

# Service Quality and Students' Satisfaction In Higher Vocational College in China

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**Abstract:** The concern of Service Quality and Student Satisfaction has become of critical concern globally. The purpose of this study is to examine the relationship between service quality and students' satisfaction in one of the higher vocational college in China. This study is to extend the service performance model of service quality in a higher vocational education in China. Descriptive research design and quantitative method was employed in this study. Quantitative data was collected using questionnaires. The sample of the study consists of 400 second year students (200 males and 200 females ) from a higher vocational college in Guangdong Province, China. Prior to the actual study, a pilot test was carried out to obtain the reliability and validity of the instrument. The quantitative data was analyzed using correlation and regression analysis (Statistical Package for the Social Sciences, SPSS, version 25.0). The results show that there is a high positive correlation between five dimensions of service quality and students' satisfaction. Further the study also identified that there are strong significant effects on three dimensions of service quality (tangibility, reliability, empathy) with students' satisfaction. The results confirm that service quality is a vital factor that determines the students' satisfaction. By improving service quality in higher vocational college especially in three dimensions of service quality (tangibility, reliability, empathy), it can enhance students' satisfaction.

**Keywords:** Service Quality, Students' Satisfaction, Higher Vocational College, China.

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## I. Introduction

### 1.1 Background of the study

Education is the guarantee on the development of culture, politics, economy, and society. (Vuković, Damjanović, & Papić-Blagojević, 2020). Quality is essential in developing the higher vocational education institution. This leads to the service quality of the higher vocational education institution being a concern. Governments prompted to improve skills-based education, also known as the higher vocational institution. The quality and characteristics of higher vocational colleges are different from that of the university. Kusumaningrum (2016) pointed out "the characteristics of vocational education are different from academic education". High vocational education brings a lot of benefits to a country where skilled workers are highly required (Rinanto, Pujianto, Rosyidi, & Prasetyo, 2019). The concern of Service Quality and Student Satisfaction has become a concern globally.

Some data illustrate the effort that China has made in Higher vocational education development. According to statistics released by China's Statistics Department in 2019, there were totally 2,688 higher education institutions in China, including 1,265 undergraduate colleges and 1,423 vocational colleges, of which vocational colleges taking 52.94% of the total. There were a total of 30.3153 million students in higher education institutions, including 12.8071 million vocational college students taking 42.25% of the total number. The higher vocational institutions started late in China, but it accounts for half of higher education today. Since the expansion of enrollment from 1999, China has put forward over 30 items of policies in improving the higher vocational education. Under these policies, the development of the higher vocational education has a period with various focuses at different stages.

According to Fan (2020), The stages can be divided into different periods : Stage 1 (1999–2005), Stage 2 (2006–2010), Stage 3 (2011–2018) and Stage 4 (2019–present). The current stage and stress is in the same way on improving the service quality and expanding the scale of higher vocational colleges. In recent years, the internationalization of education has increasingly become the focus of educational reform and development. As such the policies and files such as “Decision on Accelerating the Development of Modern Vocational Education”, “Action Plan for Innovative Development of the higher vocational education institution (2015-2018)” and the Action Plan for Promoting “the Belt and Road Initiative” and other plans put forward show the need to further promote the service quality of higher vocational college education (Fan,2020).

Service quality and student satisfaction play important roles in the development of higher vocational colleges. Only through constant improvement of service quality and student satisfaction can higher vocational colleges experience sustainable, stable and healthy development. On the basis of the previous researches in service quality and student satisfaction, there are many studies focusing on service quality and student satisfaction in higher education, little attention has been given to service quality and student satisfaction in higher vocational education. Allowing students to become the main body of evaluation of the higher vocational education can help improve the quality of the higher vocational college and face the challenges of mass number of colleges, marketing and internationalization issues. There are only a few studies which are conducted regarding the relationship between service quality and students' satisfaction in higher vocational colleges in China. In this context, the purpose of this study was to adopt the service performance (SERVPERF) model and investigate the relationship between five dimensions of service quality with students' satisfaction in higher vocational college in China.

## **1.2 Statement of Problem**

In China, Government institutions propose clearly that they should develop vocational education quality vigorously. In the process of the popularization of higher vocational education, the competition in enrolling new students is becoming serious. College students are becoming more conscious of customer satisfaction, how to satisfy students and how to survive in the fierce competition is becoming realistic (Zhou, 2012). As the higher vocational education has gradually transferred to mass education, education quality evaluation is becoming increasingly diversified. Vocational college students, the main educational objects, should also be the main educational objects of quality evaluation. According to the training process of higher vocational students, professional learning, internships and after graduation development, the education quality evaluation based on the perspective of students is needed for higher vocational students' occupational ability development, and it is also the demand for connotative development of higher vocational college reform (Wu & Li, 2012). Yuan(2010) pointed out Higher Vocational college students were less satisfied with service quality. Since the implementation of the enrollment expansion strategy of higher vocational colleges, it has aroused concern from all walks of life, especially the cultivation quality of the students. The expansion of millions of higher vocational colleges plays a role in the popularization of higher education in China. However, such rapid scale expansion causes problems in higher vocational college, how to ensure quality is the primary problem that higher vocational colleges face. With the increase in the number of higher vocational college students, how to improve the service quality and students' satisfaction has become the focus of the parties concerned (Li, 2020).

## **1.3 Objective of the Study**

The research objectives are as follows:

1. To investigate whether there has a relationship between ‘Tangibility’ dimension of service quality and student satisfaction in higher vocational college.
2. To investigate whether there has a relationship between ‘Reliability’ dimension of service quality and student satisfaction in higher vocational college.
3. To investigate whether there has a relationship between ‘Responsiveness’ dimension of service quality and student satisfaction in higher vocational college.
4. To investigate whether there has a relationship between ‘Assurance’ dimension of service quality and student satisfaction in higher vocational college.

5.To investigate whether there has a relationship between 'Empathy' dimension of service quality and student satisfaction in higher vocational college.

#### **1.4 Hypotheses of the Study**

Five null hypotheses were formulated based on the objective of the study:

Ho1:There is no correlation between 'Tangibility' dimension of service quality and students' satisfaction in higher vocational college.

Ho2:There is no correlation between 'Reliability' dimension of service quality and students' satisfaction in higher vocational college.

Ho3:There is no correlation between 'Responsiveness' dimension of service quality and students' satisfaction in higher vocational college.

Ho4:There is no correlation between 'Assurance' dimension of service quality and students' satisfaction in higher vocational college.

Ho5:There is no correlation between 'Empathy' dimension of service quality and students' satisfaction in higher vocational college.

## **II. Review Of Literature**

### **2.1 Higher Vocational Education**

Chinese higher vocational education fits the social needs as it leads the cultivation of talents and is a way to adapt to the combination of these colleges and cooperations, and has trained a large number of high-tech talents such as grassroots positions as well as service construction and production and realize the knowledge of students. It adapts to the capacity requirements required for senior professional positions in colleges and improve the quality and structure of talents. It pays attention to the training content in the training program. Graduates of these colleges must have certain relevant professional skills and work ability and meet the standards set by the social security department and the labor department (Ministry of Education of China, 2010). Especially since 1999, with the rapid expansion of higher education, the discussion on this topic has become prevalent. Most of the researchers are focused on the researchers about the technical such as the recruiting methods and the curriculum reform, especially about the referential value the influence of the western education system (Xiong, 2011).

### **2.2 Service quality and student satisfaction in higher education**

In the 1970s and 1980s, scholars in a number of countries began to study service quality. Most of the early researches focused on the general concepts and structural elements of service quality in the field of commercialization. As people pay more attention to the concept of quality and its importance, the conceptualization and measurement of service quality have been fully studied. The PZB research group has the most outstanding research results in this period. In 1985, PZB people cooperation published an article called a conceptual model of service quality and its application in the future study of thesis, which puts forward the service quality gap analysis model, namely the SERVQUAL model. On this basis, scholars have carried out extensive and in-depth research on service quality, and gradually introduced the concept and measurement of service quality into the higher education background. Driven by the market economy, higher education is facing fierce internal and external market competition. The subject of service quality in higher education has become increasingly popular with time. Service quality is really a motion and activity process. According to Oldfield and Baron (2000) students typically require three dimensions to be satisfied, to wit: requisite encounters, which relate to essential conditions required to satisfy study needs, acceptable encounters (desirable but not imperative) and functional encounters (practical considerations). Parasuraman et al. (1985) listed ten determinants of service quality that can be generalized to any type of service. The 10 factors is reorganized in the well known concept of the SERQUAL model (Parasuraman et al., 1990) which include "tangibility", "reliability", "responsiveness", "assurance", and "empathy":

(1) Tangibility

The tangibility refers to the appearance of physical facilities, the equipment and the materials for communication. All these are provided physical hint for the corporation service. And the scale enhance the image of the corporation. So the tangible dimension is very important for the corporations. And most of most times in most scenarios the tangible equipments will be placed

(2) Reliability

Reliability refers to the ability for giving the reliable and accurate implementation of commitments. Broadly speaking, the reliability refers to on the delivery surface, the offering of surface service to solve the problem and commitment on the price. The clients referred to cooperate on with both companies and clients with confidentiality. So the fidelity and the recognition of service quality is the most important factors in service. The service companies must know about the expectation for the credibility especially for the bank services, the reliability dimension involves the consistency, the right to know, the attitude to complaints, regularity, and accountability.

(3) Responsiveness

The responsiveness dimension refers to answering the clients acquire requests immediately and solve their complaints. It also concerns the timeliness the appearance, the behavior, the professionalism and commitment. It can be calculated by the waiting time for the customers for aids and the waiting time for answering questions . Through continuous observations of in the provided service and the attitudes of the clients, the responsiveness can be coordinated

(4) Assurance

The fourth dimension is the assurance, it can be defined as the knowledge of the recruiters, the knowledge of the personal and the personal belief and confidence for stimulating the clients trust. And this dimension is very important in the bank business and insurances company sources. For the clients there is emphasis on the credibility and insurance and they prefer to choose the organizations with better assurance such as the the insurance and stake brokers.

(5) Empathy

The empathy is another dimension. It can be defined as the care and personal concern on the clients and this aspect is on the purpose of delivering the unique meanings of the service through personal service. And the key point in this dimension is to catering to different peoples requirements. Under this hypothesis, the service providers need to know the personal requirements or the preferences of every customers.

Most research into student satisfaction examines customer perspectives. Therefore, the creation of a standard definition of student satisfaction emerges as an obvious challenge. This requires customer satisfaction theory to be modified to permit student satisfaction to be elucidated (Hom, 2002). Whilst viewing students as customers may be inherently problematic, their increasing emphasis on higher education as a marketplace renders it imperative that students are appreciated as customers or fee-payer with a right to their views and opinions being heard and heeded (William, 2002). The student satisfaction is a short term attitude which is generated through the assessment from the students on their schooling experiences. The student satisfaction can be defined as the function between them. Relative experience on a service is called educational service. And there are recognition performance when. considering all of the above factors. The concept of student satisfaction in this study is mainly described based on the overall concept of student satisfaction. Student satisfaction is the attitude and feeling generated after students feel the work in all aspects of the college. Student satisfaction refers to the vocational college students, which provide the products and services after experience the feeling to satisfy his needs and psychological evaluation, it directly reflects the satisfaction degree of students in higher vocational colleges.

### **2.3 Relationship between Service Quality and Students' Satisfaction**

Globally, the relationship between service quality and students' satisfaction is a subject that researchers in over the world have continuously discussed many decades. Hasan, Ilias, Rahman and Razak (2008) revealed

that all the dimensions of service quality are highly correlated and very significant with service quality. Temize and Turkyilmaz (2012) had findings that students' satisfaction will be strongly affected by efforts relating to the quality of services provided. Truong, Pham, and Vo (2016) also had similarly findings that service quality have significant relationships with the overall satisfaction of the students who were studying at the private colleges. Mwiya, Bwalya, Siachinji, Sikombe, Chanda, and Chawala (2017) found that the higher the service quality in five dimensions, the higher customer satisfaction in Zambia. Mashene (2019) concluded that five dimensions of service quality are each significantly positively related to overall customer satisfaction in Tanzania. The regression results indicate that tangibles, reliability, empathy, and assurance have a significant effect on students' satisfaction. In India, Rajput et al. (2019) identified the strong effect of all the elements of service quality i.e. tangibility, reliability, responsiveness, empathy on student satisfaction. In their study, the correlation analysis reflects the high correlation between five dimensions (Tangibility, Assurance, reliability, Responsiveness, Empathy dimension) of service quality and Student Satisfaction. A similar result was found in the study done by Asaduzzaman, Hossain, and Rahman (2013), which indicated that there is a significant correlation among all the constructs with student satisfaction and also among each other. Malik, Danish, and Usman (2010) did their study in Pakistan and found that the tangibility, assurance, reliability and empathy dimension have a strong and significant impact on the students' satisfaction from an institution.

Research on service quality in higher education institutions in China is relatively late. There was limited literature about the relationship between service quality and students' satisfaction in higher vocational colleges in China. The specific relationship and influence mechanism between the two is not clear enough, most of the studies only explore the overall correlation of two variables directly, not for each service quality dimensions and correlation analysis and regression analysis between student satisfaction. Hong (2007) conducted a research on higher vocational education service quality and student satisfaction in higher vocational colleges, and pointed out that there is a strong correlation between students' evaluation of higher vocational education quality and students' satisfaction and behavior tendency. Hu (2015) in his study showed that there is a positive correlation between service quality and student satisfaction in higher vocational colleges. So higher vocational colleges should adhere to the concept of customer satisfaction, course system, teaching facilities, construction of campus culture, practice and teaching to increase high quality resources, enhance student satisfaction and the related benefit of improving the attractions of higher vocational colleges. Shi and Pu (2011) conducted a study indicating that tangibility, reliability and responsiveness of college service quality have positive influence on student satisfaction.

### **III. Methodology**

This study used descriptive research design and quantitative method.

#### **3.1 Research Framework**

The study employed the SERVPERF model (Brochado, 2009; Cronin & Taylor, 1994) to measure service quality in higher vocational college in China. SERVPERF model is a variant of the SERVQUAL model that adopts a performance based approach to measuring service quality by focusing only on the perceptions component. The dependent variable in this study is students' satisfaction. The independent variables in this study is five dimensions of service quality, namely tangibility, reliability, responsiveness, assurance and empathy.

#### **3.2 Sample**

This study was conducted at a higher vocational college which is situated in the southern part of China. The population is about 20,000 students. Purposive sampling is used to select 400 samples, they are second year students, aged between 19 to 20 years old. The sample comprised of 200 male and 200 female students, enrolled in the academic year 2019 and from four different majors (English, Robotic, Business and Computer). The demographic information includes the following factors: gender, major and home location. The demographics information is based on frequency and percentages. From the 400 respondents in this study, 200 (50%) are male and 200 (50%) are females, 100(25%) respondents are major in English, 100 (25%) respondents are major in Robotic, 100 (25%) respondents are major in Business, 100 (25%) respondents are major in Computer. Majority of the respondents are from urban (72 %) and others are from rural(28%).

#### **3.3 instruments**

This study used questionnaires to collect the data needed. The questionnaire design was based on the SERVPERF model (Brochado, 2009; Cronin & Taylor, 1994) for measuring students' perceptions of service quality at the college.

There are two questionnaires. Questionnaire 1 is designed to measure students' perception of Service Quality in a higher vocational college with 30 items, including five service quality dimensions: tangibility (1-5

items), reliability (6-10 items), responsiveness (11-16 items), assurance (17-22 items), empathy (23-30 items). Questionnaire 1 used in this study are adapted from Parasuraman, Zeithaml, & Berry. (1990) with the items used extracted from Brochado (2009). Questionnaire used the 5-point Likert scales, from 1 for strongly disagree to 5 for strongly agree (strongly disagree =1, disagree =2, not sure =3, agree =4, strongly agree=5 ). Questionnaire 2 is designed to measure students' satisfaction in a higher vocational college with 15 items, which was adapted from (Hasan et al., 2008). Questionnaire used 5-point Likert scales, from 1 for very dissatisfied to 5 for very satisfied(very dissatisfied=1,dissatisfied =2,not sure =3,satisfied=4,very satisfied=5 ).

**3.4 Data Analysis Procedures**

Prior to the actual study, a pilot test was carried out to obtain the reliability and validity of the instrument. The quantitative data was analyzed through the Statistical Package for the Social Sciences (SPSS) Version 25.0. Reliability test was applied to check the reliability of the questionnaire with the help of Cronbach Alpha. Correlation analysis was used to find the correlation between five dimensions of service quality and students' satisfaction. Regression was applied to find out the significant impact of tangibility, reliability, responsiveness, assurance, and empathy on students' satisfaction.

**IV. Results And Discussion**

**4.1 Reliability**

Reliability was checked by Cronbach alpha method using SPSS software and the values for all variables (Tangibility, Reliability, Responsiveness, Assurance, Empathy, and Students' Satisfaction) was found to be above the standard value of .7. Therefore, the questionnaire in the current study for measuring the variable can be treated as highly reliable.

**4.2 Correlations results**

Table 1: *Correlation Results of Service quality and Students' satisfaction*

		Correlations					
		Students' Satisfaction	Tangibility	Reliability	Responsiveness	Assuarance	Empathy
Students' Satisfaction	Pearson Correlation	1	.828**	.848**	.836**	.833**	.877**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	400	400	400	400	400	400
Tangibility	Pearson Correlation	.828**	1	.865**	.868**	.833**	.867**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	400	400	400	400	400	400
Reliability	Pearson Correlation	.848**	.865**	1	.920**	.904**	.909**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	400	400	400	400	400	400
Responsive ness	Pearson Correlation	.836**	.868**	.920**	1	.911**	.923**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	400	400	400	400	400	400
Assuarance	Pearson Correlation	.833**	.833**	.904**	.911**	1	.910**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	400	400	400	400	400	400

Empathy	Pearson	.877**	.867**	.909**	.923**	.910**	1
	Correlation						
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	400	400	400	400	400	400

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The purpose of this analysis was to see the correlation between five dimensions of service quality and student satisfaction in higher vocational college. The Correlations results of 400 students' perceptions of service quality and student satisfaction are shown in Table 1.

**Ho1. There is no correlation between 'Tangibility' dimension of service quality and students' satisfaction in higher vocational college.**

The findings from Table 1 show that the correlation coefficients of students' satisfaction and tangibility is,  $r=0.828$ ,  $p=.000$ . The correlation results clearly revealed that there is a high positive correlation between students' satisfaction and tangibility dimension of service quality. As such, these findings rejected Ho1. Similarly, these findings support the study by Hasan et al. (2008) who demonstrated that all the dimensions are highly correlated and very significant with one another. Therefore, the results proven that the service quality dimension (tangibility) have a significant relationship with students' satisfaction. Furthermore, these findings are consistent with the results by Rajput et al. (2019) which reflects the high correlation between five dimensions of service quality and students' satisfaction by the correlation analysis.

**Ho2. There is no correlation between 'Reliability' dimension of service quality and students' satisfaction in higher vocational college.**

The findings in Table 1 show that the correlation coefficients of students' satisfaction and reliability dimension of service quality is,  $r=0.848$ ,  $p=.000$ . The correlation results indicated that there is a high positive correlation between students' satisfaction and reliability dimension of service quality. These findings rejected Ho2. These findings support the studies of Ou (2007) who emphasized that there is a strong correlation between five dimensions of service quality and students' satisfaction. In addition, the current findings support the study by Hu (2015) who stressed that there is a positive correlation between five dimensions of service quality and students' satisfaction in higher vocational colleges.

**Ho3. There is no correlation between 'Responsiveness' dimension of service quality and students' satisfaction in higher vocational college.**

The findings in Table 1 show that the correlation coefficients of students' satisfaction and responsiveness dimension of service quality is,  $r=0.836$ ,  $p=.000$ . The correlation results revealed that there is a high positive correlation between students' satisfaction and responsiveness dimension of service quality. As such, these findings are parallel with prior studies in Colombia by Cardona and Bravo (2012). Current findings are also similar with a study in Jordan by Twaissi and Al-Kilani (2015), which indicated that studentsat is faction significantly influenced by the five dimensions of service quality. In addition, this findings support the study in Zambia by Mwiya et al. (2017) who found that that the higher the level of perceived good service performance in responsiveness to customer's needs, the higher the level of customer satisfaction.

**Ho4. There is no correlation between 'Assurance' dimension of service quality and students' satisfaction in higher vocational college.**

The findings from Table 1 show that the correlation coefficients of students' satisfaction and assurance dimension of service quality is,  $r=0.833$ ,  $p=.000$ . The correlation results showed that there is a high positive correlation between students' satisfaction and assurance dimension of service quality. These findings rejected Ho4. A similar result was found in the study done by Asaduzzaman, Hossain and Rahman (2013) who found that there is a significant correlation among all the dimensions of service quality with student satisfaction and also among each other. In addition, Truong, Pham, and Vo (2016) also had similar findings that service quality have significant relationships with the student satisfaction.

**Ho5. There is no correlation between 'Empathy' dimension of service quality and students' satisfaction in higher vocational college.**

The findings from Table 1 show that the correlation coefficients of students' satisfaction and empathy dimension of service quality is,  $r=0.877$ ,  $p=.000$ . The correlation results indicated that there has a high positive correlation between students' satisfaction and empathy dimension of service quality. These results failed to accept Ho5. These findings support the study in Pakistan by Malik, Danish, and Usman (2010) who found that the tangibility, assurance, reliability and empathy have a strong and significant impact on the students' satisfaction. Moreover, research conducted by Onditi and Wechuli (2017) clearly mentioned that the five dimensions of service quality in higher education has a significant influence on students' satisfaction.

**4.3 Regression results**

Table 2: Results of multiple regression analysis with dimensions of service quality as predictor of students' satisfaction

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.891 <sup>a</sup>	.795	.792	5.82127

a. Predictors: (Constant), Empathy, Tangibility, Assurance, Reliability, Responsiveness

b. Dependent Variable: Students' Satisfaction

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	51679.980	5	10335.996	305.012	.000 <sup>b</sup>
	Residual	13351.530	394	33.887		
	Total	65031.510	399			

a. Dependent Variable: Students' Satisfaction

b. Predictors: (Constant), Empathy, Tangibility, Assurance, Reliability, Responsiveness

Coefficients <sup>a</sup>								
Model		Unstandardized		Standardized	t	Sig.	Collinearity	
		Coefficients					Statistics	
		B	Std. Error	Beta	Tolerance	VIF		
1	(Constant)	5.405	1.432		3.774	.000		
	Tangibility	.611	.143	.216	4.275	.000	.205	4.883
	Reliability	.548	.197	.189	2.776	.006	.113	8.880
	Responsiveness	-.162	.177	-.067	-.913	.362	.098	10.220
	Assurance	.230	.161	.092	1.431	.153	.126	7.912
	Empathy	.897	.127	.496	7.064	.000	.106	9.465

a. Dependent Variable: Students' Satisfaction

In this study, regression analysis has been utilized to find out the significant impact of its dimension on student satisfaction. The purpose of this analysis was to see the significance effect between students' perceptions of service quality and student satisfaction in higher vocational college. The regression results of 400 students' perceptions of service quality and student satisfaction are shown in Table 2. In the area of impact of tangibility, reliability, responsiveness, assurance and empathy on student satisfaction, the value of Adjusted R square is 0.795. This indicates that the dimensions of tangibility, reliability, responsiveness, assurance and empathy in service quality show a 79% variance in determining student satisfaction. The model used for the regression had a good fit indicated by F value =305 and  $p<.05$ , which was found to be significant. Further the

relation between tangibility, reliability, responsiveness, assurance, empathy and students' satisfaction is indicated by standardized coefficient beta values. Beta values were .216, .189, .496 and  $p < .05$  for tangibility, reliability and empathy respectively which were found to be significant at level of 5%, indicating that tangibility, reliability and empathy had a significant effect on students' satisfaction. The higher the level of tangibility, reliability, empathy provided by the higher vocational college in China, the higher the level of student's satisfaction. However, the current findings are not consistent with the study by Malik, Danish and Usman (2010) who proved that the tangibility, assurance, reliability and empathy have a strong and significant impact on the students' satisfaction from an institution in Pakistan. In addition, the results are not paralleled with findings by Mashene (2019) who indicate that tangibles, reliability, empathy and assurance have a significant effect on students' satisfaction in Tanzania. It can be seen from the regression analysis that the different dimensions had different effects on students' satisfaction in different countries.

## V. Conclusion

In conclusion, the study confirms the relationship between service quality and students' satisfaction in one of the higher vocational college in China. Firstly, from the correlation results, it indicates that each service quality dimension has a high positive correlation with students' satisfaction in higher vocational college. It clearly shown that each factor of service quality had a strong positive correlation with student satisfaction. Higher vocational colleges should adopted effective methods to improve each service quality dimension, and then improve students' satisfaction. To achieve the goal of improving students' satisfaction, higher vocational colleges must first provide high-quality higher vocational education services. As a result, increasing the quality of service in higher vocational education can boost student satisfaction. Secondly, the results of regression analysis show that three aspects of service quality (tangibility, reliability, and empathy dimension) have a significant impact on students' satisfaction. As such, three dimensions is relevant predictor for service quality namely tangibility, reliability, and empathy in the study. This means that three dimensions of service quality as more important need to be offered by the college. The higher the level of tangibility, reliability, and empathy in the higher vocational college's service quality, the higher the level of student satisfaction in the higher vocational college. The students' service quality is a leading influential factor of student satisfaction. It provides directions for improving higher vocational education service in higher vocational colleges. Moreover, this study also presented here contributes to the existing knowledge of service quality and students' satisfaction both theoretically and practically. Theoretically, this study contributes to the body of knowledge. Considering the service characteristics of higher vocational education, this study deeply analyzed the service quality and student satisfaction in higher vocational education. According to the proposed service quality model and scale in China and other countries, the study constructed the higher vocational education service quality scale and student satisfaction scale. Practically, the study helps the management of the higher vocational college to identify the relationship between five dimensions of service quality and students' satisfaction, and improve them in higher vocational college.

However, there are still some limitations in this study. This is a quantitative study, only using questionnaire to collect the data. As such, it is hoped that future researchers will also use qualitative data from semi-structured interviews to get a more in depth data on the relationship between service quality and students' satisfaction and. In addition, the research objects of this study are only from the second-year college students. With the increase of students' age and work experience in higher vocational education, their satisfaction level with the service quality may change to some extent. Therefore, future researchers can be consider to include students who have graduated as their sample.

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