, material and financial resources, there is no way to conduct in-depth investigations and discussions. In the course of this study, there are two main limitations. The first point is that collecting questionnaires on the collection of university data in Haining City has its difficulties. Because of the vast land, sometimes there is no way to design and find the respondents during the interview process.

## **6. ACKNOWLEDGEMENT**

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