

# Projecting Factors Impacting Art Students Satisfaction with Blended Learning in Sichuan, China

Tongcheng Liu\*

Received: October 5, 2023. Revised: February 19, 2024. Accepted: February 22, 2025.

## Abstract

**Purpose:** This research aims to investigate factors impacting satisfaction of art students enrolled in blended learning programs at the Ethnic Colleges and Universities directly under Central administration (ECUCA) in Sichuan Province. The conceptual framework posits a causal relationship among several variables, namely faculty services, academic aspects, reputation, heritage, trust, service quality, and students' satisfaction. **Research design, data, and methodology:** The researcher employs quantitative techniques to distribute online questionnaire to 500 undergraduate art students enrolled in ECUCA (Eastern China University of Creative Arts) in Sichuan Province. The researcher implements sampling strategy, focusing judgmental, stratified random and convenience sampling. The researcher employs structural equation modeling and confirmatory factor analysis to analyze the collected data. These statistical techniques were utilized to assess the appropriateness of the proposed models and evaluate the reliability and validity of the measurements used in the study. **Results:** Seven hypotheses proved to achieve the research objectives. Faculty services, academic aspects, reputation, heritage, trust, and service quality have a significant impact on students' satisfaction. **Conclusions:** It is recommended that institutions of higher learning and administrators should pay attention to significant factors to improve student satisfaction and increase the competitiveness of schools.

**Keywords:** Art Students, Blended Learning, Student Satisfaction, Higher Education, Ethnic Universities

**JEL Classification Code:** E44, F31, F37, G15

## 1. Introduction

As (Lin, 1997) states, despite organizations being subsidized by the state having the tendency to ignore the needs of its target public, which is the case of universities, facing this new and more competitive context, these institutions need to incorporate a better orientation to the market, seeking to obtain competitive advantages over its competitors, as well as the construction of a positive image close to its target market.

Numerous studies have extensively examined the factors influencing customer satisfaction in service settings. These investigations have revealed that many factors shape customer satisfaction. Surprisingly, the research on

satisfaction within the higher education sector needs to be more extensive, exacerbating the dearth of knowledge in this area (Alves & Raposo, 2007). This study investigates the factors influencing the satisfaction levels of art undergraduate students enrolled in blended learning programs at ethnic colleges and universities. This research not only aligns with the prevailing trends of the times but also contributes to the advancement of education. In Sichuan Province, a single undergraduate university operates directly under the central government (ECUCA: Ethnic Colleges and Universities directly under Central administration). This university, known as Southwest Minzu University, falls under the jurisdiction of the National Ethnic Affairs Commission of the People's Republic of China. It is situated in Chengdu, the provincial capital of Sichuan.

\*Tongcheng Liu, School of Fine Arts, Sichuan Minzu College, China. Email: 117496856@qq.com

© Copyright: The Author(s)  
This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

This article elucidates the notable correlation among factors that impact students' satisfaction (SS), including reputation, faculty service, academic aspects, trust, and service quality. The research model is constructed to examine this relationship comprehensively by integrating insights from multiple sources and authors, enabling the examination of these connections from diverse perspectives.

The primary objective of this study is to investigate the factors that influence learning satisfaction and reputation within the context of China's rapidly evolving higher education landscape. As higher education in the country enters a new phase, it becomes crucial to comprehend the elements that can impact students' satisfaction levels and the reputation of educational institutions. This study mainly refers to Astin (1999) theory of student involvement, Tinto's (1975) retention theory, Abdullah's (2005) five-dimensional scale for measuring service quality (Darby & Karni, 1973; Nelson, 1970) university services attributes.

## 2. Literature Review

### 2.1 Faculty Services

Pozo-Munoz et al. (2000). Faculty are key actors in a college's work. Faculty service (teacher performance, class, and consultant performance) was studied and focused on as the main factors influencing students' satisfaction/dissatisfaction with higher education (Deshields et al., 2005). According to previous research (Arif et al., 2013), faculty service is central to ensuring students' satisfaction with higher education. It is a key benchmark for assessing students' satisfaction levels (Mai, 2005). Moreover, faculty service is crucial in education (Martirosyan, 2015).

Regarding faculty service, it has been observed that when teachers fail to address the individual differences among students in their teaching approach, it leads to increased dissatisfaction among students. Similarly, when teachers possess a lower level of knowledge, it negatively impacts students' satisfaction levels. Additionally, students tend to express their dissatisfaction when graduate teaching assistants are assigned as their instructors (Martirosyan, 2015). The curriculum within faculty service plays a crucial role and holds significant importance. It serves as the fundamental value proposition of higher education institutions. The curriculum quality substantially influences students' satisfaction levels (Sahney et al., 2004; Trivellas & Dargenidou, 2009). Therefore, this study develops a hypothesis:

**H1:** Faculty services have a significant impact on satisfaction.

### 2.2 Academic Aspects

A college's academic quality has the potential to drive its rapid growth, expand its market share, and contribute to the establishment of a positive and enduring institutional image. By focusing on academic excellence, a college can enhance its competitiveness in the educational landscape (Juillerat & Schreiner, 1996). Academic quality is the comprehensive assessment of a student's educational experience. It encompasses various aspects, including curriculum quality and teaching proficiency, contributing to the overall evaluation of academic quality (Hossain et al., 2018).

Ensuring both academic and service quality is crucial for private colleges' success in education (Hossain et al., 2018). The maintenance of academic quality and service quality holds significant importance for colleges as it directly impacts their ability to thrive in the educational landscape. These factors play a pivotal role in enhancing student satisfaction and overall educational effectiveness (Hossain et al., 2018); according to Saurombe et al. (2017, academic personnel play a crucial role in the success of higher education institutions and the ability to attract and retain exceptional academic staff is an essential component of their branding strategy. Furthermore, academic leadership has a noteworthy influence on service quality and the reputation of colleges (Latif et al., 2021). As highlighted by Juillerat and Schreiner (1996), academic quality plays a pivotal role in the rapid growth, increased market share, positive institutional image, and long-term benefits of educational institutions. Thus, academic quality is indispensable for the survival and progress of these institutions. Therefore, this study develops a hypothesis:

**H2:** Academic aspects have a significant impact on satisfaction.

### 2.3 Reputation

A college's reputation, often regarded as the university's image, is pivotal in determining its success (Awang, 2010; Sung & Yang, 2008). Reputation is a school or institution's collective perception and understanding, encompassing its services' tangible benefits and experiential aspects (Fombrun & Shanley, 1990; Macmillan et al., 2005). It is a crucial factor influencing an educational institution's perception and standing. The reputation of a college is manifested through its brand association. Brand association is any significant element influencing how students perceive the college brand (Chen, 2017). It encompasses various factors that shape students' perceptions and impressions of the college.

The significance of reputation lies in its ability to attract and retain students (Bush et al., 1998; Standifird, 2005). Moreover, a positive correlation exists between student satisfaction and college reputation (Andreassen & Lindestad,

1998; Johnson, 2001; Selnes, 1993). A college's reputation influences students' perceptions and overall satisfaction with the institution. The college's reputation, that is, the image of the college, directly impacts students' loyalty and satisfaction and has an indirect impact in some aspects (Alves & Raposo, 2007). The role of university image and reputation in gaining a competitive advantage in the market surpasses the influence of perceived image quality, significantly impacting students' decision-making process when selecting a school (Kotler & Fox, 1987). The image and reputation of a university hold substantial sway in shaping students' preferences and choices regarding their educational institution. Therefore, this study develops a hypothesis:

**H3:** Reputation has a significant impact on satisfaction.

## 2.4 Heritage

Over time, a brand establishes a historical narrative that contributes to shaping consumer perceptions (Aaker, 1991). This is particularly relevant in corporate brands, where Aaker (2004) emphasizes heritage significance. The early roots of a brand add authenticity and distinctiveness, especially when its history and origin are reinterpreted in a contemporary context. The accumulated brand-related experiences play a vital role in influencing consumer perceptions. As categorized by Bulotaite (2003), university heritage encompasses material and immaterial aspects. Material heritage comprises physical elements such as university buildings, libraries, archives, and regalia. Immaterial heritage encompasses intellectual heritage, cultural aspects, values, ethics, ceremonies, and more (Bulotaite, 2003). The significance of university heritage lies in its ability to influence students' cognitive, affective, and intentional attitudes toward the brand, ultimately fostering a stronger emotional connection and attachment to the university (Merchant et al., 2015).

According to Aaker (2004), heritage plays a crucial role in branding as it adds authenticity and differentiation, particularly when a brand's history and origin are reinterpreted in modern times. Marketers sometimes emphasize their brands' genuine history and heritage to evoke a sense of authenticity (Beverland & Luxton, 2005). However, in other instances, marketers may attempt to emotionally engage consumers by embellishing or narrating a fictionalized heritage (Beverland et al., 2008; Holak et al., 2008). The strategic use of heritage in branding allows various approaches to connect with consumers and create meaningful brand experiences. Therefore, this study develops below hypotheses:

**H4:** Heritage has a significant impact on satisfaction.

**H7:** Heritage has a significant impact on reputation.

## 2.5 Trust

Trust in education refers to the perception of students regarding the integrity and dependability of the college (Rojas-Méndez et al., 2009). In relationship marketing, trust and service quality take center stage, as trust plays a fundamental role in determining the strength of the relationship between customers and service providers (Berry, 2002). Trust is a significant outcome of evaluating service quality provided to students in higher education institutions (Hennig-Thurau et al., 2001). The trust serves as a crucial factor in fostering positive relationships and facilitating a sense of confidence and reliability between students and the educational institution. Trust is the belief that the other party will act following expectations and achieve the desired outcomes, reflecting a sense of social responsibility (Mcknight & Chervany, 2001). In the context of public institutions, trust refers to the belief that these institutions will deliver the necessary outcomes and operate efficiently (Nunkoo et al., 2012). Trust is a fundamental element in establishing confidence and reliability in relationships, both within and outside public institutions.

The satisfaction derived from excellent service and high-quality experiences plays a significant role in maintaining trust over time (Latif et al., 2021). Trust can stem from various dimensions, including transactional, evaluative, affective, and emotional judgments (Sultan & Wong, 2014). This implies that trust is influenced by various factors encompassing objective assessments and subjective perceptions. Customers' satisfaction with the service and quality they receive enhances their trust in the organization or institution. Therefore, this study develops below hypotheses:

**H5:** Trust has a significant impact on satisfaction.

**H8:** Trust has significant impact on reputation.

## 2.6 Service Quality

Service quality is commonly defined as the attitude or perception related to service excellence (Parasuraman et al., 1988). It represents the customer's evaluation of the overall excellence or superiority of the service provided (Zeithaml et al., 1988). In essence, service quality encompasses the customer's subjective assessment of the service experience and their perception of how well the service meets their expectations and requirements. The impact of service quality on the college brand must be considered, as it is a crucial factor in shaping the institution's reputation. Enhancing service quality and ensuring student satisfaction are paramount for colleges to establish a favorable reputation (Panda et al., 2018). By prioritizing service quality and meeting the needs and expectations of students, colleges can effectively build a positive brand image that contributes to

their overall reputation in the educational landscape.

The concept of university service quality encompasses multiple dimensions, highlighting the importance of researchers, teaching staff, and teachers within the institution (Chen, 2017). In research studies, various factors have been identified to measure the service quality of colleges, including teaching aspects, administrative services, academic facilities, campus infrastructure, support services, and internationalization (Chandra et al., 2019). These dimensions collectively contribute to the overall service quality provided by the university and play a significant role in shaping the students' experience and satisfaction. When encountering services, information pertaining to service quality forms the foundation for evaluating service quality attributes (Sultan & Wong, 2012). This implies that customers rely on the available information to assess and judge the various aspects of service quality during their service encounters. The information they gather and perceive influences their expectations, satisfaction, and overall perception of the service quality provided. Therefore, this study develops below hypotheses:

**H6:** Service quality has a significant impact on satisfaction.

**H9:** Service quality has a significant impact on reputation.

## 2.7 Satisfaction

Student satisfaction is a transient attitude during student education (Zeithaml et al., 1988). It reflects the experiential and perceptual aspects of education services throughout the student's educational journey (Mukhtar et al., 2015). Student satisfaction is a short-term attitude from evaluating students' educational experiences, services, and facilities (Weerasinghe & Fernando, 2017). It encompasses students' subjective assessments of the quality and fulfillment of their educational encounters, encompassing their overall satisfaction with the educational institution.

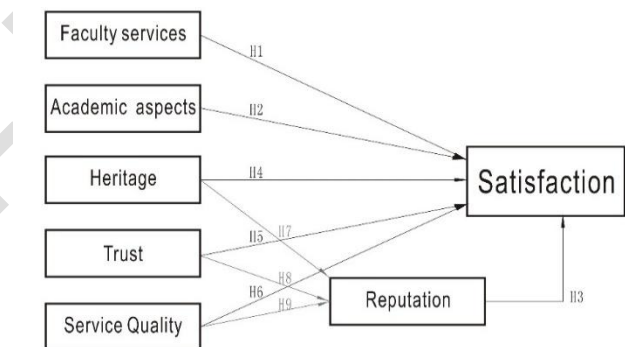
The level of student satisfaction directly impacts their perception of success or failure (Walther, 2000; Wiese, 1994). Furthermore, student satisfaction plays a significant role in influencing decisions related to student dropout or transfer (Astin, 2001; Chadwick & Ward, 1987; Dolinsky, 1994; Thomas et al., 1996; Wiese, 1994). Student satisfaction has far-reaching implications, impacting students' overall academic experiences and their likelihood of persisting in their educational pursuits. Studies conducted by Hartman and Schmidt (1995) and Webb and Jagun (1997) reveal that students' perceived value, encompassing factors such as perceived quality and expectations, significantly influence their satisfaction levels. These findings highlight the importance of how students perceive the quality of the education they receive and how well it aligns with their expectations. The perceived value of the educational experience plays a crucial role in shaping students' overall

satisfaction, emphasizing the need for educational institutions to focus on delivering high-quality education and meeting students' expectations to enhance their satisfaction levels.

## 3. Research Methods and Materials

### 3.1 Research Framework

This study draws on several established theories and scales to support its research. Astin's theory of student involvement (Astin, 1999) and Tinto's retention theory (1975) provide the theoretical foundation for understanding the factors influencing postgraduate students' e-learning satisfaction, perceived usefulness, and continuance intention. Abdullah's five-dimensional scale for measuring service quality, known as "HEDPERF" (Abdullah, 2005), and the attributes of university services (Darby & Karni, 1973; Nelson, 1970) are also incorporated.



**Figure 1:** Conceptual Framework

**H1:** Faculty services have a significant impact on satisfaction.

**H2:** Academic aspects have a significant impact on satisfaction.

**H3:** Reputation has a significant impact on satisfaction.

**H4:** Heritage has a significant impact on satisfaction.

**H5:** Trust has a significant impact on satisfaction.

**H6:** Service quality has a significant impact on satisfaction.

**H7:** Heritage has a significant impact on reputation

**H8:** Trust has a significant impact on reputation.

**H9:** Service quality has a significant impact on reputation.

### 3.2 Research Methodology

Data collection methods employing quantitative techniques are utilized to measure the representativeness of samples, enabling researchers to respond to the entire



population with relative ease and accuracy (Creswell, 2014). Quantitative research methods offer precise answers to research questions using predetermined methods and measurements determined by statistical tools and techniques (Johnson, 2001). These methods facilitate the collection of numerical data, allowing for rigorous analysis and drawing statistically grounded conclusions. The researchers employed quantitative methods to conduct an electronic questionnaire survey among art undergraduates at Southwest Minzu University in Sichuan. The purpose of the survey was to collect data and analyze the significant factors that impact student satisfaction. The questionnaire was structured into three sections, each addressing specific aspects related to student satisfaction.

The questionnaire was structured into three sections: screening, demographic, and measurement. To analyze all nine hypotheses, a 5-point Likert scale was employed to measure the five variables proposed, ranging from strongly disagree (1) to agree (5) strongly. In the pilot test, 45 respondents, evaluated as experts based on the project's objective consistency index, participated to ensure the questionnaire's reliability and validity.

For the pilot test, Cronbach's alpha reliability was employed to assess the reliability of the questionnaire items related to faculty service, academic aspects, reputation, heritage, trust, service quality, and student satisfaction. Tavakol and Dennick (2011) have suggested that an alpha coefficient of 0.60 or higher indicates acceptable reliability for the measurement tool, with higher coefficients indicating better reliability and greater consistency within the structure. After passing the pilot test, the questionnaire was distributed to the target audience, resulting in 500 valid responses. The data was then analyzed using SPSS AMOS software. Confirmatory Factor Analysis (CFA) was conducted to ensure the validity and reliability of the model, followed by the utilization of structural equation models (SEMs) to examine the relationships between variables.

### 3.3 Population and Sample Size

Clark-Carter (2009) explains that the target population refers to a collective of individuals who exhibit a shared behavior or characteristic related to a specific element. Similarly, Hair et al. (2007) emphasize that the target population encompasses the entire set of elements pertinent to the research project. These definitions underscore the significance of identifying the specific group or set of individuals researchers aim to study or analyze in their research endeavors. This paper focuses on art undergraduates enrolled at Southwest Minzu University. To ensure an adequate sample size for conducting structural equation models, a minimum sample size of 425 was determined. In the study, 520 electronic questionnaires were distributed, and

500 valid electronic questionnaires were for analysis.

### 3.4 Sampling Technique

The researcher employed the judgmental sampling to select the desired target population, specifically undergraduate art students in local ethnic colleges and universities in Sichuan. The researchers utilized the stratified sampling technique to ensure a representative sample, which involved distributing questionnaires among the target population. The distribution process and the resulting effective samples are presented in Table 1. The electronic questionnaires were conveniently distributed online, employing a convenience sampling method that facilitated the data collection process.

**Table 1:** Sample Units and Sample Size

The names of ECUCA	Population Size	Proportional Sample Size
First grade	687	124
Second grade	682	123
Third grade	661	120
Fourth grade	737	133
Total	2767	500

Source: Constructed by author

## 4. Results and Discussion

### 4.1 Demographic Information

According to Table 2, the demographic data comprises 500 individuals. Male and female are equal proportion of 250, which are 50% each group. 151 students have enrolled in software or mini programs, representing 30.2% of the whole, followed by website resource course (24.8%), webcast (24%), and the others (21%).

**Table 2:** Demographic Profile

Demographic and General Data (N=500)		Frequency	Percentage
Gender	Male	250	50%
	Female	250	50%
Blended Learning Format	Webcast	120	24.0%
	Software or mini programs	151	30.2%
	Website Resource Course	124	24.8%
	The others	105	21.0%

Source: Constructed by author

### 4.2 Confirmatory Factor Analysis (CFA)

The questionnaire's reliability in this study was assessed using Cronbach's Alpha, as indicated in Table 3. The alpha coefficient values presented in the table exceeded 0.6, indicating a considerable level of reliability. To evaluate the

construct validity, Byrne (2011) recommended employing Confirmatory Factor Analysis (CFA) to confirm both convergence and discriminant validity. To evaluate the convergence effectiveness of the conceptual models, factor loading, average variance extracted (AVE), and composite reliability (CR) were employed, following the approach suggested by Hair et al. (2013). The findings presented in

Table 3 demonstrated that all variables exhibited factor load values exceeding 0.5 and p-values below 0.05, which were considered acceptable according to Hair et al. (2013). Furthermore, the CR values of all variables surpassed 0.7, and the AVE values exceeded 0.5, further confirming the questionnaire's reliability and validity.

**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
Faculty Service (FS)	Martirosyan (2015 )	4	0.835	0.721-0.770	0.839	0.566
Academic Aspects (AA)	Ali et al. (2016)	7	0.838	0.696-0.795	0.895	0.549
Reputation (R)	Ali et al. (2016)	5	0.899	0.672-0.758	0.839	0.510
Heritage (H)	Panda et al. (2018)	3	0.836	0.710-0.765	0.783	0.546
Trust (T)	Panda et al. (2018)	6	0.782	0.571-0.788	0.860	0.510
Service Quality (SQ)	Panda et al. (2018)	8	0.857	0.663-0.765	0.895	0.516
Satisfaction (SS)	Panda et al. (2018)	5	0.894	0.635-0.873	0.862	0.559

In order to evaluate the consistency between the measurement model and the observed data, confirmatory factor analysis (CFA) was utilized, following the recommendation of Brown (2015). Additionally, Ainur et al. (2017) suggested utilizing the Goodness-of-Fit (GoF) measure to assess the adequacy of the measurement model. The outcomes presented in Table 4 demonstrate that the GoF values, including CMIN/DF = 1.472, GFI = 0.906, AGFI = 0.890, NFI = 0.903, CFI = 0.966, TLI = 0.963, and RMSEA = 0.031, all fell within an acceptable range.

**Table 4:** Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
<b>CMIN/DF</b>	< 3.00 (Hair et al., 2006)	1.472
<b>GFI</b>	≥ 0.85 (Sica & Ghisi, 2007)	0.906
<b>AGFI</b>	≥ 0.85 (Schermmelleh-Engel et al., 2003)	0.890
<b>NFI</b>	≥ 0.90 (Hair et al., 2006)	0.903
<b>CFI</b>	≥ 0.90 (Hair et al., 2006)	0.966
<b>TLI</b>	≥ 0.90 (Hair et al., 2006)	0.963
<b>RMSEA</b>	< 0.05 (Hu & Bentler, 1999)	0.031
<b>Model Summary</b>		<b>In harmony with empirical data</b>

**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.

As per the findings of Fornell and Larcker (1981), discriminant validity is confirmed when the square root of the average variance extracted (AVE) exceeds the correlation coefficients between the constructs, in this study, Table 5 reveals that the square root of all AVE values surpasses the corresponding inter-construct correlation coefficients, thus affirming the presence of discriminant validity in the measurement model.

**Table 5:** Discriminant Validity

	FS	AA	R	H	T	SQ	SS
<b>FS</b>	<b>0.748</b>						
<b>AA</b>	0.312	<b>0.753</b>					
<b>R</b>	0.375	0.246	<b>0.731</b>				
<b>H</b>	0.361	0.360	0.330	<b>0.738</b>			
<b>T</b>	0.352	0.337	0.350	0.367	<b>0.753</b>		
<b>SQ</b>	0.314	0.302	0.313	0.370	0.358	<b>0.738</b>	
<b>SS</b>	0.474	0.437	0.425	0.455	0.459	0.463	<b>0.736</b>

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

### 4.3 Structural Equation Model (SEM)

In the present study, Structural Equation Modeling (SEM) was employed as a statistical method to examine the relationships among variables, utilizing a covariance matrix described by Zhang et al. (2007). The Goodness Fit Index (GFI) values, including CMIN/DF = 1.525, GFI = 0.899, AGFI = 0.881, NFI = 0.901, CFI = 0.963, TLI = 0.959, and RMSEA = 0.032, are presented in Table 6. These statistical values indicate that the proposed model demonstrates a good fit for the data, as they fall within an acceptable range.

**Table 6:** Goodness of Fit for Structural Model

Index	Acceptable	Statistical Values
<b>CMIN/DF</b>	< 3.00 (Hair et al., 2006)	1.525
<b>GFI</b>	≥ 0.85 (Sica & Ghisi, 2007)	0.899
<b>AGFI</b>	≥ 0.85 (Schermmelleh-Engel et al., 2003)	0.881
<b>NFI</b>	≥ 0.90 (Hair et al., 2006)	0.901
<b>CFI</b>	≥ 0.90 (Hair et al., 2006)	0.963
<b>TLI</b>	≥ 0.90 (Hair et al., 2006)	0.959
<b>RMSEA</b>	< 0.05 (Hu & Bentler, 1999)	0.032

Index	Acceptable	Statistical Values
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.

#### 4.4 Research Hypothesis Testing Result

The structural equation modeling technique integrates factor analysis measurement structures with a path analysis framework, allowing for the inclusion of latent and unobserved structures. This modeling approach, as highlighted by Lefcheck (2021), enables the differentiation between measurement models and structural models. In a structural equation model, the measurement model is constructed based on the observed variables associated with the measurement concept. On the other hand, the structural model establishes the relationships among these variables and incorporates the mediation path. Path coefficients are employed to quantify the correlation between external and internal potential variables within the structural equation model. As can be seen from Table 7, the hypothesis test results support H1, H2, H3, H4, H5, H6, H7, H8, and H9.

**Table 7:** Hypothesis Results of the Structural Equation Modeling

Hypothesis	( $\beta$ )	t-Value	Result
H1: FS→SS	0.347	6.262*	Supported
H2: AA→SS	0.190	3.860*	Supported
H3: R→SS	0.194	2.956*	Supported
H4: H→SS	0.300	5.394*	Supported
H5: T→SS	0.271	5.260*	Supported
H6: SQ→SS	0.273	5.351*	Supported
H7: H→R	0.186	3.203*	Supported
H8: T→R	0.141	2.626*	Supported
H9: SQ→R	0.168	3.122*	Supported

**Note:** \*  $p < 0.05$

**Source:** Created by the author

**H1:** Faculty services notably influence a college or university. The normalized path coefficient is 0.347, and the t-value is 6.262\* (\* indicates statistical significance). These results indicate that faculty services positively contribute to student satisfaction.

**H2:** The academic aspect significantly impacts the college or university. The normalized path coefficient is 0.190, and the t-value is 3.860\*. This suggests that the academic aspect plays a significant role in student satisfaction.

**H3:** Reputation substantially impacts a college or university. The normalized path coefficient is 0.194, and the t-value is 2.956\*. This implies that reputation has a positive influence on student satisfaction.

**H4:** University heritage significantly influences college or university outcomes. The normalized path coefficient is 0.300, and the t-value is 5.349\*. This indicates that the historical legacy of the university contributes to student satisfaction.

**H5:** Trust plays a significant role in universities. The normalized path coefficient is 0.271, and the t-value is 5.260\*. This implies that trust has a positive impact on student satisfaction.

**H6:** Service quality significantly affects universities. The normalized path coefficient is 0.273, and the t-value is 5.351\*. This suggests that the quality of services the university provides leads to students.

**H7:** University heritage significantly impacts the reputation (R) of the college or university. The normalized path coefficient is 0.186, and the t-value is 3.203\*. This suggests that the historical legacy of the university contributes to its reputation.

**H8:** Trust plays a significant role in the reputation (R) of the college or university. The normalized path coefficient is 0.141, and the t-value is 2.626\*. This implies that trust positively influences the reputation of the institution.

**H9:** Service quality significantly affects universities' reputation (R). The normalized path coefficient is 0.168, and the t-value is 3.122\*. This means that the quality of services provided by the university contributes to its reputation.

## 5. Conclusion and Recommendation

### 5.1 Conclusion and Discussion

This research identifies the factors influencing the satisfaction levels of undergraduate art students participating in blended learning at Southwest University for Nationalities. The study employs a set of hypotheses as a conceptual framework to examine the significant effects of Faculty Services (FS), Academic Aspect (AA), Reputation (R), Heritage (H), Trust (T), and Service Quality (SQ) on Student Satisfaction (SS). To gather reliable data, questionnaires were distributed to the participants. The validity and reliability of the conceptual models were assessed through Confirmatory Factor Analysis (CFA). The study utilizes Structural Equation Modeling (SEM) to analyze the factors that impact student satisfaction.

The study reveals the following findings. Faculty Services (FS), Heritage (H), and Trust (T) have the most significant and direct impact on Student Satisfaction (SS). Among these factors, the quality of teacher services emerges as a crucial determinant of student satisfaction. This finding suggests that the influence of teacher services outweighs other factors, such as physical facilities, administrative services, and campus safety, as highlighted by Standifird et

al. (2011). Based on the study conducted by Samad et al. (2017), it is evident that universities can enhance student satisfaction by prioritizing improving the quality of faculty services.

Furthermore, the level of institutional trust serves as a significant predictor of student satisfaction with the overall college experience, as noted by Shu and Liu (2019). The current study's findings indicate that the quality of teacher services and the level of institutional trust are the primary factors influencing student satisfaction in the context of blended learning. Moreover, the impact of Academic Aspect (AA), Reputation (R), and Service Quality (SQ) on Student Satisfaction (SS) is substantial, supporting the validity of the researchers' hypothesis.

## 5.2 Recommendation

In the study conducted in the context of ECUCA (Ethnic Colleges and Universities directly under Central administration in Sichuan), the researchers identified several key factors that influence blended learning for undergraduate arts students. These factors include faculty services, institutional trust, academic aspects, institutional reputation, institutional heritage, and service quality. Based on these findings, it is recommended that ethnic colleges and universities in Sichuan prioritize these aspects to enhance student satisfaction and improve the overall competitiveness of the educational institutions. The findings of the study conducted by Darolia and Koedel (2011) underscore the importance of faculty service in promoting student satisfaction. The results suggest that universities should prioritize enhancing faculty service as a fundamental component of their strategy to increase student satisfaction. Effective communication, prompt customer service, and a commitment to meeting student needs form the foundation for establishing institutional trust, as highlighted by Yazdanparast et al. (2017). Based on the findings of Marshall and Creswell (2017), it is advisable for higher education institutions to prioritize the establishment of a trustworthy relationship with their students. Consequently, the relevant administrative and governing bodies of these institutions should emphasize measuring student satisfaction to achieve overall university success.

## 5.3 Limitation and Further Study

One limitation of this study is that it focused on art students from an ethnic undergraduate college in Sichuan, which may limit the generalizability of the findings to other specific higher education contexts, diverse levels of universities, various professional fields, and different regions. Further research could explore the structural patterns of student satisfaction in other educational

institutions, examining factors such as Faculty Services (FS), Academic Aspect (AA), Reputation (R), Heritage (H), Trust (T), Service Quality (SQ), and other influencing factors. Furthermore, for future research, conducting more specific and in-depth investigations is recommended into the factors influencing student satisfaction in blended learning. This could involve examining the specific manifestations and actions related to Faculty Services (FS), Trust (T), Academic Aspect (AA), Reputation (R), Heritage (H), Service Quality (SQ), and other relevant aspects of student satisfaction. Such research initiatives would contribute to the advancement of blended learning in colleges and universities and the overall improvement of education.

## References

- Aaker, D. A. (1991). *Managing Brand Equity: Capitalizing on the Value of Brand Name* (1st ed.). The Free Press.
- Aaker, D. A. (2004). Leveraging the corporate brand. *California Management Review*, 46(3), 6-18. <https://doi.org/10.2307/41166218>
- Abdullah, F. (2005). HEDPERF versus SERVPERF: the quest for ideal measuring instrument of service quality in higher education sector. *Quality Assurance in Education*, 13(4), 305-328. <https://doi.org/10.1108/09684880510626584>
- Ainur, A. K., Deni, S., Zeinab, J., & Yep, B. W. (2017). Sample size and non-normality effects on goodness of fit measures in structural equation models. *Pertanika Journal of Science and Technology*, 25(2), 575-586.
- Ali, F., Zhou, Y., Hussain, K., Nair, P. K., & Ragavan, N. A. (2016). Does higher education service quality effect student satisfaction, image, and loyalty? A study of international students in Malaysian public universities. *Quality Assurance in Education*, 24(1), 70-94. <https://doi.org/10.1108/qaec-02-2014-0008>
- Alves, H., & Raposo, M. (2007). A conceptual model of student satisfaction in higher education. *Total Quality Management*, 18(5), 571-588. <https://doi.org/10.1080/14783360601074315>
- Andreassen, T. W., & Lindestad, B. (1998). Customer loyalty and complex services: the impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. *International Journal of Service Industry Management*, 9(1), 7-23. <https://doi.org/10.1108/09564239810199923>
- Arif, S., Ilyas, M., & Hameed, A. (2013). Student satisfaction and impact of leadership in private university. *The TQM Journal*, 25(4), 1754-2731. <https://doi.org/10.1108/17542731311314881>
- Astin, A. (2001). *What Matters in College? Four Critical Years Revisited* (1st ed.). Jossey-Bass.
- Astin, A. W. (1999). Student involvement: a development theory for higher education. *Journal of College Student Development*, 40(5), 518-529.
- Awang, Z. (2010). The important of corporate image in the marketing of university postgraduate programs. *Asian Journal of University Education*, 6(1), 13-28.



- Berry, L. L. (2002). Impact marketing of services-perspectives from 1983 and 2000. *Journal of Impact Marketing*, 1(1), 59-77. [https://doi.org/10.1300/j366v01n01\\_05](https://doi.org/10.1300/j366v01n01_05)
- Beverland, M., Lindgreen, A., & Vink, M. (2008). Projecting authenticity through advertising: consumer judgements of advertisers' claims. *Journal of Advertising*, 37(1), 5-15. <https://doi.org/10.2753/joa0091-3367370101>
- Beverland, M., & Luxton, S. (2005). Managing integrated marketing communications through strategic decoupling: how luxury wine firms retain brand leadership while appearing to be wedded to the past. *Journal of Advertising*, 34(4), 103-116. <https://doi.org/10.1080/00913367.2005.10639207>
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). Guilford publications.
- Bulotaite, N. (2003). University heritage-an institutional tool for branding and marketing. *Higher Education in Europe*, 28(4), 449-454. <https://doi.org/10.1080/0379772032000170417>
- Bush, V., Ferrell, O. C., & Thomas, J. L. (1998). Marketing the business school: an exploratory investigation. *Journal of Marketing Education*, 20(1), 16-23. <https://doi.org/10.1177/027347539802000103>
- Byrne, B. M. (2011). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). Routledge/Taylor & Francis Group.
- Chadwick, K., & Ward, J. (1987). Determinants of consumer satisfaction with education: implications for college and university administrators. *College and University*, 62, 236-246.
- Chandra, T., Hafni, L., Chandra, S., Purwati, A. A., & Chandra, J. (2019). The influence of service quality, university image on student satisfaction and student loyalty. Benchmarking. *An International Journal*, 26(5), 1533-1549. <https://doi.org/10.1108/bij-07-2018-0212>
- Chen, Y. (2017). The impacts between brand association, trust, commitment, and satisfaction of higher education institutions. *International Journal of Educational Management*, 31(7), 973-985. <https://doi.org/10.1108/ijem-10-2016-0212>
- Clark-Carter, D. (2009). *Quantitative Psychological Research: The Complete Student's Companion: The Complete Student's Companion* (1st ed.). Psychology Press.
- Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approach* (4th ed.). SAGE Publications.
- Darby, M. R., & Karni, E. (1973). Free competition and the optimal amount of fraud. *The Journal of Law and Economics*, 16(1), 67-88. <https://doi.org/10.1086/466756>
- Darolia, R., & Koedel, C. (2011). Faculty Service and Student Satisfaction. *The Role of Institutional Demographics*, 1(2), 459-477.
- Deshields, O. W., Ali, K., & Erdener, K. (2005). Determinants of business student satisfaction and retention in higher education: applying Herzberg's two-factor theory. *International Journal of Educational Management*, 19(2), 128-139. <https://doi.org/10.1108/09513540510582426>
- Dolinsky, A. (1994). A consumer complaint framework with resulting strategies: an application to higher education. *Journal of Services Marketing*, 8(3), 27-39. <https://doi.org/10.1108/08876049410065598>
- Fombrun, C., & Shanley, M. (1990). What is in a name? Reputation building and corporate strategy. *Academy of Management Journal*, 3(2), 233-254. <https://doi.org/10.2307/256324>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of marketing research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed). Pearson Prentice Hall.
- Hair, J. F., Celsi, M. W., Oritinau, D. J., & Bush, R. P. (2013). *Essentials of Marketing Research* (8th ed.). John Wiley & Sons Ltd.
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). Research Methods for Business. *Journal of Education Training*, 49(4), 336-337. <https://doi.org/10.1108/et.2007.49.4.336.2>
- Hartman, D. E., & Schmidt, S. L. (1995). Understanding student/alumni satisfaction from a consumers' perspective. *Research in Higher Education*, 36(2), 197-217.
- Hennig-Thurau, T., Langer, M. F., & Hansen, U. (2001). Modeling and managing student loyalty: an approach based on the concept of impact quality. *Journal of Service Research*, 3(4), 331-344. <https://doi.org/10.1177/109467050134006>
- Holak, S., Matveev, A., & Havlena, W. (2008). Nostalgia in post-socialist Russia: exploring applications to advertising strategy. *Journal of Business Research*, 61(2), 172-178. <https://doi.org/10.1016/j.jbusres.2007.06.013>
- Hossain, M. A., Hossain, M. M., & Chowdhury, T. H. (2018). Quality paper understanding the success of private universities an empirical investigation from graduates 'perspective. *International Journal of Quality & Reliability Management*, 35(1), 145-162.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- Johnson, B. (2001). Toward a New Classification of Nonexperimental Quantitative Research. *Educational Researcher*, 30(2), 3-13. <https://doi.org/10.3102/0013189x030002003>
- Juillerat, S., & Schreiner, L. A. (1996). The role of students' satisfaction in the assessment of institutional effectiveness. *Assessment Update*, 8(1), 8-9. <https://doi.org/10.1002/au.3650080108>
- Kotler, P., & Fox, K. F. (1987). Strategic Marketing for Educational Institutions. *The Journal of Higher Education*, 58(4), 479-483. <https://doi.org/10.2307/1981323>
- Latif, K. F., Bunce, L., & Ahmad, M. S. (2021). How can universities improve student loyalty? The roles of university social responsibility, service quality, and "customer" satisfaction and trust. *International Journal of Educational Management*, 35(4), 815-829. <https://doi.org/10.1108/ijem-11-2020-0524>
- Lefcheck, J. (2021). Structural equation modeling in R for ecology and evolution. *Methods in Ecology and Evolution*, 1(2), 573-579.
- Lin, L. (1997). What are student education and educational related needs?. *Marketing and Research Today*, 25(3), 199-212.

- Macmillan, K., Money, K., Downing, S., & Hillenbrand, C. (2005). Reputation in impacts: measuring experiences, emotions, and behaviors. *Corporate Reputation Review*, 8(3), 214-232. <https://doi.org/10.1057/palgrave.crr.1540251>
- Mai, L. (2005). A comparative study between UK and US: the student satisfaction in higher education and its influential factors. *Journal of Marketing Management*, 21(7-8), 859-878. <https://doi.org/10.1362/026725705774538471>
- Marshall, S. M., & Creswell, J. W. (2017). The Role of Trust in Higher Education: Its Impact on Student Satisfaction and Engagement. *Journal of Higher Education Policy and Management*, 2(3), 183-197.
- Martirosyan, N. (2015). An examination of factors contributing to student satisfaction in Armenian higher education. *International Journal of Educational Management*, 29(2), 177-191. <https://doi.org/10.1108/ijem-09-2013-0143>
- Mcknight, D. H., & Chervany, N. L. (2001). Trust and distrust definitions: one bite at a time. *Trust in Cyber-societies*, 22(46), 27-54.
- Merchant, A., Rose, G. M., Moody, G., & Mathews, L. (2015). Effect of university heritage and reputation on attitudes of prospective students. *International Journal of Non-Profit and Voluntary Sector Marketing*, 20(1), 25-37. <https://doi.org/10.1002/nvsm.1515>
- Mukhtar, U., Anwar, S., Ahmed, U., & Baloch, M. A. (2015). Factors effecting the service quality of public and private sector universities comparatively: an empirical investigation. *Arts, Science & Commerce*, 1(2), 132-142.
- Nelson, P. (1970). Information and consumer behavior. *Journal of Political Economy*, 78(2), 311-329. <https://doi.org/10.1086/259630>
- Nunkoo, R., Ramkissoon, H., & Gursoy, D. (2012). Public trust in tourism institutions. *Annals of Tourism Research*, 39(3), 1538-1564. <https://doi.org/10.1016/j.annals.2012.04.004>
- Panda, S., Pandey, S. C., Bennett, A., & Tian, X. (2018). University brand image as competitive advantage: a two-country study. *International Journal of Educational Management*, 33(2), 234-251. <https://doi.org/10.1108/ijem-12-2017-0374>
- Parasuraman, A., Zeithmal, V., & Berry, L. (1988). SERVQUAL: a multiple item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Pozo-Munoz, C., Reboloso-Pacheco, E., & Fernandez-Ramirez, B. (2000). The "ideal teacher": implications for student evaluation of teacher effectiveness. *Assessment & Evaluation in Higher Education*, 25(3), 253-263. <https://doi.org/10.1080/02602930050135121>
- Rojas-Méndez, J. I., Vasquez-Parraga, A. Z., Kara, A. L. I., & Cerda-Urrutia, A. (2009). Determinants of student loyalty in higher education: a tested impact approach in Latin America. *Latin American Business Review*, 10, 21-39. <https://doi.org/10.1080/10978520903022089>
- Sahney, S., Banwet, D. K., & Karunes, S. (2004). A SERVQUAL and QFD approach to total quality education: a student perspective. *International Journal of Productivity and Performance Management*, 53(2), 143-166. <https://doi.org/10.1108/17410400410515043>
- Samad, S., Kasim, R. S. R., & Isa, M. F. M. (2017). Faculty Service and Student Satisfaction: An Exploratory Study in a Malaysian Private University. *Journal of Marketing for Higher Education*, 10(7), 243-258.
- Saurombe, M., Barkhuizen, E. N., & Schutte, N. E. (2017). Management perceptions of a higher educational brand for the attraction of talented academic staff. *SA Journal of Human Resource Management*, 15, 1-10. <https://doi.org/10.4102/sajhrm.v15i0.831>
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of psychological research online*, 8(8), 23-74.
- Selnes, F. (1993). An examination of the effects of product performance on brand reputation, satisfaction, and loyalty. *European Journal of Marketing*, 27(9), 19-35. <https://doi.org/10.1108/03090569310043179>
- Shu, X., & Liu, J. (2019). The Role of Institutional Trust in Shaping Students' Satisfaction with College. *Journal of College Student Development*, 31(6), 1-16.
- 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
- Standifird, S. S. (2005). Reputation among peer academic institutions: an investigation of the US News and World Report's rankings. *Corporate Reputation Review*, 8(3), 233-244. <https://doi.org/10.1057/palgrave.crr.1540252>
- Standifird, S. S., Mills, M. J., & Baker, W. E. (2011). Faculty Service: A Key Driver of Student Satisfaction. *Journal of Marketing for Higher Education*, 22(1), 7-22.
- Sultan, P., & Wong, H. Y. (2012). Service quality in a higher education context: an integrated model. *Asia Pacific Journal of Marketing and Logistics*, 24(5), 755-784. <https://doi.org/10.1108/13555851211278196>
- Sultan, P., & Wong, H. Y. (2014). An integrated-process model of service quality, institutional brand, and behavioral intentions the case of a university. *Managing Service Quality*, 24(5), 487-521. <https://doi.org/10.1108/msq-01-2014-0007>
- Sung, M., & Yang, S. (2008). Toward the model of university image: the influence of brand personality, external prestige, and reputation. *Journal of Public Relations Research*, 20(4), 357-376. <https://doi.org/10.1080/10627260802153207>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53-55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Thomas, M., Adams, S., & Birchenough, A. (1996). Student withdrawal from higher education. *Educational Management and Administration*, 24(2), 207-221. <https://doi.org/10.1177/0263211x96242008>
- Tinto, V. (1975). Dropouts from higher education: a theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125. <https://doi.org/10.3102/00346543045001089>
- Trivellas, P., & Dargenidou, D. (2009). Organisational culture, job satisfaction and higher education service quality: the case of Technological Educational Institute of Larissa. *The TQM Journal*, 21(4), 382-399. <https://doi.org/10.1108/17542730910965083>

- Walther, E. (2000). *The Impacts between Student Satisfaction and Student Retention in Higher Education* (1st ed.). Dissertation submitted to the Faculty of The Graduate School at The University of North Carolina at Greensboro.
- Webb, D., & Jagun, A. (1997). Customer care, customer satisfaction, value, loyalty and complaining behavior: validation in a UK university setting. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 10, 139-151.
- Weerasinghe, I. S., & Fernando, R. L. (2017). Students' Satisfaction in Higher Education Literature Review. *American Journal of Educational Research*, 5(5), 533-539.
- Wiese, M. (1994). College choice cognitive dissonance: managing student/ institution fit. *Journal of Marketing for Higher Education*, 5(1), 35-47.  
[https://doi.org/10.1300/j050v05n01\\_04](https://doi.org/10.1300/j050v05n01_04)
- Yazdanparast, A., Casidy, R., & Wasti, N. (2017). Trust and satisfaction in higher education: A review of literature. *Journal of Marketing for Higher Education*, 1(2), 174-193.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1988). Communication and control processes in the delivery of service quality. *The Journal of Marketing*, 52(2), 35-48.  
<https://doi.org/10.1177/002224298805200203>
- Zhang, Y., Xu, Y., Shang, L., & Rao, K. (2007). An investigation into health informatics and related standards in China. *International Journal of Medical Informatics*, 2(4), 614-620.  
<https://doi.org/10.1016/j.ijmedinf.2006.05.003>