FACTORS AFFECTING STUDENTS' SATISFACTION WITH ART EDUCATION MANAGEMENT IN HIGHER EDUCATIONAL INSTITUTIONS : A CASE OF LIAONING UNIVERSITY LIAONING PROVINCE, CHINA

Han Xiao
หาน เซี่ยว
Prapatpong Senarith
ประพัฒน์พงศ์ เสนาฤทธิ์
Sukhum Moonmuang
สุขุม มูลเมือง
Educational Administration, Faculty of Education,
Bangkokthonburi University
สาขาวิชาการบริหารการศึกษา คณะศึกษาศาสตร์
มหาวิทยาลัยกรุงเทพธนบุรี
E-mail: 62631100016@bkkthon.ac.th
Received : 7 July 2022
Revised : 17 June 2023
Accepted : 17 June 2023

ABSTRACT

The popularization of higher education policy in China over the past decades not only increased the opportunity for higher learning among young generation, but also put pressure on colleges and universities around the country to strengthen their management. The objectives of this research were to: (1) Assess the students' satisfaction with art education management in Liaoning University; (2) Determine the factors affecting such satisfaction; (3) Analyze and compare the relationships among those influencing factors identified, in relation to different art majors; and (4) Evaluate the models fit. This study used a quantitative survey method. A multi-stage random sampling was employed to select 339 samples from art students enrolled in various art majors in Liaoning University in 2021. Semi-structured, self-rating questionnaires were used to collect data. Statistics used for data analysis included frequency, percentage, mean, standard deviation and path analysis respectively.

The results showed that: (1) Art students were highly satisfied with art education management in Liaoning University, with average scores on the Likert-typed scale of 4.18 (S.D. of .68); (2) The influencing factors of satisfaction included years of study, teacher leadership and organizational innovativeness; Though academic achievement was also affected by these variables, it had no significant relationship with students' satisfaction. In addition, teacher leadership also significantly exerted its influences over students' satisfaction indirectly via years of study and organizational innovativeness; (3) Only students in Photography and Art Performance majors showed significant differences in satisfaction from those peers in Art Design, Radio and Television Editing, and Broadcasting and Hosting Art majors, while those in Folk Arts showed no differences; and (4) The model is consistent with empirical data.

Keywords: Teacher leadership, Organizational innovativeness, Students' satisfaction, Art education management, Higher education

1. Introduction

Education, especially art education in China has been challenged by both domestic changes in socioeconomic development and the globalization connectivity, in which China has been engaged through the agreements of World Trade Organization membership and Chinese own initiative policies, such as, double first class, popularization of higher education, and belt and road initiative. The consequences of these changes had forced education to readjust its orientation and administrative practices, in order to properly inculcate students with careers and characteristics to the transforming world of works. Over the past decade, higher education sector expanded its absorptive capacity either by stretching existing resources or opening new institutions. With the applicants for college entrance examination in 2012 of 9.12 million, the number reached 10.31 million in 2019, and the numbers admitted rose from 6.85 to 8.2 million. (College enrollment network, 2021)

Art education in higher educational institutions in Liaoning Province has gone through a fast development and transformation, in terms of Institutional expansion, administrative system improvement, and academic program diversification, in order to accommodate the fast-growing candidates. For example, there were 16,662 applicants taking art examination in Liaoning Province in 2015, while the number slightly grew to 19,052 in 2020. (Liaoning Provincial Department of Education, 2021) However, the number of students admitted have not proportionally increased, with 4,440 in 2015 and 4,491 in 2020, despite 8 additional art majors were opened. (Liaoning Provincial Department of Education, 2021) Strategically speaking, the absorptive capacity of

art education system in Liaoning Province has been declining, with the admission rate of 27 percent in 2015 to 24 percent in 2020. (Ministry of Education of the People's Republic of China, 2021) This seemed contradicted to the fast expansion of demand-driven higher education in China in general. In terms of management, however, there have been some challenges and pending questions to be clarified, especially, the development of newly recruited personnel, program diversification to serve the diverse needs of students, and eventually the effectiveness of the whole management of art education system. (Liu Shanshan, 2019)

Furthermore, as the number of applicants increased, the background of students entering art education in colleges and universities has been more diversified, especially in big province such as Liaoning. However, the teaching and learning environments of art schools have not effectively responded to the needs of students, and while tuition fees of art majors were generally higher than those of ordinary subjects, so some students were dissatisfied with management. In order to meet the rapidly growing demand, expansion of infrastructure and academic projects were emphasized, but recruitment of more teaching and supportive personnel was not in proportion. Many teachers were young, with limited academic and administrative experience in their own majors. (Liangjiu, 2020) Therefore, it was a challenging task to explore more innovative management system in adaptable to new generation of learners effectively. From the trend of modern management within which the fast changing of Chinese contexts, it was a challenge to consider the application of demand-focus strategy in art education, by focusing on students' satisfaction, such as business sector, where customers' satisfaction was influenced by many factors, including individuals, products, services and organizational environments. (Guochunfang, 2019) As a teacher of art major in Liaoning University and assigned to be responsible for student-related activities, employment and entrepreneurship practices, the researcher decided to carry out this study.

2. Research Questions

The following questions were set to guide this study:

1. What were the factors that affect the students' satisfaction with the management of art education in Liaoning University?

2. How did these factors affect the students' satisfaction with the management of art education in Liaoning University?

3. Were the students' satisfaction models the same between the different majors in art education?

4. How the students' satisfaction models fit with empirical data?

3. Research Objectives

The objectives of this study were to:

1. Assess students' satisfaction with the management of art education in Liaoning University.
2. Partition how such factors affecting students' satisfaction.
3. Compare the students' satisfaction models between different art majors.
4. Test the models fit with empirical data.

4. Research Hypotheses

The following hypotheses were set to be tested by the data collected:

H1: Academic achievement positively affected students' satisfaction.

H2: Years of study of students positively affected students' satisfaction.

H3: Organizational innovativeness positively affected students' satisfaction.

H4: Teacher leadership positively affected students' satisfaction.

H5: Teacher leadership positively affected academic achievement.

H6: Organizational innovativeness positively affected academic achievement.

H7: Students of six different art majors had different satisfaction with art education management.

H8: Teacher leadership positively affected organizational innovativeness.

H9: Teacher leadership positively affected years of study.

5. Research Method

This study used a quantitative survey method, by selecting art students in Liaoning University as the research objects. The art student population in 2021 was 1,093. The sample size of 339 students was determined by applying G*power software and multi-stage proportional random sampling. A Likert-typed self-rating questionnaire, developed by the researcher, with content validity of .6 or above, and Cronbach alpha ranging from .726 to .922, as shown in Table 1. The questionnaires were duplicated and sent to the selected samples through online, email and personal collection. The returning rate was 100 percent.

Table 1: Instrument qualities by variables

Questionnaires	Cronbach's reliability	Number of items	Discrimination power
1. Academic Achievement	0.754	13	0.081-0.786
2.Years of Study	0.726	9	0.104-0.679
3. Organizational Innovativeness	0.825	9	0.175-0.753
4.Teacher Leadership	0.911	15	0.085-0.935
5.Students Satisfaction	0.755	10	0.124-0.783

6. Research Results

1) Sample characteristics

Table 2: Frequencies and percent of personal characteristics of respondents.

Variables	**Values**	**n**	**%**
Gender	1. male	99	29.20
	2. female	240	70.80
Age	1. Under 20	181	53.39
	2. 20-25 years old	157	46.31
	3. Over 25 years old	1	0.29
Grade	1. Freshman	106	31.27
	2. Sophomore	131	38.64
	3. Junior	79	23.30
	4. Senior	23	6.78
Majors	1. Art design	86	25.37
	2. Radio and television editing	78	23.01
	3. Broadcasting and hosting art	81	23.89
	4. Photography	33	9.73
	5. Perform	36	10.62
	6. Folk art	25	7.37
	Total	**339**	**100.00**

From Table 2, the samples for this study were predominantly female (70.80%); under 25 years, old, with slightly more than half (53.39%) under 20 and 46.31 percent were in the 20-25 age-group; and the largest proportion (38.64%) represented by sophomores, followed by freshmen (31.27%) and juniors (23.3%) respectively. As the respondents were proportionally drawn from six art majors to represent overall samples, the proportions by majors ranged from 7.37 percent in Folk arts to 25.37 percent in Art design.

2) Descriptive statistics of variables

Table 3 presented the descriptive statistics of variables under study. It indicated that the students' satisfaction was relatively high, with mean score of 4.18 and standard deviation of .68, coefficient of variance of 16.19 percent, indicating good concentration of data obtained. The skewness and kurtosis values of all variables were within the acceptable ranges between plus and minus 2, indicating the normality of the data.

Table 3: Descriptive statistics of quantitative variables:

Variables	X	S.D.	CV	Sk	Kur
Achievement (A)	4.22	0.95	22.52	-1.20	0.57
Year of study (B)	3.89	0.78	20.09	-0.52	0.70
Innovativeness (C)	4.10	1.06	25.86	-1.17	0.50
Leadership (D)	4.31	0.98	22.78	-1.48	1.39
Satisfaction (E)	4.18	0.68	16.19	-0.98	1.80

3) Model specification

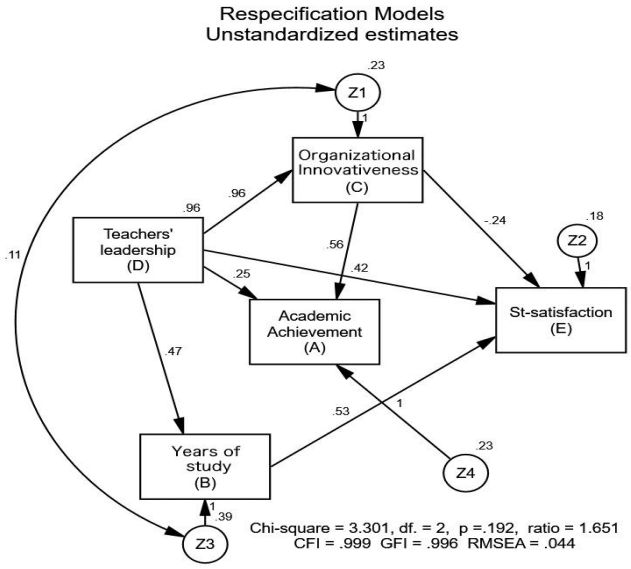

Figure 1: Trimmed path model for unstandardized estimates

As illustrated in Figure 1, the significant relationships among variables under study were presented. It revealed the students' satisfaction with art education management for the case of Liaoning University was directly affected by students' years of study, teacher leadership, and organizational innovativeness, while students' academic achievement showed no significant impacts on satisfaction. Teacher leadership also indirectly exerted its influences on students' satisfaction via years of study and organizational innovativeness. Academic achievement was directly influenced by teacher leadership and organizational innovativeness, but not years of study.

4) Model evaluation

Table 4: Model fit evaluation in unstandardized.

Measure	Estimate	Threshold	Interpretation
	51.563	--	--
DF	1	--	--
/DF	51.563	Between 1 and 3	Terrible
CFI	0.966	>0.95	Excellent
SRMR	0.063	<0.08	Excellent
RMSEA	0.387	<0.06	Terrible
PClose	0	>0.05	Not Estimated

Table 4 presented two excellent out of four indicators used for model fit evaluation, Comparative Fit Index (CFI) and Square Root Mean of Residual (SRMR), it was assumed that the model usefully fitted the empirical data.

5) Hypothesis testing

There were 9 hypotheses set to be tested in this study. As presented in Table 5, except hypothesis 1, academic achievement positively affected students' satisfaction, the remaining hypotheses were tested highly significant. Interestingly, organizational innovativeness negatively influenced students' satisfaction, which contradicted to hypothesis 3. For hypothesis 7, students of six different art majors had different satisfaction with their respective art major management, it was found that only students in Photography and Art Performance majors showed significant differences in satisfaction from those peers in Art Design, Radio and Television Editing, and

Broadcasting and Hosting Art majors, while those in Folk Arts showed no differences. Details of pair comparisons were presented in Table 6.

Table 5: Hypotheses testing.

Effects			Estimate	S.E.	C.R.	P	Hypothesis
B	⟶	E	0.53	0.04	14.15	***	H2
C	⟶	E	-0.24	0.05	-5.05	***	H3
D	⟶	E	0.42	0.06	7.57	***	H4
D	⟶	A	0.25	0.06	4.20	***	H5
C	⟶	A	0.56	0.05	10.18	***	H6
D	⟶	C	0.96	0.03	36.09	***	H8
D	⟶	B	0.47	0.03	13.68	***	H9

Note: *...refer to parameter constrained*

**** = p<.001*

Table 6: Model comparison and hypothesis comparison

Pairs comparison	$\Delta\chi^2$	Effects						
		H2	H3	H4	H5	H6	H8	H9
		B → E.	C → E.	D → E.	D → A.	C → A.	D → C.	D → B.
major1 - major2	5.88	0.068	0.039	0.027	-0.204	0.177	0.004	0.036
major1 - major3	7.06	-0.07	-0.066	0.319	0.111	-0.062	0.021	0.094
major1 - major4	17.49*	0.597*	-0.543*	-0.1*	-0.19*	0.175*	0.091*	0.192*
major1 - major5	25.82**	0.234**	-0.13**	-0.284**	-0.308**	0.324**	-0.015**	0.052**
major1 - major6	9.07	0.128	0.091	-0.264	-0.13	0.263	0.112	0.083
major2 - major3	9.11	-0.138	-0.104	0.291	0.314	-0.239	0.017	0.057
major2 - major4	16.42*	0.529*	-0.582*	-0.127*	0.014*	-0.002*	0.087*	0.156*
major2 - major5	25.76**	0.166**	-0.169**	-0.311**	-0.104**	0.147**	-0.019**	0.015**
major2 - major6	8.9	0.06	0.052	-0.291	0.074	0.086	0.108	0.046
major3 - major4	27.28**	0.666**	-0.478**	-0.418**	-0.301**	0.237**	0.07**	0.098**
major3 - major5	35.31**	0.304**	-0.065**	-0.602**	-0.419**	0.386**	-0.037**	-0.042**
major3 - major6	12.23	0.198	0.156	-0.583	-0.24	0.325	0.091	-0.011
major4 - major5	8.99	-0.362	0.413	-0.184	-0.118	0.149	-0.106	-0.14
major4 - major6	9.2	-0.469	0.634	-0.165	0.061	0.088	0.021	-0.109
major5 - major6	3.27	-0.106	0.221	0.02	0.179	-0.061	0.128	0.031

Note: *$\Delta\chi^2$ Refer to the chi-square different between the constraint and the unconstraint model with the different degrees of freedom=9*

** = p.< 0.05, **= p.<0.01*

6) Effects decomposition

Table 7: Decomposing effects of students' satisfaction

Independent variables	Raw	Direct	Indirect	Spurious	Pure	Square pure
Years of study (B)	0.713	0.597	0.000	0.116	0.608	0.370
Organizational innovativeness (C)	0.564	-0.383	0.000	0.947	-0.381	0.145
Teacher leadership (D)	0.628	0.607	0.021	0.000	0.607	0.368
Total	**...**	**...**	**...**	**...**	**...**	**0.883**

Note: *The number displays in standardized.*

As specified in the model, and previous analysis of direct effects of three independent variables revealed that insignificant direct relationship between academic achievement and students' satisfaction had limited the indirect influences of organizational innovativeness and years of study. Only teacher leadership then could indirectly influence students' satisfaction via years of study and organizational innovativeness. Related statistics were presented in table 7.

6. Conclusion, Discussion and Recommendations

Based on the quantitative research method and data collected through self-rating questionnaire from 339 art students in Liaoning University in 2021, it concluded that: (1) Students' satisfaction was positively influenced by teacher leadership and years of study, while organizational innovativeness showed negative impacts on students' satisfaction; (2) Teacher leadership exerted its influences, both directly and indirectly via years of study and organizational innovativeness, on students' satisfaction; (3) Students studying in different art majors expressed different satisfaction with management of their respective majors; and (4) The model was usefully fitted the empirical data.

This study had shed some light on certain academic and administrative issues regarding art education management in Liaoning University in particular and in Liaoning province in general. The followings are worth considering:

(1) Students' satisfaction and art education management effectiveness. Similar to business practices, where customers' satisfaction is considered one of the determining criteria to business success, art students' satisfaction reflects how educational services are managed in various art majors. The variation of students' satisfaction across art majors may, to certain extent, reflect management effectiveness of those majors.

(2) Students' satisfaction and academic achievement. As theoretically perceived, the two variables are closely linked, where high academic achievers tend to be more satisfied with their study, or *vice versa*. The data obtained for this study did not indicate such relationship. Further investigation should be explored, particularly in the instrumentation and representation of samples across years of study.

(3) Organizational innovation and art education. It is well perceived that the advancement of innovation and technology of all forms has permeated education sector, including art education. New technology not only facilitates motivated teaching and learning activities, but also provides students with relevant opportunities to learn and properly prepare themselves for future employment. However, with the negative relationship between students' satisfaction and organizational innovativeness, it may reflect the disappointment with how innovation and technology has been incorporated in both learning and management in art education. Besides, different art majors contain different features of operation, in terms of philosophy, curriculum, teaching and learning, needs for innovation and technology, as well as socio-cultural environment. This may affect on how the students perceive the impacts of organizational innovativeness on their satisfaction.

(4) The role of teacher leadership. As evidenced in this study, teacher leadership has played a key role, directly and indirectly, on students' satisfaction. It reconfirms the already known fact that teacher-student relationship determines students' achievement and satisfaction. The variation of students' satisfaction across different art majors might be partly due to differences of teachers' competencies, especially as some newly graduates and inexperienced teachers had been recruited. Moreover, the uniqueness of art professions and art spirits on the part of teachers can inspire and motivate students through both normal instruction and extracurricular activities. Proper and responsive management settings, where human and other resources can be optimally utilized, may enhance students' learning, and eventually, satisfaction.

(5) Suggestions for consideration include empowering current teaching and administrative staffs with appropriate competencies and skills, strengthening organizational agility in art majors relevant to changing environment with related technology to accommodate the diversified needs of students, and replicating similar study with more samples both inside and outside Liaoning University

BIbliography

College enrollment network. (2021). Retrieved from http://www.eduzs.org.cn/index.html.

Guochunfang. (2019). **Aesthetic education and Art Education-Thoughts on the characteristic development and national service strategy of comprehensive art colleges in the new era.** Journal of Northeast Normal University (Philosophy and Social Sciences), pp. 22-28.

Liangjiu. (2020). **The three primary tasks of "art education" researchers in art theory.** Journal of Aesthetic Education, pp. 20-26.

Liaoning Provincial Department of Education. (2021). Retrieved from: http://jyt.ln.gov.cn/.

Liu Shanshan, S. (2019). **Innovative research on the integration of Chinese excellent traditional culture into art education courses in Colleges and Universities.** Art Education, pp. 267-268.

Ministry of Education of the People's Republic of China. (2021). Retrieved from : http://www.moe.gov.cn/.