Factors Influencing Undergraduate Students' Satisfaction and Loyalty to Art Museums in Chengdu, China

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Abstract

Purpose: This study aims to investigate factors impacting university students' satisfaction and loyalty towards art museums in Chengdu, China, including student expectation, perceived value, perceived quality, student satisfaction, trust, image, and loyalty. **Research design, data, and Methodology:** The researchers identified the target population as undergraduate (n=450) who have visited their school's art museum in selected seven universities in Chengdu, China. A quantitative methodology was employed alongside a questionnaire-based research design. To ensure the content validity, three experts were engaged to assess all questionnaire items using the index of item-objective congruence. Preliminary testing involved the distribution of the questionnaire to 50 participants to assess the reliability through the Cronbach's Alpha test variable. Data analysis was executed utilizing confirmatory factor analysis and structural equation modeling techniques. **Results:** The results show that student expectation and perceived value significantly impact student satisfaction. Perceived quality has a significant impact on perceived value. Furthermore, trust and student satisfaction significantly impact image. Student satisfaction and image have a significant impact on loyalty. However, perceived quality has no significant impact on student satisfaction. **Conclusions:** Enhancing university students' museum experiences requires a holistic approach that prioritizes student-centric program development, effective communication, exhibit quality, trust-building initiatives, and collaborations with educational institutions.

Keywords : Student Expectation, Student Satisfaction, Perceived Value, Perceived Quality, Art Museum

JEL Classification Code: E44, F31, F37, G15

1. Introduction

The artistic expression of art museums has appeared in front of us with a brand-new manifestation under the impetus of the emerging cultural industry. When we have yet to recognize it fully, it has been rapidly developing and integrating into our lives at an astonishing speed. Nowadays, fine arts, as an important part of cultural and creative industries, have received extensive attention from many countries and regions (Mairesse, 2019). As a temple that collects human fine arts heritage and promotes the process of modern fine arts, art museums have become the business cards of many universities, especially in the developed countries of Europe and America, where the resources of art museums and related derivatives in the universities have

become an important strategic component for improving the quality of university students and deepening their national identity. Art museums are now more than just places for art exchange and aesthetic education for university students. However, the university environment requires art museums to strengthen their management, emphasize content development, and pay attention to student's needs, or else they will be gradually neglected and forgotten. As an important part of the art category, art is no longer only in the traditional art field of painting and calligraphy; with the advancement of the cultural industry, art also presents a variety of forms of expression. Compared to comprehensive, historical, or thematic museums, university art museums' collection, exhibition, and education functions will directly affect art production, development, and the continuation of

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art genres (Museumnext, 2023).

The art museum is a cultural institution that houses a collection of artworks for public viewing and appreciation. It is a repository of human creativity, preserving and exhibiting various art forms. Art museums showcase various artworks, including paintings, sculptures, photographs, prints, installations, and more. These museums are crucial in preserving cultural heritage and promoting artistic expression. They often have permanent collections that feature works from renowned artists throughout history and temporary exhibitions that showcase contemporary artists and thematic displays (Ser, 2019).

Visiting an art museum offers an opportunity to immerse oneself in the world of art and aesthetics. It provides a unique space for individuals to reflect, appreciate, and engage with artistic creations. Museums also organize educational programs, guided tours, workshops, and lectures to enhance visitors' understanding of art and its historical, social, and cultural context. Art museums vary in size, scale, and focus. Some are dedicated exclusively to a specific artist, art movement, or period, while others have collections encompassing various styles and periods. Major art museums often become landmarks in cities and attract visitors worldwide. In addition to their curatorial function, art museums contribute to a region's cultural and economic development (Recupero et al., 2019).

The existing literature on museum studies and cultural engagement provides valuable insights into general visitor satisfaction and loyalty. However, there is a notable absence of research specifically focused on the unique context of university students in Chengdu and the factors that shape their perceptions of art museums. The current research gap leaves unexplored the intricate interplay between student expectations, perceived value, perceived quality, satisfaction, trust, image, and loyalty within the cultural landscape of Chengdu. Understanding these factors is essential for both scholars and museum practitioners to tailor their approaches to the specific needs and preferences of this demographic. Therefore, this study aims to contribute valuable knowledge to the field of museum studies and provide practical guidance for cultural institutions seeking to enrich the experiences of university students in Chengdu and foster enduring connections with art and cultural heritage.

2. Literature Review

2.1 Student Expectation

Student expectation is a belief or anticipation about a future event, outcome, or situation. It involves what an individual or group assumes or predicts will happen based on their knowledge, experiences, or subjective preferences (Zhang et al., 2008). Student expectations can be understood as the beliefs, hopes, or assumptions individuals hold regarding a future event, outcome, or situation (Carbone & Sheard, 2003). Student expectations serve as a mental framework through which people anticipate and evaluate their experiences (Karagiannopoulou & Christodoulides, 2005).

Student expectation and student satisfaction are closely intertwined. Student expectation refers to students' anticipated outcomes, experiences, and objectives for their educational journey. These expectations can include factors such as the quality of teaching, the relevance of the curriculum, the availability of resources, and the overall learning environment (Zhang et al., 2008). Student satisfaction, on the other hand, is a measure of how well these expectations are met. It reflects the contentment, fulfillment, and happiness students experience in their educational experiences. It encompasses various aspects like the teaching methods, support services, assessment practices, extracurricular opportunities, and the overall educational setting (Carbone & Sheard, 2003). Accordingly, the following hypothesis is derived:

H1: Student expectation has a significant impact on student satisfaction.

2.2 Perceived Value

Perceived value refers to the subjective assessment or judgment that individuals make about the worth or benefits they believe they will receive from a product, service, or brand (Teeroovengadum et al., 2019). It is based on their perception of the overall benefits relative to the costs or sacrifices involved in obtaining and using the offering. Perceived value is not solely based on a product or service's objective attributes or features but is influenced by the individual's needs, preferences, and circumstances (Quintal & Polczynski, 2010).

Perceived value and student satisfaction are significant and can greatly influence students' overall satisfaction with their educational experience. Perceived value refers to students' perception or assessment of the worth or benefits they perceive to receive about the costs or sacrifices they make for their education (Teeroovengadum et al., 2019). When students perceive a high value in their education, they believe that the benefits they receive, such as knowledge, skills, personal growth, networking opportunities, and career prospects, outweigh their investment costs and efforts. This perception of value can be influenced by factors such as the quality of education, the institution's reputation, curriculum relevance, faculty expertise, access to resources, and support services (Tam, 2004). Accordingly, the following hypothesis is derived:

H2: Perceived value has a significant impact on student satisfaction

2.3 Perceived Quality

Perceived quality refers to customers' subjective assessment or judgment about the overall excellence, superiority, or desirability of a product, service, or brand. It represents customers' perceptions or beliefs regarding the level of quality associated with the offering (Sultan & Yin Wong, 2012). Perceived quality represents the consumer's subjective perception of a product or service's overall standard or excellence (Yılmaz, 2008). Perceived quality involves a comparative assessment of the offering's quality compared to other alternatives available in the market. It is influenced by how customers perceive the offering of competing products or services (Cronin & Taylor, 1992; Parasuraman et al., 1988).

Perceived quality and perceived value are closely intertwined and can greatly influence students' overall perception and satisfaction (Yılmaz, 2008). Perceived quality refers to the subjective evaluation made by students regarding the excellence, effectiveness, and overall level of satisfaction with the educational products or services they receive. (Sultan & Yin Wong, 2012). Perceived quality and student satisfaction are significant and are crucial in shaping students' overall satisfaction with their educational experience (Cronin & Taylor, 1992; Parasuraman et al., 1988). Accordingly, the following hypotheses are derived:
H3: Perceived quality has a significant impact on perceived value.
H4: Perceived quality has a significant impact on student satisfaction.

2.4 Trust

Trust is a fundamental concept that refers to the belief, confidence, and reliance placed on a person, organization, or system. It involves the student's expectation that the trusted entity will act in a reliable, honest, and competent manner and fulfill its commitments or obligations (Sultan & Yin Wong, 2012). Trust forms the foundation for positive relationships, interactions, and transactions between individuals, businesses, and institutions (Newell et al., 2016).

Trust plays a crucial role in shaping students' satisfaction levels. When students trust their educational institution, they feel confident in the reliability and credibility of the institution to fulfill their needs and expectations. This trust can stem from various factors, such as consistent delivery of quality education, effective support services, transparent communication, fair assessment practices, and a

commitment to students' well-being (Sultan & Yin Wong, 2012). Accordingly, the following hypothesis is derived:
H5: Trust has a significant impact on image.

2.5 Student Satisfaction

Student satisfaction heavily relies on the quality of education and the academic experience. It involves factors such as the relevance and effectiveness of the curriculum, the expertise and accessibility of faculty members, the availability of resources and learning materials, and the opportunities for intellectual growth and development (To & Lung, 2020).

The overall learning environment plays a crucial role in student satisfaction. This includes aspects such as the classroom atmosphere, the extent of student engagement and participation, the presence of supportive teaching methodologies, and the level of interaction and collaboration among peers (Li & Pibulcharoensit, 2022). Accordingly, the following hypotheses are derived:
H6: Student satisfaction has a significant impact on image.
H7: Student satisfaction has a significant impact on loyalty.

2.6 Image

In consumer research, the concept of image refers to how consumers perceive and evaluate a brand, product, or company based on its overall impression, reputation, and identity. It represents consumers' mental representation and impression of a particular entity, which influences their attitudes, behaviors, and purchasing decisions. Image refers to a cumulative structure served by customer experience and directly relates to customer loyalty (Brunner et al., 2008). In some cases, images are also used to portray the company's image and gauge product quality (Afsar et al., 2010).

The image of an educational institution refers to how it is perceived by its stakeholders, including students, faculty, staff, and the wider community. This perception is shaped by factors such as the institution's reputation, brand, quality of education, facilities, and overall perceived value (Teeroovengadum et al., 2019). A positive institutional image can have a direct impact on student loyalty. When students perceive an institution positively, they are more likely to develop a stronger sense of loyalty and commitment toward it. They feel proud to be associated with the institution and become engaged and active campus community members (Feng, 2023). Accordingly, the following hypothesis is derived:
H8: Image has a significant impact on loyalty.

2.7 Loyalty

Loyalty is a customer-perceived behavior associated with various physical institutions, such as suppliers, stores, products, brands, and organizations (Rundle-Thiele, 2005). At the same time, it is considered an unflinchingly consistent commitment to the future, a form of behavior that extends or continues patronage (Oliver, 1997), similar to the related concepts of customer loyalty. In consumer research, loyalty refers to consumers' psychological attachment, commitment, and repeat behavior towards a specific brand, product, or company. It measures how customers consistently choose, repurchase, and prefer a particular brand over others within a specific product category. Student loyalty also includes attitudes and behaviors (Helgesen & Nesset, 2007).

3. Research Methods and Materials

3.1 Research Framework

The study designed a framework based on the first five student and gallery satisfaction articles, as shown in Figure 1. The study attempts to investigate the relationship between various variables and student satisfaction and loyalty to promote the adjustment of business strategies by university art museums based on university students' preferences and improve the attractiveness of art museums for university students. Based on the three previous studies (Sultan & Yin Wong, 2012; Teeroovengadum et al., 2019; Zhang et al., 2008), and referring to many research papers and scientific theories, this study designed six independent variables: student expectation, perceived value, perceived quality, trust, satisfaction, image, and loyalty.
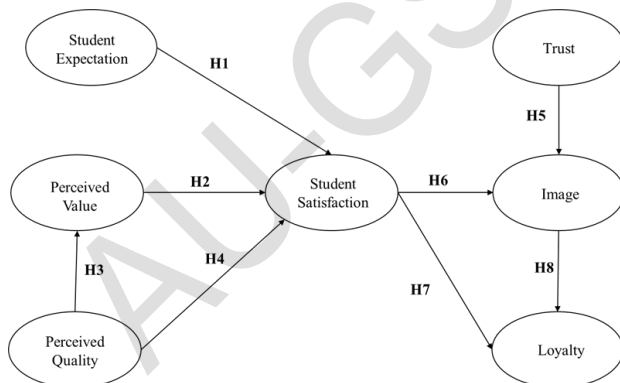

Figure 1: Conceptual Framework

H1: Student expectation has a significant impact on student satisfaction.

H2: Perceived value has a significant impact on student satisfaction.

H3: Perceived quality has a significant impact on perceived value.

H4: Perceived quality has a significant impact on student satisfaction.

H5: Trust has a significant impact on image.

H6: Student satisfaction has a significant impact on image.

H7: Student satisfaction has a significant impact on loyalty.

H8: Image has a significant impact on loyalty.

3.2 Research Methodology

In this investigation, a quantitative methodology was employed alongside a questionnaire-based research design to gather data from a subset of the designated population. To ensure the content validity of the research instrument, three experts were engaged to assess all questionnaire items using the index of item-objective congruence (IOC). Therefore, IOC is higher than 0.6 or midpoint to validate the content. Preliminary testing involved the distribution of the questionnaire to 50 participants sharing characteristics with the target population, albeit not comprising the final sample, to assess the reliability through the Cronbach's Alpha test variable. A 0.7 or higher alpha value implies a more reliable item, while a lower number denotes a less reliable item (Van Zyl et al., 2000). Data analysis was executed utilizing validated factor analysis (CFA) and structural equation modeling (SEM) techniques. These analytical approaches were employed to scrutinize data, assess the model's goodness of fit, examine relationships between variables, and assess the eight proposed hypotheses.

3.3 Population and Sample Size

The researchers identified the target population as undergraduate (n=450) who have visited their school's art museum in selected seven universities in Chengdu, China. Israel (2003) pointed out that analysis of covariance, multiple regression, and log-linear analysis require large samples like 200-500. The researcher considered the complexity of the model, so the sample size selected in this study was 450 cases and were accepted by the minimum sample size requirement.

3.4 Sampling Technique

In research investigations, judgment sampling is a non-probabilistic sampling strategy. In this technique, the researcher selects participants or subjects based on their judgment or expertise. Instead of selecting participants randomly or systematically, the researcher uses their judgment to select participants who they believe are most

representative or relevant to the research question.

In statistical surveys, quota sampling is a non-probability sampling strategy. It entails choosing people based on established quotas to guarantee that the sample reflects demographic features or subgroups. The population is stratified in quota sampling depending on relevant variables such as gender, and study program (Acharya et al., 2013).

Table 1: Sample Units and Sample Size

Name of University	Population Size	Proportional Sample Size
Sichuan University	31373	87
Southwest Minzu University	23520	65
Chengdu University	24100	67
Sichuan Normal University	33890	94
Sichuan Conservatory of Music	14512	40
Sichuan University of Media and Communications	14212	39
Tianfu College of SWUFE	21059	58
Total	**162666**	**450**

Source: Constructed by author

4. Results and Discussion

4.1 Demographic Information

As shown in Table 2, with a balanced representation of 450 undergraduates. This essay provides a detailed analysis of the gender and student program distribution within these categories. The gender distribution reveals a fairly even representation across the entire participant pool. Among the undergraduate segment, 46.9% are male, comprising 211 individuals, while 53.1% are female, totaling 239 participants.

The undergraduate group is further delineated by academic year, offering insights into the educational

progression of participants. The distribution across undergraduate years is as follows: 26.9% (121 individuals) in the first year, 32.9% (148 individuals) in the second year, 21.1% (95 individuals) in the third year, and 19.1% (86 individuals) in the fourth year. This breakdown allows for a nuanced examination of potential variations or trends based on the academic year.

Table 2: Demographic Profile

Demographic and General Data (N=450)		Frequency	Percentage
Gender	Male	211	46.9%
	Female	239	53.1%
Student Program	Undergraduate/First Year	121	26.9%
	Undergraduate/Second Year	148	32.9%
	Undergraduate/Third Year	95	21.1%
	Undergraduate/Fourth Year	86	19.1%

4.2 Confirmatory Factor Analysis (CFA)

CFA was used before analyzing the measurement model with the structural equation model (SEM). The result of CFA indicated that all items in each variable are significant and have factor loading to prove discriminant validity. Hair et al. (2006) recommends guidelines to define the significance of factor loading of each item and acceptable values in defining the goodness of fit. Factor loadings are higher than 0.50, and the p-value is lower than 0.05. Furthermore, aligning with the recommendation from Fornell and Larcker (1981), the Composite Reliability (CR) is greater than the cut-off point of 0.6, and the Average Variance Extracted (AVE) is higher than the cut-off point of 0.4.

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
Student Expectation (SE)	Zhang et al. (2008)	3	0.890	0.836-0.887	0.890	0.730
Perceived Value (PV)	Teeroovengadum et al. (2019)	4	0.777	0.624-0.737	0.780	0.471
Perceived Quality (PQ)	Sultan and Yin Wong (2012)	5	0.838	0.651-0.774	0.839	0.512
Student Satisfaction (SS)	Zhang et al. (2008)	6	0.859	0.683-0.738	0.859	0.504
Trust (TR)	Sultan and Yin Wong (2012)	6	0.875	0.599-0.837	0.875	0.543
Image (IM)	Teeroovengadum et al. (2019)	5	0.826	0.659-0.775	0.829	0.494
Loyalty (LO)	Zhang et al. (2008)	4	0.780	0.573-0.759	0.788	0.484

Table 4 presents compelling evidence that the model satisfies the requirements for several fit indices, such as GFI, AGFI, NFI, CFI, TLI, and RMSEA. This confirms that the model possesses both convergent and discriminant validity. Taken together, these measurements strongly support the discriminant validity of the model and provide substantial validation for the subsequent estimates in the structural model.

Table 4: Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	660.763/474 = 1.394
GFI	≥ 0.85 (Kline, 2011)	0.919
AGFI	≥ 0.85 (Kline, 2011)	0.904
NFI	≥ 0.85 (Kline, 2011)	0.908
CFI	≥ 0.85 (Kline, 2011)	0.972
TLI	≥ 0.85 (Kline, 2011)	0.969
IFI	≥ 0.85 (Kline, 2011)	0.972

Fit Index	Acceptable Criteria	Statistical Values
RMSEA	≤ 0.08 (Hooper et al., 2008)	0.030
Model Summary		Acceptable Model Fit

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, IFI = Incremental Fit Index and RMSEA = Root mean square error of approximation

According to Fornell and Larcker (1981), testing for discriminant validity was evaluated by computing the square root of each AVE. Based on this study, the value of discriminant validity is larger than all inter-construct/factor correlations. Therefore, the discriminant validity is supportive. The convergent and discriminant validity were proved. Consequently, the evidence is sufficient for establishing construct validity.

Table 5: Discriminant Validity

	TR	SE	SS	IM	LO	PV	PQ
TR	0.737						
SE	0.319	0.855					
SS	0.229	0.550	0.710				
IM	0.239	0.556	0.581	0.703			
LO	0.313	0.647	0.538	0.665	0.696		
PV	0.214	0.619	0.587	0.640	0.641	0.686	
PQ	0.211	0.392	0.227	0.434	0.563	0.388	0.715

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

4.3 Structural Equation Model (SEM)

The structural model delves into the interactions between latent constructs, examining how these constructs interrelate and exert influence on one another. Table 6 presents the computed goodness-of-fit indices for the structural model within the main campus group. Following the analysis of the undergraduate group, the statistical results indicate a satisfactory fit, as evidenced by the following indices: CMIN/DF = 2.175, GFI = 0.876, AGFI = 0.857, NFI = 0.852, CFI = 0.913, TLI = 0.906, IFI = 0.914, and RMSEA = 0.051.

Table 6: Goodness of Fit for Structural Model

Index	Acceptable	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	1059.303/487 = 2.175
GFI	≥ 0.85 (Kline, 2011)	0.876
AGFI	≥ 0.85 (Kline, 2011)	0.857
NFI	≥ 0.85 (Kline, 2011)	0.852
CFI	≥ 0.85 (Kline, 2011)	0.913
TLI	≥ 0.85 (Kline, 2011)	0l906
IFI	≥ 0.85 (Kline, 2011)	0.914
RMSEA	≤ 0.08 (Hooper et al., 2008)	0.051
Model Summary		Acceptable Model Fit

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, IFI = Incremental Fit Index and RMSEA = Root mean square error of approximation

4.4 Research Hypothesis Testing Result

After the SEM model's running data, this study's hypothesis verification results were obtained, as shown in Table 7. As can be seen from the values in the table, the results show that all hypotheses are supported, and the standardized path coefficients and T-values are shown in Table 7.

Table 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-value	Result
H1: SE→SS	0.422	8.164*	Supported
H2: PV→SS	0.464	7.213*	Supported
H3: PQ→PV	0.387	6.430*	Supported
H4: PQ→SS	-0.020	-0.372	Not Supported
H5: TR→IM	0.123	2.542*	Supported
H6: SS→IM	0.581	8.371*	Supported
H7: SS→LO	0.285	4.290*	Supported
H8: IM→LO	0.480	6.314*	Supported

Note: * p<0.05
Source: Created by the author

Table 7 reveals the following findings:
H1 has confirmed that student expectation is an important component in student satisfaction, with the standardized route coefficient value in the structural approach being 0.422. It is found that student expectation significantly impacts student satisfaction (Zhang et al., 2008).

On the other hand, **H2** has confirmed that perceived value is an important component of student satisfaction, with the standardized route coefficient value in the structural approach being 0.464. Student satisfaction significantly influences perceived value (Teeroovengadum et al., 2019).

Regarding **H3,** the correlational statistics result validated the hypothesis for the strong impact of perceived quality on perceived value, described by the standard coefficient value of 0.387. Perceived quality positively and considerably impacts perceived value (Sultan & Yin Wong, 2012).

H4 discovered that perceived quality influences student satisfaction, with a standard coefficient of -0.020. According to the findings, student satisfaction has no significant effect on student satisfaction (Cronin & Taylor, 1992).

Trust reinforced image, as evidenced by the statistic value of 0.123 on the standard coefficient examining the active impact of **H5.** The models studied state that trust relies primarily on the image (Sultan & Yin Wong, 2012).

H6 has confirmed that student satisfaction is an important component in the image, with the standardized route coefficient value in the structural approach being 0.581.

Student satisfaction had a significant effect on the prediction of images (Zhang et al., 2008).

In addition, **H7** shows that student satisfaction significantly influences loyalty in this study, and the standard coefficient value is 0.285, proving that student satisfaction significantly affects loyalty (To & Lung, 2020).

Finally, the statistical results of this study do support the notion that effort expectancy affects the image, according to the **H8** hypothesis, and its standard coefficient value is 0.480 (Teeroovengadum et al., 2019).

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

The study aimed to investigate the factors influencing university students' satisfaction and loyalty toward art museums in Chengdu, China, focusing on student expectation, perceived value, perceived quality, student satisfaction, trust, image, and loyalty. The target population comprised undergraduate (n=450) students who had visited their respective university's art museum. The research employed a quantitative methodology and a questionnaire-based design to collect data.

For the undergraduate group, the findings reveal significant impacts of student expectation and perceived value on student satisfaction, affirming the importance of these factors in shaping the undergraduates' museum experience. Perceived quality significantly influences perceived value, contributing to understanding the factors that enhance the perceived value of art museums. Moreover, trust and student satisfaction emerge as significant influencers of image, emphasizing the interconnectedness of trust-building and satisfaction in shaping the overall image of the art museum. Both student satisfaction and image significantly impact loyalty, underlining their pivotal roles in fostering loyalty among undergraduate students. Notably, the study identifies that perceived quality does not significantly impact student satisfaction for this group.

This study provides valuable insights into the factors shaping university students' satisfaction and loyalty toward art museums in Chengdu, China. The distinct influence patterns identified for undergraduate groups offer nuanced perspectives for museum administrators and educators. The findings can inform targeted strategies to enhance the museum experience, strengthen satisfaction, and foster loyalty among student populations. Additionally, the methodology employed, including rigorous instrument validation and advanced statistical techniques, contributes to the methodological rigor of the research. However, acknowledging the limitations and potential for further research, this study lays a solid foundation for future endeavors in art museum experiences and student engagement in cultural institutions.

5.2 Recommendation

Based on the findings and implications of the study on factors impacting university students' satisfaction and loyalty toward art museums in Chengdu, China, the following recommendations are offered for practitioners, educators, and administrators within the museum context.

To foster meaningful connections with university students, museums should prioritize the development of programs and exhibitions that are student-centric. This involves a thorough understanding of diverse learning styles, interests, and academic backgrounds. By tailoring exhibits to accommodate these differences, museums can create inclusive and engaging experiences for both undergraduate and postgraduate students. This approach not only acknowledges the diversity within the student population but also ensures that the museum remains relevant and appealing to a broad audience.

Implementing robust communication strategies is paramount to conveying the educational and cultural value of museum visits. Utilizing various communication channels, including social media, enables museums to reach students effectively. By providing clear and accessible information about upcoming exhibits, events, and educational opportunities, museums can heighten students' awareness and interest, fostering a sense of anticipation and excitement about their museum experiences.

The perceived value of a museum experience is heavily influenced by the quality of exhibits and interactive displays. Museums should prioritize maintaining high standards to enhance the overall value perceived by university students. Regularly updating and refreshing exhibits ensures that the museum remains dynamic and responsive to the evolving interests of students. This commitment to quality contributes to a positive perception of the museum as a valuable educational and cultural resource.

Building and strengthening trust between students and the museum is crucial for fostering a positive and enduring relationship. Transparency in communication, ethical practices, and initiatives that demonstrate the museum's commitment to students' educational and cultural enrichment are essential. By establishing trust, museums can create an environment where students feel confident in the educational value of their experiences and are more likely to engage actively and frequently.

Collaborative efforts with educational institutions can significantly enhance the alignment of museum offerings with academic curricula. By working closely with educators,

museums can create synergies between classroom learning and museum experiences, providing students with a holistic and integrated educational journey. This collaboration not only reinforces the educational value of museum visits but also strengthens the link between academic studies and cultural exploration.

In conclusion, enhancing university students' museum experiences requires a holistic approach that prioritizes student-centric program development, effective communication, exhibit quality, trust-building initiatives, and collaborations with educational institutions. By implementing these recommendations, museums can establish themselves as integral components of students' educational and cultural journeys, fostering a lasting appreciation for the richness and diversity offered by art and cultural institutions.

5.3 Limitation and Further Study

While this study provides valuable insights into the factors influencing university students' satisfaction and loyalty toward art museums in Chengdu, China, it is important to acknowledge certain limitations that may guide future research endeavors.

The study focused on a specific geographic location (Chengdu, China) and a selected group of universities. Generalizing the findings to a broader population or different cultural contexts should be approached cautiously. Future studies could encompass a more diverse range of universities and regions to enhance the external validity of the findings.

Cultural nuances can significantly impact perceptions and behaviors. Future research should consider conducting comparative studies across different cultural settings to explore how cultural factors influence the relationships between the identified variables.

The study's cross-sectional design provides a snapshot of the relationships at a specific point in time. Longitudinal studies could offer a more comprehensive understanding of how these relationships evolve and may be influenced by changing educational and cultural landscapes.

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