

The Study on Practical Teaching of College and Significant Factors of Student's Performance in Chengdu, China

Xu Teng*

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Abstract

Purpose: This study investigates the factors that influence students' performance of the practical teaching of Chengdu higher vocational college students, which are determined by perceived usefulness, perceived ease of use, attitude, behavioral intention, social influence, and use behavior. **Research design, data, and methodology:** The target population was 500 students from Sichuan Vocational College of Finance and Economics, Chengdu Polytechnic, and Chengdu Textile College. The validity and reliability are measured by Item-Objective Congruence (IOC) and Cronbach's Alpha. Hypotheses were tested using CFA and SEM, and the model's goodness of fit was validated via SEM. **Results:** The results show that perceived usefulness significantly influences the attitude of higher vocational students to participate in practical teaching. Behavior intention is influenced by perceived ease of use, perceived usefulness, attitude and social influence. In addition, behavior intention significantly influences use behavior towards student's performance. **Conclusions:** The results of this study show that a more active participation attitude, a higher sense of identity in practical teaching, a better understanding of the usefulness and ease of use of practical instruction, a higher social impact, and better student performance are all related to user behavior and willingness of higher vocational students to participate in practical teaching.

Keywords: Attitude, Social Influence, Behavioral Intention, Use Behavior, Students' Performance

JEL Classification Code: E44, F31, F37, G15

1. Introduction

Practical teaching refers to a series of material and spiritual production activities related to the course content and is characterized by encouraging students to participate, think and explore actively. Under the organization of teachers, to achieve the goal of science education and

promote the overall development of students' comprehensive quality, students are guided purposefully, planned, and organized in teaching activities.

The theory of moral cognitive development represented by Elm (2019) advocated that the ethical dilemma should be used to promote individual moral development and that the formation of students' character should be encouraged in

*Xu Teng, Sichuan Vocational College of Finance and Economics, China.
Email: 417031326@qq.com

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communication practice and life situations.

Newman (1980), an American educator, indicated that we should strengthen the practical action ability, action training, and skill training of educational objects. He also puts forward that moral education must pay attention to the teaching of civil society activists and the cultivation of individual social and ethical Behavior, which makes up for the shortcomings of various theories.

Practical education is a teaching idea aiming at the deficiency of existing theoretical education, which embodies the suitable needs of education. Especially for a long time, the education of some higher vocational colleges has paid attention to teaching theoretical knowledge unilaterally, ignoring the critical role of practical education, which affects the effectiveness and effectiveness of education. Experimental and theoretical education are indispensable aspects of the same education process.

Nowadays, practical education is becoming an institutionalized idea in foreign universities. Many world-famous universities, such as the Massachusetts Institute of Technology and Cambridge University, have infiltrated the idea of strengthening practical education in their university concepts and educational goals and supported cultivating students' creative, functional abilities through various channels.

This study's importance is exploring the factors that affect the willingness to use practical teaching for higher vocational college students from Chengdu, Sichuan, China. China's Ministry of Education now encourages the use of practical teaching methods in the teaching process of higher vocational colleges to utilize and promote their teaching process in this digital age. Therefore, it is necessary to understand the factors that can motivate students to participate in practical teaching effectively. The variables investigated in this study include behavioral intention, use Behavior, attitude, students' performance, perceived ease of use, perceived usefulness, and social influence. It discusses whether all the structures significantly influence the use of Behavior and behavioral intention of practical teaching. The research can improve the attention of society and schools to the practical education of higher vocational college students.

Therefore, how to improve the practical education of higher vocational college students, enhance the pertinence, effectiveness, and effectiveness of higher vocational college education, and truly realize the organic integration of theoretical teaching and practical education is an important research topic of a higher vocational college education.

2. Literature Review

2.1 Perceived Usefulness

According to Hu et al. (2015), perceived usefulness was described as the primary influence on the usage intention of users. The perceived usefulness of m-library apps was defined as the degree to which users believed it would enhance their learning and studying performance. Further, perceived usefulness affects a user's attitude toward using the information system (Lee, 2010). The TPB theory proposed that an individual's intention to engage in specific behaviors was determined by their attitude (Ajzen, 1991). It suggests that attitude determines an individual's choice to engage in some behaviors (Park & Kim, 2014). More importantly, philosophy could better explain users' internal and external cognition than other factors (Hernández-Ortega, 2017). This, in turn, affected the actual Behavior. The effectiveness of using a technology product to achieve a goal would cause users to have positive feelings about the product. Thus, perceived usefulness would positively affect attitude (Yu & Huang, 2020). As such, the following hypotheses are stated:

H1: Perceived usefulness has a significant influence on attitude.

H6: Perceived usefulness has a significant influence on behavioral intention.

2.2 Attitude

According to Zhang (2016), perceived usefulness was described as the primary influence on the usage intention of users. The perceived usefulness of m-library apps was defined as the degree to which users believed it would enhance their learning and studying performance. Further, perceived usefulness affects a user's attitude toward using the information system (Lee, 2010). The TPB theory proposed that an individual's intention to engage in specific behaviors was determined by their attitude (Ajzen, 1991). It suggests that attitude determines an individual's choice to engage in some behaviors (Park & Kim, 2014). More importantly, philosophy could better explain users' internal and external cognition than other factors (Hernández-Ortega, 2017). This, in turn, affected the actual Behavior. The effectiveness of using a technology product to achieve a goal would cause users to have positive feelings about the product. Thus, perceived usefulness would positively affect attitude (Yu & Huang, 2020). As such, the following hypothesis is given:

H2: Attitude has a significant influence on behavioral intention.

2.3 Behavioral Intention

Ukut and Krairit (2019) found that the behavioral intention of the users of ICT had been found to impact user behavior significantly. This was similar to the findings of (Venkatesh et al., 2003). Actual usage behavior was affected by "behavioral intention" (i.e., the higher intention to use technological products, the complete discretion to use specialized products) (Yu & Huang, 2020). Zhong et al. (2022) stated that behavioral intention to use online learning system is contributed by perceived usefulness and perceived ease of use. Use Behavior regarding web-based question-and-answer services was significantly and positively influenced by facilitating conditions and behavioral intention (Deng et al., 2011). Gupta and Arora (2019) examined the impact of behavioral intention on use behavior toward mobile payment systems. Accordingly, the following assumption is proposed:

H3: Behavioral intention has a significant influence on use behavior.

2.4 Perceived Ease of Use

Consistent with Lin (2013)'s expectation, the paths from perceived usefulness and ease of use to behavioral intention were positive and significant. Alalwan et al. (2017) also found that perceived ease of use, perceived risk, and perceived usefulness notably influenced the behavioral intention of consumers in Jordan to adopt mobile banking. Many researchers have used TAM in their e-learning studies and found that perceived ease of use and usefulness significantly affect the individual's behavioral intention to use an e-learning system (Liu et al., 2009; Ong et al., 2004; Sheng et al., 2008). Armenteros et al. (2013) revealed that perceived usefulness followed by perceived enjoyment, perceived ease of use, and quality of the multimedia instruction marked the instructors' behavioral intentions to a large degree when using multimedia teaching material. The constructs of subjective norm, perceived usefulness, perceived ease of use, and behavioral intention were measured with scales (Venkatesh & Davis, 2000). The following hypothesis has therefore been developed:

H4: Perceived ease of use has a significant influence on behavioral intention.

H5: Perceived ease of use has a significant influence on perceived usefulness.

2.5 Social Influence

Social influence is one of the predictors of behavioral intention to use ICT (Venkatesh et al., 2003). In addition, Ukut and Krairit (2019) found social influence to impact students' performance significantly and directly. This

implied that the social environment could affect students' performance. In previous studies, social results were shown to affect behavioral intention directly (Ajzen, 1991; Venkatesh & Davis, 2000). In adopting new mobile shopping services, consumer behavioral intention to use mobile shopping services was expected to be influenced by their significant others' perceptions of mobile shopping services use (Yang, 2010). The social influence had a favorable impression on the behavioral intention of participants in concert (Nikou & Bouwman, 2016). Behavioral choice has been significantly influenced by effort expectancy, facilitating conditions, performance expectancy, and social influence in the case of near-field communication services in mobile phones (Chen & Chang, 2013). This research proposes the following hypothesis:

H7: Social influence has a significant influence on behavioral intention.

2.6 Use Behavior

Ukut and Krairit (2019) conducted studies in recent times confirming the instructors' perspective on the issue of user behavior. Use Behavior in ICT concerns how and when people use ICT. It was indicated in the frequency and purpose of use (Davis, 1989; Davis et al., 1989, 1992). This harmful use behavior consequently affected students' academic performance. Examples of such distracting media platforms include Instagram, Facebook, Twitter, WhatsApp, etc. (Carvajal-Trujillo et al., 2014; Judd, 2014; Junco & Cotton, 2012; Wood et al., 2012). Therefore, this study put forward a hypothesis that:

H8: Use behavior has a significant influence on students' performance.

2.7 Students' Performance

Bagchi (2005) indicated that the inequality caused by individuals owning ICT components is reflected in students' performance in the academic environment. In addition, Venkatesh et al. (2003) found that social influence significantly and directly impacts students' performance. This means that the social environment will influence students' performance. Moradi and Sabeti (2014) suggested that teachers' personalities and psychological characteristics, such as self-efficacy, understanding, attitude, and belief, were essential characteristics that determine students' achievements. Venkatesh et al. (2003) found that the results of the student model showed that the expected outcomes had a significant impact on behavior intention, and the teacher model's results also showed a significant impact. At this point, the hypothesis was accepted by students and teachers. Enlightened and knowledgeable parents would provide all the necessary equipment for their wards to learn information

and communication technology at home. This affected students' positive performance (Hill & Tyson, 2009). Abeer and Elaraby (2014) conducted similar research focusing on generating classification rules and predicting students' performance in a selected course program based on previously recorded students' behavior and activities.

3. Research Methods and Materials

3.1 Research Framework

The conceptual framework of this study is adapted from three previous studies. Zhang (2016) investigated the relationship between Perceived Usefulness (PU), Attitude (A), and Behavior Intention (BI). Lin (2013) studied the relationship between Perceived Usefulness (PU), Perceived Ease Of Use (PEOU), and Behavioral Intention (BI). Finally, Ukut and Krairit (2019) investigated the relationship between Behavioral Intention (BI), Students' Performance (SP), Social Influence (SI), and Use Behaviour (UB). The conceptual framework of this study is presented in Figure 1.

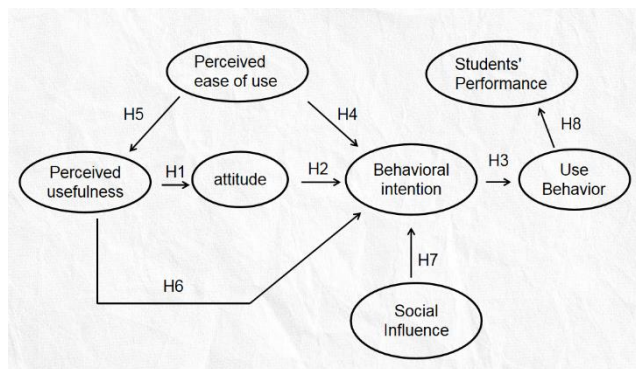


Figure 1: Conceptual Framework

H1: Perceived usefulness has a significant influence on attitude.

H2: Attitude has a significant influence on behavioral intention.

H3: Behavioral intention has a significant influence on use behavior.

H4: Perceived ease of use has a significant influence on behavioral intention.

H5: Perceived ease of use has a significant influence on perceived usefulness.

H6: Perceived usefulness has a significant influence on behavioral intention.

H7: Social influence has a significant influence on behavioral intention.

H8: Use behavior has a significant influence on students' performance.

3.2 Research Methodology

To explore factors influencing college students' behavioral intention and use Behavior in practical teaching in Chengdu, this study used a quantitative method and a questionnaire survey to collect data from the target group. The content validity was checked using Item-Objective Congruence (IOC) and Cronbach's Alpha. The data-gathering process was discussed, as well as the statistical analysis of the data. SEM was used to validate the structure of the link between variables. The research methodology was divided into eight sections: research method used, respondents and sampling procedure, research questionnaires, research instrument validity and internal consistency reliability, data collection/gathering procedures, Confirmatory Factor Analysis (CFA), the goodness of fits or model fits, and Structural Equation Model (SEM).

This study used a questionnaire survey to collect sample data from the target population of students from three universities. Questionnaire Star's online questionnaire was used to create the questionnaire, providing efficient distribution and data collection. IOC and a pilot test (n=50) were conducted to verify the reliability of the questionnaire before it was distributed. The index of item-objective congruence (IOC) resulted that all scale items passed at a score rating from three experts equal to or higher than 0.6. The pilot test (n=50) by the Cronbach alpha coefficient reliability test resulted that all items have strong internal consistency equal to or above 0.7 (Sarmiento & Costa, 2016). SPSS and AMOS statistical tools were used to analyze the sample data, and CFA and SEM were used to test the conceptual framework empirically and the hypothesized relationship between the variables. The content of the study was organized according to the standards of empirical research, with the introduction, theoretical foundation, review of related research, theoretical model construction, relation hypothesis proposal, questionnaire design, data collection, empirical analysis, result discussion and revelation, conclusion, and prospect steps.

3.3 Population and Sample Size

The researchers chose these three representatives of higher vocational colleges:

1. It belongs to higher vocational colleges in Chengdu, Sichuan Province.
2. They all give priority to the development of students.
3. These higher vocational colleges have a long history.
4. Each university has more than 5,000 students.

Considering the previous research, the researchers chose the most suitable sample size. The researchers collected 500 samples from three higher vocational colleges in Chengdu, Sichuan, for better statistical results. Therefore, there are 500

samples in each model, which is suitable for this study and structural equation modeling (SEM) statistical technology.

3.4 Sampling Technique

This study adopted a three-step sampling method: judgmental, stratified random, and convenience. In China, there are different levels of higher education. Higher vocational education is a professional education and vocational education conducted based on completing secondary education. Therefore, this research used judgmental sampling to select college students from a higher vocational college in Chengdu to conduct the investigation. A proportional stratified sampling method is adopted, and each layer is assigned its sample number, as shown in Table 1. Questionnaires are distributed to higher vocational colleges accordingly. Finally, the participants in higher vocational colleges are selected by convenient sampling.

Table 1: Sample Units and Sample Size

| Target Population | Population | Proportional Sample Size |
|--|--------------|--------------------------|
| Sichuan Vocational College of Finance and Economic | 1,960 | 300 |
| Chengdu Polytechnic | 2,106 | 100 |
| Chengdu Textile College | 2,007 | 100 |
| Total | 6,073 | 500 |

Source: Constructed by author

4. Results and Discussion

4.1 Demographic Information

According to Table 2, there are 500 respondents in the study. Demographic information collected from respondents includes school name, grade, gender, and age. The questionnaire was distributed among 500 first-year students

in three selected higher vocational colleges. All the interviewees are from these three higher vocational colleges. The respondents are 329 females and 171 males, representing 65.8 percent and 34.2 percent, respectively. In the age classification, 205 students are 18 years old, 128 students are 19, and 167 are 20 or above. Accounting for 41.0 percent, 25.6 percent, and 33.4 percent, respectively.

Table 2: Demographic Profile

| Demographic and General Data (N=500) | | Frequency | Percentage |
|--------------------------------------|-------------|-----------|------------|
| Gender | Male | 171 | 34.2% |
| | Female | 329 | 65.8% |
| Age | 18 | 205 | 41.0% |
| | 19 | 128 | 25.6% |
| | 20 or above | 167 | 33.4% |

Source: Constructed by author

4.2 Confirmatory Factor Analysis (CFA)

In the structural research model, the CFA was cited as crucial for all latent variables (Alkhadim et al., 2019). The measurement model was evaluated using confirmatory factor analysis to confirm model fitness. There are seven variables, attitude, behavioral intentions, perceived usefulness, user behavior, perceived ease of use, social influence, and students' performance. CFA was used as the analysis before measuring with the structural equation model (SEM).

Table 3 shows that Cronbach's Alpha values were above 0.7, the composite reliability (CR) was higher than 0.70, and the average extracted variance (AVE) values were greater than 0.50. Moreover, the factor loading values were over 0.50 (Sarmiento & Costa, 2016). The CFA was examined for convergent validity, and the fit model results indicated acceptable values, thus certifying its convergent validity, showing the model measurement with all approved results.

Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

| Variables | Source of Questionnaire (Measurement Indicator) | No. of Item | Cronbach's Alpha | Factors Loading | CR | AVE |
|------------------------------|---|-------------|------------------|-----------------|-------|-------|
| Perceived usefulness (PU) | Lee (2010) | 5 | 0.843 | 0.655-0.772 | 0.834 | 0.502 |
| Attitude (ATT) | Bashir and Madhavaiah (2015) | 5 | 0.875 | 0.506-0.888 | 0.885 | 0.615 |
| Perceived Ease of Use (PEOU) | Vululleh (2018) | 3 | 0.794 | 0.662-0.804 | 0.802 | 0.576 |
| Behavioral Intention (BI) | Bashir and Madhavaiah (2015) | 3 | 0.791 | 0.708-0.786 | 0.792 | 0.560 |
| Social Influence (SI) | Mtebe and Raisamo (2014) | 3 | 0.760 | 0.608-0.793 | 0.764 | 0.522 |
| Students' Performance (SP) | Bashir and Madhavaiah (2015) | 3 | 0.739 | 0.594-0.762 | 0.750 | 0.504 |
| Use Behavior (UB) | Bashir and Madhavaiah (2015) | 2 | 0.711 | 0.732-0.754 | 0.711 | 0.552 |

For research, the model fit was presented by the acceptable values of goodness-of-fit indices in Table 4. The statistical values of indices were compared to the acceptance

criteria. In which, the values were CMIN/DF = 4.293, GFI = 0.848, AGFI = 0.802, NFI=0.858, CFI = 0.887, TLI = 0.865, and RMSEA = 0.810.

Table 4: Goodness of Fit for Measurement Model

| Fit Index | Acceptable Criteria | Statistical Values |
|----------------------|--|---------------------------------------|
| CMIN/DF | < 5.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012) | 4.293 |
| GFI | ≥ 0.85 (Sica & Ghisi, 2007) | 0.848 |
| AGFI | ≥ 0.80 (Sica & Ghisi, 2007) | 0.802 |
| NFI | ≥ 0.80 (Wu & Wang, 2006) | 0.858 |
| CFI | ≥ 0.80 (Bentler, 1990) | 0.887 |
| TLI | ≥ 0.80 (Sharma et al., 2005) | 0.865 |
| RMSEA | < 0.08 (Pedroso et al., 2016) | 0.810 |
| Model Summary | | In harmony with empirical data |

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker-Lewis index and RMSEA = Root mean square error of approximation

Discriminant validity was assessed by calculating the square root of the AVEs (Fornell & Larcker, 1981). The findings of this study suggest that the discriminant validity is higher than all inter-construct/factor correlations, as shown in Table 5, thus indicating its supportiveness.

Table 5: Discriminant Validity

| | PU | ATT | PEOU | BI | SI | SP | UB |
|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| PU | 0.708 | | | | | | |
| ATT | 0.809 | 0.784 | | | | | |
| PEOU | 0.601 | 0.638 | 0.758 | | | | |
| BI | 0.349 | 0.377 | 0.271 | 0.748 | | | |
| SI | 0.718 | 0.671 | 0.577 | 0.304 | 0.722 | | |
| SP | 0.607 | 0.530 | 0.493 | 0.249 | 0.559 | 0.709 | |
| UB | 0.436 | 0.357 | 0.381 | 0.180 | 0.415 | 0.667 | 0.742 |

Note: The diagonally listed value is the AVE square roots of the variables
Source: Created by the author.

4.3 Structural Equation Model (SEM)

The SEM analysis after modification yielded satisfactory results, as indicated by CMIN/DF = 4.038, GFI = 0.879, AGFI = 0.843, NFI = 0.866, CFI = 0.895, TLI = 0.875, and RMSEA = 0.078. Thus, Table 6 showed that the modified SEM model had met the desired fit criteria.

Table 6: Goodness of Fit for Structural Model

| Index | Acceptable Criteria | Statistical Values Before Adjustment | Statistical Values After Adjustment |
|----------------|--|--------------------------------------|-------------------------------------|
| CMIN/DF | < 5.00 (Al-Mamary & Shamsuddin, 2015; Awang, 2012) | 6.360 | 4.038 |

| Index | Acceptable Criteria | Statistical Values Before Adjustment | Statistical Values After Adjustment |
|----------------------|-------------------------------|---|---------------------------------------|
| GFI | ≥ 0.85 (Sica & Ghisi, 2007) | 0.790 | 0.879 |
| AGFI | ≥ 0.80 (Sica & Ghisi, 2007) | 0.741 | 0.843 |
| NFI | ≥ 0.80 (Wu & Wang, 2006) | 0.778 | 0.866 |
| CFI | ≥ 0.80 (Bentler, 1990) | 0.805 | 0.895 |
| TLI | ≥ 0.80 (Sharma et al., 2005) | 0.780 | 0.875 |
| RMSEA | < 0.08 (Pedroso et al., 2016) | 0.104 | 0.078 |
| Model Summary | | Not in harmony with empirical data | In harmony with empirical data |

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker-Lewis index and RMSEA = Root mean square error of approximation

4.4 Research Hypothesis Testing Result

The importance of each variable was examined based on its standardized path coefficient (β) and t-value, as presented in Table 7. This study verified the substantial effect of H1, H2, H3, H4, H5, H6, H7, H8.

Table 7: Hypothesis Results of the Structural Equation Modeling

| Hypothesis | (β) | t-Value | Result |
|-------------|-------------|-----------|-----------|
| H1: PU→ATT | 0.974 | 11.620*** | Supported |
| H2: ATT→BI | -0.599 | -1.510* | Supported |
| H3: BI→UB | 1.432 | 5.520*** | Supported |
| H4: PEOU→BI | 0.289 | 3.230*** | Supported |
| H5: PEOU→PU | 0.657 | 9.774*** | Supported |
| H6: PU→BI | 0.211 | 1.963** | Supported |
| H7: SI→BI | 0.158 | 4.246*** | Supported |
| H8: UB→SP | 1.001 | 7.183*** | Supported |

Note: *** p<0.001, ** p<0.01, * p<0.05
Source: Created by the author

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

In this study, the factors affecting the behavioral intention and use Behavior of Chengdu college students in practical teaching were quantitatively studied. The respondents are freshmen from three higher vocational colleges in Chengdu, Sichuan. Previous literature was reviewed to shape the conceptual framework for the study, and relevant theories and research studies were gathered on

the topic. Confirmatory factor analysis (CFA) and structural equation (SEM) path analysis was used to measure and test the validity and reliability of the conceptual model, as well as to verify the influencing factors of college students' behavior intention and use Behavior on practice teaching.

The results confirmed the proposed conceptual framework and verified the relationships among Behavior intention, use of Behavior, and other variables. That was, behavior intention and use behavior are influenced by perceived ease of use, perceived usefulness, attitude, social influence, and students' performance. In conclusion, perceived ease of use, perceived effectiveness, attitude, social influence, behavior intention, use Behavior, and students' performance are all positively correlated. This study aims to realize that these are the key factors that affect the behavioral choice and use of behavior of college students in Chengdu for practical teaching. For conclusions, the study's main findings may be presented in a short Conclusions section, which may stand alone.

5.2 Recommendation

This section includes suggestions for higher vocational students who will participate in practical teaching in the future and recommendations for higher vocational college leaders and educators who will carry out practical teaching.

This study aims to determine the factors that affect the students' willingness to participate in practical teaching in Chengdu, Sichuan Province, and make suggestions to the students, leaders of higher vocational colleges, and educators who participate in practical education. The researchers examined seven factors: perceived usability, behavioral intention, use Behavior, social influence, attitude, perceived usefulness, and student performance. The results show that all the above factors directly or indirectly impact the willingness of higher vocational students to participate in practical teaching. Therefore, students, leaders of higher vocational colleges, and educators should emphasize and develop the above factors to improve students' willingness to participate in practical teaching. The results show that for first-year students, perceived usefulness has the most significant influence on the attitude of higher vocational students to participate in practical education. If students feel that practical teaching has little impact on their development, they may not be interested in practical teaching.

Therefore, first of all, from the student level, we should improve our self-awareness, realize the importance of practical teaching, correct our attitude toward practical education, and participate in practical teaching with a positive attitude. Secondly, the leaders and educators of higher vocational colleges should provide an excellent functional teaching environment for students who participate in practical education, enhance their recognition

of practical teaching, deepen their knowledge and understanding of practical instruction, and further enrich practical teaching methods to improve their willingness to participate in practical education.

Educational institutions should focus on improving the perceived usefulness of practical teaching experiences. This can be achieved by aligning the content and structure of practical teaching modules with real-world applications and career prospects. Students should clearly see the relevance of what they learn in practical settings. Students will be more motivated to participate in practical teaching when they perceive it as beneficial for their future careers. This can lead to increased engagement and better learning outcomes.

5.3 Limitation and Further Study

For the limitations of this study, the first possibility is that the researchers choose the people to study. Because the target group of this study is first-year students in higher vocational colleges, there may be different results and conclusions if the target group is sophomores or juniors in higher vocational colleges. In addition, to expand the research scope and make the research results more accurate and representative, researchers may choose higher vocational colleges in other regions as the research objects, which may bring some discoveries. Second, another limitation may be the limitation of potential variables. In studying behavior intention, especially in the technology acceptance model, other essential factors affecting behavior intention is considered besides the variables used in this study. In this case, future research may include additional variables to check their relationship with behavioral intention. Finally, this study only uses quantitative methods to collect data. In future research, qualitative methods, such as in-depth interviews or focus groups, may be added to comprehensively understand the students' intention of using practical teaching in higher vocational colleges.

References

- Abeer, B. E. D. A., & Elaraby, I. S. (2014). Data Mining: A prediction for Student's Performance Using Classification Method. *World Journal of Computer Application and Technology*, 2(2), 43 - 47.
- Ajzen, I. (1991). The theory of planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: extending UTAUT2 with trust. *International Journal of Information Management*, 37(3), 99-110. <http://doi.org/10.1016/j.ijinfomgt.2017.01.002>

- Alkhadim, M., Gidado, K., & Painting, N. (2019). Perceived crowd safety in large space buildings: The confirmatory factor analysis of perceived risk variables. *Journal of Engineering, Project, and Production Management*, 8(1), 22-39. <https://doi.org/10.32738/jepm.201801.0004>
- Al-Mamary, Y. H., & Shamsuddin, A. (2015). Testing of The Technology Acceptance Model in Context of Yemen. *Mediterranean Journal of Social Sciences*, 6(4), 268-273. <https://doi.org/10.5901/mjss.2015.v6n4s1p268>
- Armenteros, M., Morcuende, D., Ventanas, S., & Estevez, M. (2013). Application of Natural Antioxidants from Strawberry Tree (*Arbutus unedo* L.) and Dog Rose (*Rosa canina* L.) to Frankfurters Subjected to Refrigerated Storage. *Journal of Integrative Agriculture*, 12(11), 1972-1981.
- Awang, Z. (2012). *A Handbook on SEM Structural Equation Modelling: SEM Using AMOS Graphic* (5th ed.). Kota Baru.
- Bagchi, A. K. P. (2005). Growth and Structural Change in the Economy of Gujarat (1970-71 to 2000-01). *Economic and Political Weekly*, 40(28), 3039-3047
- Bashir, I., & Madhavaiah, C. (2015). Consumer Attitude and Behavioral Intention Towards Internet Banking Adoption in India. *Journal of Indian Business Research*, 7(1), 67-102. <https://doi.org/10.1108/jibr-02-2014-0013>
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246. <https://doi.org/10.1037/0033-2909.107.2.238>
- Carvajal-Trujillo, E., Escobar-Rodríguez, T., & Monge-Lozano, P. (2014). Factors that influence the perceived advantages and relevance of Facebook as a learning tool: An extension of the UTAUT. *Australasian Journal of Educational Technology* 30(2), 1-10.
- Chen, Y.-S., & Chang, C.-H. (2013). Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk. *Journal of Business Ethics*, 114(3), 1-10.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340. <https://doi.org/10.2307/249008>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. *Journal of Applied Social Psychology*, 22(14), 1111-1132. <https://doi.org/10.1111/j.1559-1816.1992.tb00945.x>
- Deng, S., Liu, Y., & Qi, Y. (2011). An empirical study on determinants of web-based questionnaire services adoption. *Online Information Review*, 35(5), 789-798. <https://doi.org/10.1108/14684521111176507>
- Elm, D. R. (2019). Cognitive Moral Development in Ethical Decision-making, Business Ethics. In D. R. Elm (Ed.), *Business and Society 360* (pp. 155-177). Emerald Publishing Limited. <https://doi.org/10.1108/S2514-175920190000003006>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50.
- Gupta, K., & Arora, N. (2019). Investigating consumer intention to accept mobile payment systems through unified theory of acceptance model: An Indian perspective. *South Asian Journal of Business Studies*, 9(1), 88-114. <https://doi.org/10.1108/SAJBS-03-2019-0037>
- Hernández-Ortega, B. (2017). Do not Believe Strangers: Online Consumer Reviews and the Role of Social Psychological Distance. *Information & Management*, 55(1), 1-10.
- Hill, N. E., & Tyson, D. F. (2009). Parental Involvement in Middle School: A Meta-Analytic Assessment of the Strategies That Promote Achievement. *Developmental Psychology*, 45(3), 740-763. <http://dx.doi.org/10.1037/a0015362>
- Hu, T., Zhang, D., & Wang, J. (2015). A Meta-Analysis of the Trait Resilience and Mental Health. *Personality and Individual Differences*, 76, 18-27. <https://doi.org/10.1016/j.paid.2014.11.039>
- Judd, E. (2014). Apparent and true resistant hypertension: definition, prevalence and outcomes. *Journal of Human Hypertension volume*, 28(8), 463-468.
- Junco, R., & Cotton, S. R. (2012). The relationship between multitasking and academic performance. *Computers and Education*, 59(2), 505-514. <https://doi.org/10.1016/j.compedu.2011.12.023>
- Lee, J.-W. (2010). Online support service quality, online learning acceptance, and student satisfaction. *The Internet and Higher Education*, 13(4), 277- 283. <https://doi.org/10.1016/j.iheduc.2010.08.002>
- Lin, H.-F. (2013). The effect of absorptive capacity perceptions on the context-aware ubiquitous learning acceptance. *Campus-Wide Information Systems*, 30(4), 249-265. <https://doi.org/10.1108/cwis-09-2012-003>
- Liu, Y., Sheng, Z., Liu, H., Wen, D., He, Q., Wang, S., Shao, W., Jiang, R. J., An, S., Sun, Y., Bendena, W. G., Wang, J., Gilbert, L. I., Wilson, T. G., Song, Q., & Li, S. (2009). Juvenile hormone counteracts the bHLH-PAS transcription factors MET and GCE to prevent caspase-dependent programmed cell death in *Drosophila*. *Development*, 136(12), 2015--2025.
- Moradi, K., & Sabeti, G. (2014). A Comparison of EFL Teachers and EFL Students' Understandings of 'Highly Effective Teaching'. *Procedia - Social and Behavioral Sciences* 98, 1204-1213
- Mtebe, J. S., & Raisamo, R. (2014). Challenges and instructors' intention to adopt and use open educational resources in higher education in Tanzania. *The International Review of Research in Open and Distributed Learning*, 15(1). <https://doi.org/10.19173/irrodl.v15i1.1687>
- Newman, A. J. (1980). Aesthetic Sensitizing and Moral Education. *Journal of Aesthetic Education*, 14(2), 93. <https://doi.org/10.2307/3332480>
- Nikou, S., & Bouwman, H. (2016). Domestication of smartphones and mobile applications: A quantitative mixed-method study. *Mobile Media & Communication*, 4(3), 1-10.
- Ong, C. S., Lai, J. Y., & Wang, Y. S. (2004). Factors Affecting Engineers' Acceptance of Asynchronous E-Learning Systems in High-Tech Companies. *Information and Management*, 41(6), 795-804. <http://dx.doi.org/10.1016/j.im.2003.08.012>
- Park, H., & Kim, Y.-K. (2014). The role of social network websites in the consumer-brand relationship. *Journal of Retailing and Consumer Services*, 21(4), 460-467

- Pedroso, R., Zanetello, L., Guimaraes, L., Pettenon, M., Goncalves, V., Scherer, J., Kessler, F., & Pechansky, F. (2016). Confirmatory factor analysis (CFA) of the crack use relapse scale (CURS). *Archives of Clinical Psychiatry*, 43(3), 37-40. <https://doi.org/10.1590/0101-60830000000081>
- Sarmiento, R., & Costa, V. (2016). *Comparative Approaches to Using R and Python for Statistical Data Analysis* (1st ed.). IGI Global Press.
- Sharma, G. P., Verma, R. C., & Pathare, P. (2005). Mathematical modeling of infrared radiation thin layer drying of onion slices. *Journal of Food Engineering*, 71(3), 282-286. <https://doi.org/10.1016/j.jfoodeng.2005.02.010>
- Sheng, H., Nah, F. F.-H., & Siau, K. (2008). An Experimental Study on Ubiquitous commerce Adoption: Impact of Personalization and Privacy Concerns. *Journal of the Association for Information Systems*, 9(6), 1-10.
- Sica, C., & Ghisi, M. (2007). The Italian versions of the Beck Anxiety Inventory and the Beck Depression Inventory-II: Psychometric properties and discriminant power. In M.A. Lange (Ed.), *Leading-Edge Psychological Tests and Testing Research* (pp. 27-50). Nova.
- Ukut, I., & Krairit, D. (2019). Justifying students' performance, A comparative study of ICT students' and instructors' perspectives. *Interactive Technology and Smart Education*, 16(1), 18-35.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204. <https://doi.org/10.1287/mnsc.46.2.186.11926>.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478. <https://doi.org/10.2307/30036540>
- Vululleh, P. (2018). Determinants of Students' E-Learning Acceptance in Developing Countries: An Approach Based on Structural Equation Modeling (SEM). *International Journal of Education and Development Using Information and Communication Technology*, 14(1), 141-151.
- Wood, E., Zivcakova, L., Gentile, P., Archer, K., De Pasquale, D., & Nosko, A. (2012). Examining the impact of off-task multi-tasking with technology on real-time classroom learning. *Computers & Education*, 58(1), 365-374. <https://doi.org/10.1016/j.compedu.2011.08.029>
- Wu, J. H., & Wang, Y. M. (2006). Measuring KMS success: A respecification of the DeLone and McLean's model. *Information and Management*, 43(6), 728-739. <https://doi.org/10.1016/j.im.2006.05.002>.
- Yang, K. (2010). Determinants of US consumer mobile shopping services adoption: implications for designing mobile shopping services. *Journal of Consumer Marketing*, 27(3), 262-270. <https://doi.org/10.1108/07363761011038338>
- Yu, K., & Huang, G. (2020). Exploring consumers' intent to use smart libraries with technology acceptance model. *The Electronic Library*, 38(3), 447-461. <https://doi.org/10.1108/el-08-2019-0188>
- Zhang, L. F. (2016). *Research on Employee Performance Assessment of TJS Company* (1st ed.). Dalian.
- Zhong, K., Feng, D., Yang, M., & Jaruwankul, T. (2022). Determinants of Attitude, Satisfaction and Behavioral Intention of Online Learning Usage Among Students During COVID-19. *AU-GSB E-JOURNAL*, 15(2), 49-57. <https://doi.org/10.14456/augsbejr.2022.71>