

Factors Influencing Satisfaction on Internship of Art Normal Students in Sichuan, China

Kuilin Zhao^{1,*}, Jingying Huang² and Somsit Duangekanong³

**¹School of Business and Advanced Technology Management,
Assumption University, 10240, Thailand**

**²Recruitment and Employment Department,
Sichuan University of Arts and Science, China**

**³School of Business and Advanced Technology Management,
Assumption University, 10240, Thailand**

***Corresponding author's e-mail: kuilinzhao086@gmail.com**

Received: June 8, 2022 Revised: July 22, 2022 Accepted: August 3, 2022

Abstract

This study aims to determine the significant impact of supervisor support, task clarity, service quality, perceived value, and student expectation on art student satisfaction on educational internship. This quantitative study conducted the data collection by distributing questionnaires. Before the data collection, the item-objective congruence (IOC) index was approved by three experts at a score above 0.5, and Cronbach's alpha coefficient value of the pilot test was acceptable at above 0.7. The sampling methods used were purposive, stratified random, and convenience samplings. The data were analyzed by confirmatory factor analysis (CFA), and the hypotheses were tested by the structural equation model (SEM). The results showed that service quality, supervisor support, task clarity, and perceived value significantly impacted art students' internship satisfaction. Service quality had the most substantial significant impact on art students' internship satisfaction. However, there was no causal relationship between student expectation and student satisfaction. In conclusion, universities and internship sites should focus on improving service quality, providing skilled supervisors, giving higher task clarity, and promoting values of the educational internship program to ensure student satisfaction.

Keywords: Perceived value, Service quality, Student satisfaction, Educational internship, Student expectation

Introduction

In China, students majoring in arts education are called "normal art students". Their future career is expected to be art teachers. Before graduating from university, art normal students will be required to complete a full-time educational internship at the internship sites

such as kindergartens, primary schools, and middle schools. The educational internship is a practical course as a prerequisite for art teachers. It is experiential learning for art students to practice their art teaching in primary and secondary schools to execute their knowledge and skills (Davies, 1990). The educational internship is essential for art students, universities, and internship sites because it helps them to understand the status quo of basic art education, master teaching skills, and develop professional ability. For universities, educational internship improves the quality of talented trainers and employment rate. For the internship sites, accepting interns and giving them suitable training and specialization is part of the talent development plan (Maertz et al., 2014). Thus, China's Ministry of Education has been focused on strengthening the opinions of the legal and educational internship for standardizing the practice management of ordinary undergraduate institutions. The government measures for the implementation of professional certification of teachers of standard universities (provisional), relating to the educational internship files to ensure students, universities, and internship sites attached great importance to the educational internship.

Although educational internship has many obvious benefits for the stakeholders of art students, internship sites, and universities, there are some potential risks in the educational internship phenomenon. Therefore, this study examines the case of Sichuan Province, China. At present, the experience of art students during the educational internship is poor, and the educational internship does not meet the expectations of interns. The internship sites fail to design core or important work tasks for art normal students. Additionally, the guidance, supervision, and management of art university students are inadequate. In this context, it has attracted the attention of scholars, whose research results are mainly reflected in three aspects. Firstly, the relationship between average art students and supervisors has been discussed as a challenge to student performance and future career opportunities (Li, 1994). Secondly, the teaching practice cannot ensure students' work experience, which requires a constructive plan for career development (Xie, 2000). Thirdly, the educational internship should narrow the gap between the learning theories and actual practices in the natural academic environment. Some researchers have discussed that task clarity, service quality, perceived value, and student expectation are relevant to student satisfaction with the educational internship (Tu, 2017). Consequently, student satisfaction with their educational internship can be a prominent indicator of improving the education internship structure.

Research objectives

1. To explore the causal relationship among supervisor support, task clarity, service quality, perceived value, student expectation, and student satisfaction of art students on educational internship.
2. To provide recommendations for students, universities, and internship sites to maximize their educational internship outcomes.

Research questions

1. What are causal relationships among supervisor support, task clarity, service quality, perceived value, student expectation, and student satisfaction of art students on an educational internship?
2. What are recommendations for students, universities, and internship sites to maximize their educational internship outcomes?

Literature review

Expectation Confirmation Theory (ECT)

Expectation confirmation theory is the basic theory of consumer satisfaction proposed by Oliver (1980). This theory mainly refers to consumers' judgment of whether they are satisfied with the product or service by comparing their expectations before purchase with the performance of the product in use. ECT variables include perceived performance, expectation, confirmation, and satisfaction.

The American Customer Satisfaction Model (ACSI)

The American Customer Satisfaction Model (ACSI), established in 1994, was one of the most widely used satisfaction models. The American satisfaction model is constructed based on the Swedish customer satisfaction model, which has six variables: customer expectation, perceived quality, perceived value, customer satisfaction, customer complaint, and customer loyalty (Fornell et al., 1996).

Supervisor support

Supervisor support can be defined as the degree to which a supervisor improves his/her behavior during the interaction with the interns, including creating an atmosphere of psychological support, mutual trust, friendliness, and helpfulness (House, 1971). McHugh (2017) found that task clarity and student satisfaction were significantly influenced by the support and guidance of internship supervisors. Jackson et al. (2019) pointed out that students can better apply their knowledge and skills to work under the support of supervisors.

Gerstner and Day (1997) found that the relationship between superior and subordinate plays a significant role in organizational outcomes such as job satisfaction, organizational prospects, and welfare. Beenan (2007) studied the effect of supervisor support and task clarity on the effectiveness of internships, and he pointed out that task clarity significantly affects supervisor support. In addition, interns can get higher task clarity derived from supervisors' higher support. Maelah et al. (2014) confirmed the relationship between supervisor support, task clarity, and undergraduate students' satisfaction during the internship. The degree of supervisory support can influence the student satisfaction and performance of subordinates (Babin & Boles, 1996; Michaels et al., 1987). Hence, hypotheses are assumed:

H1: Supervisor support has a significant impact on task clarity.

H2: Supervisor support has a significant impact on student satisfaction.

Task clarity

Task clarity is the intern's understanding of the assigned task to be accomplished (Beenen & Rousseau, 2010). Maertz et al. (2014) reviewed the literature on internships in different disciplines. They reported that one factor in successful internships included clarity of tasks. Frontline employees' understanding of role/task clarity desires many aspects, including customer satisfaction, job satisfaction, organizational commitment, and job performance (Ruyter et al., 2001).

Hora, Chen et al. (2019) confirmed that task clarity significantly predicted interns' satisfaction. Sawyer (1992) measured 402 mental health workers from two organizations using two role structures which are "Process" and "Goal Clarity", and reported that task clarity is positively correlated with employee satisfaction. Feldman and Weitz (1990) pointed out that interns would be more satisfied with their internship if tasks are made more formal and structured; that is, tasks are clarified. Therefore, a hypothesis is proposed:

H3: Task clarity has a significant impact on student satisfaction.

Service quality

The definition of service quality is the judgment of the advantages and disadvantages of customers' overall impression of the services provided (Panda, 2019). Parasuraman et al. (1991) found that due to the multi-dimensional service quality characteristics customers would have different understandings of the same service based on their subjective reasons. The judgment of service quality is based on the gap between the customer's expectation and the experience. Students are among the most important customers of higher education institutions and are affected mainly by the quality of service provided by existing higher education (Abili et al., 2011).

The relationship between perceived quality and perceived value is a research area worthy of careful investigation. Cronin et al. (2000) reported that service quality was a predictor of perceived value. In some studies, scholars pointed out that service quality is the main determinant of perceived value and plays a specific role (Cronin et al., 2000; Brady et al., 2002; Hellier et al., 2003).

Norizan and Abdullah (2010) realized that the perception of service quality in customers' minds would have a significant correlation with satisfaction, and customers' purchase intention in the future would also be affected by it. Many researchers have looked at students' satisfaction with the services provided by higher education institutions or internship sites (Sarriko & Rosa, 2014). Based on the above discussions, hypotheses are indicated:

H4: Service quality has a significant impact on perceived value.

H5: Service quality has a significant impact on student satisfaction.

Perceived value

Zeithaml (1988) conceptualized perceived value as a customer's perception of the overall utility of a product or service after experiencing it. Kotler (2003) stated that perceived value refers to customers' assessment of the benefits and costs of products and their perception

after comparing them with expected substitutes. Customers can assess value from the perspective of benefit and cost, and decide whether to buy the product/service (Choi et al., 2004).

Perceived quality is a key factor in perceived satisfaction (Cronin et al., 2000; Fornell et al., 1996). Murphy (2018) studied the relationship between perceived value and internship satisfaction and found that perceived value strongly and significantly impacted internship satisfaction. In several empirical studies, a student's perception of value has been identified as one of the main predictors of student satisfaction (Cronin et al., 2000; Caruana, 2002). More specifically, the following hypothesis is proposed:

H6: Perceived value has a significant impact on student satisfaction.

Student expectation

Coye (2004) stated that expectation could be viewed as the degree to which a customer expects a service provider to be able to deliver a service. The expectation refers to a belief in the outcome of an event (Oliver, 1980). Miller (1977) constructed the ideal state of expectation and conceptually translated it into performance at the level of "hope". Expectation is the result of customers' experience of the company's product/service, and it also includes the information before the integration and analysis of resources such as the advertisement, user's word of mouth, and supplier's reputation (Anderson & Fornell, 2000).

Expectations directly relate to student satisfaction because expectations carry personal views or the sum of views on the level of service attributes. The main source of a direct subsequence of student satisfaction or preference is led by student's expectations (Thong et al., 2006). In ECT theory, expectations are directly related to post-service satisfaction (Oliver & Linda, 1981; Churchill & Surprenant, 1982; Bearden & Teel, 1983; Thong et al., 2006). More specifically, the following hypothesis is proposed:

H7: Student expectation has a significant impact on student satisfaction.

Student satisfaction

Satisfaction is a pleasant emotional experience that results from the evaluation of people on their work, usage, or purchase (Locke, 1969). Interns' satisfaction refers to students' overall satisfaction with their internship program (To & Lung, 2020). In information systems, user satisfaction has been widely used as a measurement index and is also the main index to evaluate the adoption effect of new systems (DeLone & McLean, 2016; Montesdioca & Maçada, 2015). The research on satisfaction mainly comes from a cognitive activity in which customers compare perceived performance with one or more items (such as expectations), resulting in satisfaction. (Parasuraman et al., 1988).

Research conceptual framework

The conceptual framework of this research was developed based on Expectation Confirmation Theory (ECT) and The American Customer Satisfaction Model (ACSI), involving six variables which are Supervisor Support (SS), Task Clarity (TC), Service Quality

(SQ), Perceived Value (PV), Student Expectation (SE), and Student Satisfaction (SSAT) which can be indicated as a diagram as Figure 1:

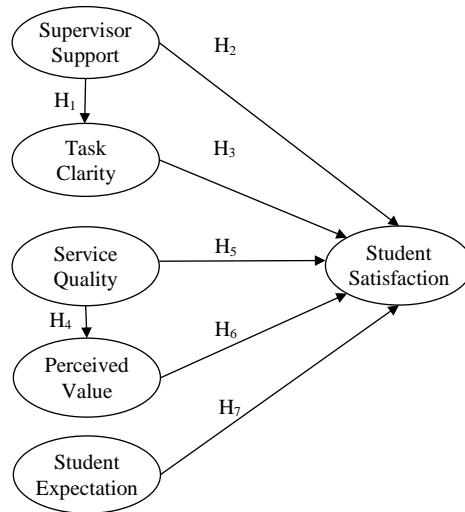


Figure 1 Research conceptual framework

Research methodology

This quantitative study collected the data by distributing questionnaires via an online platform called “Wenjuanxing” from January to April 2022. The sampling methods used were purposive, stratified random, and convenience samplings. The survey comprises 3 sections, containing 28 questions, which are 2 screening questions, 4 demographic questions, and 21 five-point Likert-scale questions, ranging from 1 of strongly disagree to 5 of strongly agree. Three experts approved the item-objective congruence (IOC) index at a score above 0.5, and Cronbach’s alpha coefficient value of the pilot test was acceptable at above 0.7. Afterward, confirmatory factor analysis (CFA) and structural equation modeling (SEM) were carried out to achieve research objectives.

Population and samples

The five universities were used in a case study-involving Sichuan Normal University, China West Normal University, Sichuan Yibin University, Sichuan University of Arts and Sciences, and Chengdu Normal University. The sample units of 6,892 are third-year students (juniors) and fourth-year students (seniors) from five universities in Sichuan Province, China. Kline (2011) suggested that the sample size of the structural equation model should be at least 200 respondents. In this study, 575 responses were returned and were screened to delete extreme and missing data, making up 496 responses used in this study.

Reliability test (Pilot test)

After the questionnaire was developed, it was distributed to 30 respondents to investigate the internal consistency and reliability of the questionnaire by the test of Cronbach's alpha coefficient value. The Cronbach's Alpha value must be 0.70 or above, reflecting the construct's internal consistency coefficient (Dikko, 2016). It is confirmed that the research questionnaire is valid and reliable, as shown in the results of Cronbach's alpha in Table 1.

Table 1 Consistency of the scale test

Variables	Number of Item	Cronbach's Alpha	Strength of Association*
Service Quality (SQ)	3	0.868	Very Good
Supervisor Support (SS)	3	0.869	Very Good
Task Clarity (TC)	5	0.851	Very Good
Student Expectation (SE)	3	0.787	Good
Perceived Value (PV)	4	0.871	Very Good
Student Satisfaction (SSAT)	3	0.904	Excellent

Source: Dikko (2016)

Results and discussion

This research aimed to study factors of internship satisfaction of art students in universities in Sichuan Province, China. In this study, SPSS and AMOS were used for confirmatory factor analysis (CFA), and the statistical results of structural equation modeling (SEM) were analyzed.

Demographic profile summary

The target respondents are 496 university students majoring in arts education in Sichuan Province, China, who had experienced a certain period of educational internship, which can be described and summarized as shown in Table 2. In consideration of 496 respondents, most of students are female for 80.0% (397 respondents) and male for 20.0% (99 respondents). For the year of study, most of the respondents were seniors, accounting for 78.6% (390 respondents), and juniors accounted for 21.4% (106 respondents). The proportion of respondents who practiced in middle schools was 44.0% (218 respondents), and 44.2% (220 respondents) worked as an intern at a primary school. As for the duration of the internship, 50.8% (252 respondents) had an internship period of more than 12 weeks, 34.8% (173 respondents) of 8-12 weeks, and 14.4% (71 respondents) of less than 8 weeks.

Table 2 Demographic characteristics of respondents (n=496)

Demographic Factors		Frequency	Percentage
Gender	Male	99	20.0%
	Female	397	80.0%
Year of Study	Juniors	106	21.4%
	Seniors	390	78.6%
Internship site	Middle school	218	44%
	Elementary school	220	44.2%
	other	58	11.8%
Internship weeks	Less than 8 weeks	71	14.4%
	Between 8-12 weeks	173	34.8%
	More than 12 weeks	252	50.8%

Confirmatory Factor Analysis (CFA)

Brown (2006) pointed out that CFA can evaluate the correlation between variables. CFA can verify convergence validity and discriminant validity. The results in Table 3 show that the statistical estimation in this study is meaningful. Specifically, the construction had an internal consistency coefficient under the rule of thumb that Cronbach's Alpha value must be 0.70 or above (Dikko, 2016). When t-value >1.98 , p-value <0.5 , and factor loading higher than 0.5 were acceptable (Hair et al., 2010). In addition, the composite reliability (CR) of all structures was more significant than 0.7, and the average variance extracted (AVE) was greater than 0.5 (Fornell & Larcker, 1981).

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

Variables	Source of Questionnaire (Measurement Indicator)	No. of Items	Cronbach's Alpha	Factor Loading	CR	AVE
Service Quality(SQ)	Chaudhary and Dey (2020)	3	0.816	0.840-0.884	0.897	0.743
Supervisor Support (SS)	To and Lung (2020)	5	0.875	0.743-0.844	0.821	0.606
Task Clarity (TC)	To and Lung (2020)	3	0.811	0.683-0.877	0.865	0.564
Student Expectation (SE)	Dan et al. 2018	3	0.880	0.737-0.813	0.812	0.591
Perceived Value (PV)	Lee and Phau (2018)	4	0.860	0.711-0.845	0.859	0.605
Student Satisfaction (SSAT)	To and Lung (2020)	3	0.828	0.773-0.802	0.835	0.627

According to Fornell and Larcker (1981), each variable's square root of AVE was calculated to evaluate the discriminant validity, and the discriminant validity was compared with factor correlation to determine whether it passes. In this study, the values of discriminant

validity were all greater than the correlation between structures, so it was considered that the discriminant validity meets the requirements.

Table 4 Discriminant validity

Variables	Factor Correlations					
	SQ	SS	TC	SE	PV	SSAT
SQ	0.862					
SS	0.179	0.778				
TC	0.229	0.419	0.751			
SE	-0.099	0.025	0.022	0.769		
PV	0.140	0.009	0.119	0.141	0.778	
SSAT	0.443	0.336	0.330	-0.013	0.347	0.792

Structural Equation Model (SEM)

Byrne (2010) pointed out that the structural equation model is a statistical method to measure the correlation of structural equations. SEM measurement mainly includes two aspects: goodness of fit of model and correlation between variables. In terms of the adaptability of the model, the SEM statistical index values in this study are compared with acceptable standard values. The indices and values of goodness of fit were CMIN/DF = 4.102, GFI = 0.889, AGFI = 0.854, NFI = 0.874, CFI = 0.901, TLI = 0.882, RMSEA = 0.079, respectively. The values of each index are all within acceptable standards, so the fitness of the model in this study is acceptable.

Table 1 Goodness of fit for Structural Equation Model (SEM)

Index	Criterion	Statistical Values
CMIN/df	<5 Awang (2012)	4.102
GFI	>0.85 Sica and Ghisi (2007)	0.889
AGFI	>0.80 Sica and Ghisi (2007)	0.854
NFI	>0.80 Wu and Wang (2006)	0.874
CFI	>0.80 Bentler (1990)	0.901
TLI	>0.80 Sharma et. al. (2005)	0.882
RMSEA	<0.08 Pedroso et. al. (2016)	0.079

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 = normalized fit index, CFI = comparative fit index, TLI = Tucker-Lewis index, and RMSEA = root mean square error of approximation

Research hypothesis testing result

In the structural model, regression weights and R^2 variances are used to measure the significance of the relationship between variables. The results show that all the hypotheses, except H7, were supported. The strongest predictor of student satisfaction was service quality, followed by perceived value. Table 6 shows the test results of this study.

Table 6 Hypothesis Testing Result of the Structural Model

Hypothesis	Standardized path coefficient (β)	t-value	Testing result
H1 SS→TC	0.520	9.048 *	Supported
H2 SS→SSAT	0.241	4.237 *	Supported
H3 TC→SSAT	0.140	2.569 *	Supported
H4 SQ→PV	0.178	3.513 *	Supported
H5 SQ→SSAT	0.388	8.141 *	Supported
H6 PV→SSAT	0.339	6.840 *	Supported
H7 SE→SSAT	-0.024	-0.538	Not Supported

Note: *p-value <0.05 is significant, that is, H1-H6 is significant, while H7 is not significant.

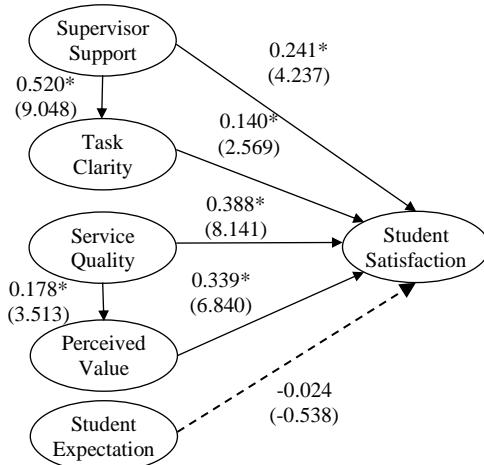


Figure 2 The results of the structural model

Note: *p-value <0.05, t-value in parentheses; Solid line report is significant; The dashed line reports no significance, that is, H1-H6 is significant, while H7 is not significant

From Figure 2 and Table 6, the results of the structural paths can be summarized as follows:

H1: Supervisor support significantly impacted task clarity with a standardized path coefficient of 0.520 and a t-value of 9.048. The hypothesis was supported by previous empirical studies (Beenan, 2007; Hora et al., 2019). University students believe that the supervisor's support in internship sites can help them better transfer their knowledge and skills to the workplace.

H2: The standardized path coefficient between supervisor support and student satisfaction was 0.241, and the t-value at 4.237. Therefore, supervisor support significantly impacted student satisfaction. Consequently, H2 was supported. This result was consistent with previous research (Hora et al., 2019; Gerstner & Day, 1997; Maelah et al., 2014). During the educational internship period, students will have work experience under the guidance of the practice instructor. Therefore, the higher the supervisor's support in assigning work tasks, giving feedback on interns' performance, and improving interns' ability to work, the higher students' satisfaction.

H3: The hypothesis was supported by the relationship between task clarity and student satisfaction using a standardized path coefficient of 0.140 and a t-value at 2.569. Task clarity was one of the predictors of internship satisfaction, which had been consistently reflected in previous research results (Hora et al., 2019; Sawyer, 1992; Feldman & Weitz, 1990). Students are more likely to be satisfied with their internships if their facilitators promote their understanding of the outcome and degree of completion of the work to be done.

H4: The standardized path coefficient between service quality and perceived value was 0.178, and the t-value at 3.513. Therefore, H4 supported that service quality significantly impacted perceived value. In some studies, scholars pointed out that service quality was the main determinant of perceived value (Cronin et al., 2000; Brady et al., 2002; Hellier et al., 2003).

H5: Service quality significantly impacted student satisfaction, supported by the standardized path coefficient of 0.388 and t-value of 8.141. Service quality is a prerequisite for student satisfaction, which has been confirmed in much social and marketing literature (Carrillat et al., 2007; Norizan & Abdullah, 2010; Reibstein, 2002; Parasuraman et al., 1991; Sarrico & Rosa, 2014). Consequently, it shows that students are satisfied if universities provide a high service quality.

H6: The standardized path coefficient between perceived value and student satisfaction was 0.339 and the t-value at 6.840, supporting H6 that perceived value significantly impacted student satisfaction. It is accepted that students' perception of service quality in higher education institutions significantly impacts satisfaction (Cronin et al., 2000; Caruana, 2002). The value perceived by students had a profound impact on students' satisfaction with an educational internship.

H7: The standardized path coefficient between student expectation and student satisfaction was -0.024 with t-value of -0.538. Therefore, the result indicated that student expectation did not significantly impact student satisfaction (Johnson & Fornell, 1991). In previous studies, some scholars stated that expectation had no or only a weak impact on satisfaction. Some studies showed that expectation did not directly affect satisfaction because

an education internship program is a mandatory requirement for the course completion which they are expected to attend. Students must perform their best to get a good recommendation from the internship providers (Churchill & Surprenant, 1982; Oliver & Desarbo, 1988).

Conclusions and implications

Conclusions

This study aimed to explore the factors affecting art students' satisfaction with an educational internship. The sample units of this study are juniors and seniors from five universities in Sichuan Province, China. The five universities selected were Sichuan Normal University, China West Normal University, Sichuan Yibin University, Sichuan University of Arts and Sciences, and Chengdu Normal University. Six variables and seven hypotheses were used to explore the impact of supervisor support, task clarity, service quality, perceived value, and student expectation on student satisfaction. This study is a quantitative, using a questionnaire survey to collect data.

The results are as follows. First, service quality significantly impacted the satisfaction of educational internships of arts education majors in Sichuan Province, China. Carrillat et al. (2007) confirmed that service quality is a prerequisite for customer satisfaction. ACSI model also showed that perceived quality has a positive impact on satisfaction. The quality of service largely determines the effect of the educational internship. The better standard of the university practice management system, professionalism of the practice teachers, and quality of the educational internship curriculum significantly affect the student satisfaction. Secondly, the perceived value had a significant impact on student satisfaction. Murphy (2018) studied the relationship between perceived value and internship satisfaction and found that perceived value strongly and significantly impacted internship satisfaction. Compared with the support, management and other services provided by universities and internship sites, students only need to integrate into the work environment step by step; that is, students perceive a higher value in an educational internship, so they are more satisfied.

Thirdly, supervisor support significantly influenced the student satisfaction with their art educational internship in Sichuan province. Thus, assigning interns to work on their interest areas, clarifying the tasks they need to complete, and providing high-quality guidance such as appropriate supervision, feedback and other support can lead to higher student satisfaction (Beenen, 2007; Jackson et al., 2019). The results showed that there was a positive correlation between task clarity and student satisfaction of educational internship of art normal students in Sichuan province in this study as confirmed by many scholars (Hora et al., 2019; Sawyer, 1992; Feldman & Weitz, 1990), who pointed out that interns would be more satisfied with their internship if tasks are made more formal and structured, that is, tasks are clarified. However, there was no causal relationship between student expectation and student satisfaction. It can be assumed that an education internship program is a mandatory requirement for the course completion they are expected to attend, and students have been forced to attend whether they like it or not. To sum up, this study achieved its objectives; service quality, supervisor support, task clarity, and perceived value significantly impacted art students' internship satisfaction.

Implications from findings

Academic researchers

When looking into the findings, service quality, supervisor support, task clarity, and perceived value significantly impacted art ~~normal~~ students' internship satisfaction. Accordingly, academic researchers could extend the future research to confirm whether there would be different results in other sample groups or even in other industries. Service quality had the most substantial impact on average art students' internship satisfaction, implying that this variable should get great attention to developing a research model. However, there was no causal relationship between student expectation and student satisfaction. It offers alternatives to future scholars to explore deeper in a qualitative study to find the exact reason.

Universities and internship sites

Due to service quality having the most substantial impact on average art ~~normal~~ students' internship satisfaction, universities and internship sites could assess the quality of their internship programs for better student satisfaction. Universities and Internship sites should focus on teachers and supervisors with rich industry experience and coaching skills, and they should allow students majoring in arts to discuss relevant problems in the process of educational internship, understand the problems students encounter in their study, work and life, and give care and help because supervisor support greatly supports student satisfaction. Task clarity should be clear and measurable to ensure students' good internship experience, which raises their satisfaction level. Furthermore, universities should promote the value of internship programs that can lead to students' future careers.

Limitations and further study

The sample of students in this study was from juniors and seniors of five universities in Sichuan Province of China. Therefore, other geographical areas or years of study could produce the same or different results the future. Many more variables could be explored to develop a different hypothesis on the impact to student satisfaction, such as career development, internship materials, etc. Further studies could extend the study qualitatively by a focus group or interview to clarify significant and insignificant results.

References

Abili, K., Narenji, T. F., Mokhtarian, F., & Mehdi, R. M. (2011). Assessing quality gap of HEI services. *Asian Journal on Quality*, 12(2), 167-175.

Anderson, E. W., & Fornell, C. (2000). Foundation of American customer satisfaction index. *Journal of Total Quality Management*, 11(7), 869-882.

Awang, Z. (2012). *A handbook on SEM structural equation modelling: SEM using AMOS graphic* (5th eds.). Kota Baru, Malaysia: Universiti Teknologi Mara Kelantan.

Babin, B. J., & Boles, J. S. (1996). The effects of perceived co-worker involvement and supervisor support on service provider role stress, performance and job satisfaction, *Journal of Retailing*, 72(1), 57-75.

Bearden, W. O., & Teel, J. E. (1983). Selected determinants of consumer satisfaction and complaint reports. *Journal of Marketing Research*, 20, 21-28.

Beenan, G. (2007). Learning fast: Understanding MBA internship effectiveness. *Academy of Management Proceedings*, 1, 1-6.

Beenan, G., & Rousseau, D. M. (2010). Getting the most from MBA internships: Promoting intern learning and job acceptance. *Human Resource Management*, 49(1), 3-22.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246.

Brady, M. K., Cronin, J., & Brand, R. R. (2002). Performance-only measurement of service quality: A replication and extension. *Journal of Business Research*, 55(1), 27-31.

Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford Press.

Byrne, B. M. (2010). Structural equation modeling with AMOS: Basic concepts, applications, and programming (2nd eds.). New York: Routledge Taylor & Francis Group.

Carrillat, F. A., Jaramillo, F., & Mulki, J. P. (2007). The validity of the SERVQUAL and SERVPERF scales: A meta-analytic view of 17 years of research across five continents. *International Journal of Service Industry Management*, 18(5), 472-490.

Caruana, A. (2002). Service loyalty: The effects of service quality and the mediating role, of customer satisfaction. *European Journal of Marketing*, 36(7/8), 811-828.

Chaudhary, S., & Dey, A. K. (2020). Influence of student-perceived service quality on sustainability practices of university and student satisfaction. *Quality Assurance in Education*, 29(1), 29-40.

Choi, K., Cho, W., Lee, S., Lee, H., & Kim, C. (2004). The relationships among quality, value, satisfaction, behavioral intention in health care provider choice: A South Korean study. *Journal of Business Research*, 57(8), 913-921.

Churchill, G. A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19(4), 491-504.

Coye, R. W. (2004). Managing customer expectations in the service encounter. *International Journal of Service Industry Management*, 15, 54-71.

Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193-218.

Dan, F., Wang, X., & Liu, X. (2018). Educational internship satisfaction model of pre-school education major students in universities based on structural equation. *Preschool Education Research*, 286(10), 36-45.

Davies, L. (1990). *Experience-based Learning within the Curriculum: A synthesis study*. Sheffield, England: Council for National Academic Awards.

DeLone, W. H., & McLean, E. R. (2016). Information systems success measurement. *Foundations and Trends in Information Systems*, 2, 1-32.

Dikko, M. (2016). Establishing construct validity and reliability: Pilot testing of a qualitative interview for research in Takaful (Islamic Insurance). *Qualitative Report*, 21(3), 521-528.

Feldman, D. C., & Weitz, B. A. (1990). Summer interns: Factors contributing to positive developmental experiences. *Journal of Vocational Behavior*, 37, 267-284.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.

Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: Nature, purpose and findings, *Journal of Marketing*, 60(4), 7-18.

Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82, 827-844.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2010). *Multivariate data analysis* (6th eds.). Upper Saddle River, NJ: Prentice Hall.

Hellier, P. K., Geursen, G. M., Carr, A., & Rickard, J. A. (2003). Customer repurchase intention: A general structural equation model. *European Journal of Marketing*, 3(12), 1762-1800.

Hora, M., Chen, Z., Parrott, E., & Her, P. (2019). *Problematizing college internships: Exploring Issues with access, program design, and developmental outcomes in three U.S. colleges*. USA: Wisconsin Center for Education Research.

House, R. (1971). A path-goal theory of leadership effectiveness. *Administrative Science Quarterly*, 16(2), 321-329.

Jackson, D., Fleming, J., & Rowe, A. (2019). Enabling the transfer of skills and knowledge across classroom and work contexts. *Vocations and Learning*, 12(3), 459-478.

Johnson, M. D., & Fornell, C. (1991). A framework for comparing customer satisfaction across individuals and product categories. *Journal of Economic Psychology*, 12(2), 267-286.

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd eds.). New York: Guilford Press.

Kotler, P. (2003). *Marketing management* (11th eds.). Englewood Cliffs, NJ: Prentice-Hall.

Lee, S., & Phau, I. (2018). Young tourists' perceptions of authenticity, perceived value and satisfaction: the case of Little India, Singapore. *Young Consumers*, 19(1), 70-86.

Li, Y. C. (1994). On art educational internship and its guidance. *Journal of Northwest Normal University*, 2, 83-85.

Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, 4(4), 309-336.

Maelah, R., Mohamed, Z. M., Ramli, R., & Aman, A. (2014). Internship for accounting undergraduates: comparative insights from stakeholders. *Education and Training*, 56(6), 482-502.

Maertz, Jr. C. P., Stoeberl, P. A., & Marks, J. (2014). Building successful internships: Lessons from the research for interns, schools, and employers. *Career Development International*, 19(1), 123-142.

McHugh, P. P. (2017). The impact of compensation, supervision and work design on internship efficacy: Implications for educators, employers and prospective interns. *Journal of Education and Work, 30*(4), 367-382.

Michaels, R. E., Day, R. L., & Joachimsthaler, E. A. (1987). Role stress among industrial buyers: An integrative model. *Journal of Marketing, 51*(2), 28-45.

Miller, J. A. (1977). *Studying satisfaction, modifying models, eliciting expectations, posing problems, and making meaningful measurements* (pp.72-919). In Hunt, K. (Ed.). Conceptualization and measurement of consumer satisfaction and dissatisfaction. Bloomington, USA: School of Business, Indiana University.

Montesdioca, G. P. Z., & Maçada, A. C. G. (2015). Measuring user satisfaction with information security practices. *Computers & Security, 48*(1), 267-280.

Murphy, K. (2018). The value of the Disney College Program internship and students' loyalty intentions. *Journal of Hospitality and Tourism Insights, 1*(1), 86-102.

Norizan, K., & Abdullah, N. A. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: A cross cultural analysis. *Asia Pacific Journal of Marketing and Logistics, 22*(3), 351-371.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research, 17*, 46-49.

Oliver, R. L., & Desarbo, W. S. (1988). Response determinants in satisfaction judgments | journal of consumer research | oxford academic. *Journal of Consumer Research, 14*(4), 495-507.

Oliver, R. L., & Linda, G. (1981). Effects of satisfaction and its antecedents on consumer preference and intention (pp. 88-93). In Monroe, K. B. (Ed.), *Advances in consumer research*. Ann Arbor, MI, USA: Association for Consumer Research.

Panda, S., Pandey, S. C., Bennett, A., & Tian, X. (2019). University brand image as competitive advantage: A two-country study. *International Journal of Educational Management, 33*(2), 234-251.

Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Understanding customer expectations of service. *Sloan Management Review, 32*(3), 39-48.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12-40.

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.

Reibstein, D. J. (2002). What attracts customers to online stores, and what keeps them coming back? *Journal of the Academy of Marketing Science, 30*(4), 465-473.

Ruyter, K., Wetzels, M., & Feinberg, R. (2001). Role stress in call centres: its effects on employee performance and satisfaction, *Journal of Interactive Marketing, 15*(2), 23-35.

Sarrico, C. S., & Rosa, M. J. (2014). Student satisfaction with Portuguese higher education institutions: The view of different types of students. *Tertiary Education and Management*, 20(2), 165-178.

Sawyer, J. E. (1992). Goal and process clarity: Specification of multiple constructs of role ambiguity and a structural equation model of their antecedents and consequences. *Journal of Applied Psychology*, 77(2), 130-142.

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.

Sica, C., & Ghisi, M. (2007). *The Italian versions of the beck anxiety inventory and the beck depression inventory-II: Psychometric properties and discriminant power* (pp. 27-50). In Lange, M.A. (Ed.). *Leading - Edge Psychological Tests and Testing Research*. New York: Nova.

Thong, J. Y. L., Hong, S. J., & Tam, K. Y. (2006). The effects of postadoption beliefs on the expectation-confirmation model for information technology continuance. *International Journal of Human-Computer Studies*, 64, 799-810.

To, W. M., & Lung, J. W. Y. (2020). Factors influencing internship satisfaction among Chinese students. *Education and Training*, 62(5), 543-558.

Tu, X. D. (2017). Analysis of the contradiction between art teacher training and basic art education. *Fine Arts Overview*, 1, 152-153.

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.

Xie, P. (2000). A brief study on several basic problems of art educational internship in Normal Universities. *China Art Education*, 1, 16-19.

Zeithaml, V. A. (1988) Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52, 2-22.