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The Assessment on Significant Factors of Undergraduate Students' Behavioral Intention to Learn Arts Education in Chengdu, China

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Abstract

Purpose: This study explores the determinants of university students' behavioral intention to learn arts education. The conceptual framework includes factors from the social sphere, academic sphere, education satisfaction, attitude, social influence, self-efficacy, effort expectancy, and behavioral intention. **Research design, data, and methodology:** The target population are those who have experienced arts education at Chengdu, China. Participants are categorized into undergraduate students, with a sample size of 500. A quantitative research approach was adopted, and data were collected using a questionnaire as the primary instrument. The sampling techniques employed in this study include judgmental, quota, convenience, and snowball sampling. To ensure the validity and reliability of the questionnaire, a pilot test was conducted with 50 participants, and both the item-objective congruence (IOC) index and Cronbach's alpha were used for validity and reliability testing, respectively. The collected data were analyzed through confirmatory factor analysis (CFA) and structural equation modeling (SEM), which served as the main statistical techniques for this research. **Results:** Social sphere and academic sphere significantly impact education satisfaction. Behavioral intention is significantly impacted by education satisfaction, self-efficacy and effort expectancy, but not by attitude and social influence. **Conclusions:** These analyses provide valuable insights into the factors influencing university students' behavioral intention to engage in arts education.

Keywords : Social Sphere, Academic Sphere, Education Satisfaction, Attitude, Social Influence

JEL Classification Code: E44, F31, F37, G15

1. Introduction

Arts integration is an educational approach incorporating various art forms, such as music, visual arts, dance, and drama, into traditional academic subjects. It aims to enhance students' learning experiences by connecting the arts with core subjects like math, science, history, and language arts. Research has shown that arts integration can benefit students, including improved academic achievement, enhanced creativity, increased engagement, and improved social-emotional development. A study by Catterall et al. (2012) examined the impact of arts integration on students' academic outcomes. The researchers found that students who participated in arts-integrated programs showed significant improvements in reading and math scores compared to their peers who did not participate in such programs. The study also highlighted the positive effects of arts integration on students' motivation, self-confidence, and critical thinking skills.

Another study by Winner et al. (2013) explored the effects of arts integration on students' creativity. The researchers found that students who engaged in arts-integrated lessons demonstrated higher levels of creative thinking and problem-solving abilities than students who received traditional instruction. The study emphasized the importance of incorporating the arts into the curriculum to

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foster students' creative potential. Arts integration has also been shown to promote student engagement and motivation. A study conducted by Upitis et al. (2016) investigated the impact of arts integration on student engagement in mathematics. The researchers found that students who participated in arts-integrated math lessons showed higher levels of interest, enjoyment, and active participation than students in traditional math classes. The study emphasized the role of the arts in making learning more meaningful and engaging for students.

Furthermore, arts integration has positively impacted students' social-emotional Development. A study by Deasy et al. (2013) examined the effects of arts integration on students' social skills and emotional well-being. The researchers found that students who participated in arts-integrated programs demonstrated improved communication skills, empathy, and self-expression. The study highlighted the role of the arts in fostering social connections and emotional intelligence among students. Therefore, research supports the benefits of arts integration in schools. Incorporating the arts into academic subjects has been shown to improve academic achievement, enhance creativity, increase engagement, and promote social-emotional development among students. These findings underscore the importance of integrating the arts into the curriculum to create a holistic and enriching educational experience for students.

2. Literature Review

2.1 Social Sphere

The social sphere in education enables interrelationships and interactions between students within the school environment (Ahghar, 2016). These are factors such as teacher interaction, interaction with the administration, and among students themselves. The social sphere also refers to the broader space where education occurs. It describes the communities and societies within the school environs that provide a conducive atmosphere for learning (Russell, 1997). The social sphere also refers to students' competence and social skills, including the ability to communicate efficiently with each other and the level at which students can solve common problems through collaboration (Fry & Coe, 1980).

Several studies have highlighted the importance of the social environment in shaping students' satisfaction with their educational experience. For instance, Johnson et al. (2023) found that positive peer interactions and a sense of belongingness in the classroom positively influenced students' overall satisfaction with their education. A study by Zhang (2023) revealed that students who perceived greater social support from their peers and teachers reported higher levels of education satisfaction. As a result, a hypothesis is determined:

H1: Social sphere has a significant impact on education satisfaction.

2.2 Academic Sphere

The academic sphere in the education sector entails broader aspects. Ramsden (1979) indicated that the academic sphere is the level of research, formal learning, and scholarly activities pursued in a given academic topic. The academic sphere can also be called the ability to be innovative and cultivate critical thinking in solving critical problems (Ramírez-Montoya et al., 2022). It shows how students can acquire knowledge and enhance their academic competence.

Kim and Song (2021) highlighted that the academic sphere significantly impacts education satisfaction with arts learning. Johnson et al. (2023) found that students who perceived high-quality teaching, engaging classroom activities, and clear explanations reported higher satisfaction levels with their educational experience. Curriculum and course design have been identified as crucial factors influencing education satisfaction. Thus, a hypothesis is set:

H2: Academic sphere has a significant impact on education satisfaction.

2.3 Education Satisfaction

The definition of education satisfaction can be seen from broad areas. According to Weerasinghe and Fernando (2017), education satisfaction is the level at which students are content with the services, facilities, and educational experience. On the other hand, Allen et al. (2002) defined education satisfaction as how courses are taken. The author described satisfaction about how students are satisfied with how instructions are passed. For this research definition of education satisfaction was seen within the context in which students were contented with a learning experience. In this case, educational satisfaction was in line with how students interacted with the class environment, as Driver (2002) indicated. According to Reinke et al. (2016), students who interact more within the classroom environment are more likely to achieve education objectives than those who do not interact. Classroom interaction was perceived as the degree to which students interact with their teachers through consultation and classroom engagement (through the question-and-answer method), among other approaches.

Education satisfaction has been shown to affect students' learning outcomes and achievements. Zhang (2023) observed that students who were satisfied with their education demonstrated better academic performance and higher levels of competence. Students' satisfaction with their education can also impact their behavioral intention toward

future career choices. Liu et al. (2022) found that higher education satisfaction was positively correlated with a stronger intention to pursue careers related to their field of study. Hence, this study proposes a hypothesis that:
H3: Education satisfaction has a significant impact on behavioral intention.

2.4 Attitude

Attitude can be described as the overall mindset towards a particular concept, subject, or situation. There exists a vast definition of attitude in the academic realm. For instance, attitude can be seen in the realm of subject orientation, interaction in class as well as teaching and learning preferences. The enjoyment and interest of a student can define their attitude towards arts education. According to Alamri (2021), when students perceive a subject or course to be interesting and enjoyable, they develop a positive attitude toward the course, fostering positive behavioral intention. Notably, enjoyment of arts education depends on teaching effectiveness. When teachers apply adequate participatory teaching methods, students become more engaged in the course, increasing their behavioral intention towards it. Effective teachers create a positive and engaging learning environment that influences the course participation level (Zhong et al., 2022).

In the marketing domain, attitudes have been extensively studied in the context of consumer behavior. Ajzen and Fishbein (1980) proposed the Theory of Reasoned Action (TRA), which posits that an individual's attitudes toward a particular product or service directly influence their behavioral intention to purchase or use it. Numerous studies have supported this notion and demonstrated the strong link between consumer attitudes and purchase intentions (Sweeney & Soutar, 2001). Thereby, this study hypothesizes that:
H4: Attitude has a significant impact on behavioral intention.

2.5 Social Influence

Social influence is the level at which individuals or groups within a society cancan exert direct or indirect pressure on others, influencing their ideas, attitudes, thoughts, beliefs, and views about certain topics and issues. According to Kim and Song (2021), social influence is the ability at which another person can change or influence a person's mind. Most often, social pressures regarding education, especially when choosing majors, are associated with family pressures. In essence, societal pressures on choosing majors or courses at the university level are often influenced by people from immediate families. However, peers within a society can also play a significant role in influencing students' attitudes and behavioral intentions toward arts education. According to Nebor (1986), social influence in the academic realm is the attitude, opinion, or action of societal members that influences students' learning attitude and behavioral intention toward courses taken at the University. Within the familial perspective, social influence on students' attitudes and behavioral intention towards arts education can be seen as the level at which parents and immediate family members influence their student's intention and attitude towards a course.

Studies have shown that consumers are more likely to follow the behavior of others, such as making a purchase when they perceive social pressure or norms supporting the action (Bearden et al., 1989; Goldsmith et al., 2003). In the educational context, social influence plays a significant role in shaping students' behavioral intentions related to academic performance. Research has shown that peer influence and teacher modeling can impact students' intentions to engage in positive academic behaviors, such as studying regularly and participating in class discussions (Vululleh, 2018). Based on previous studies, this study develops a hypothesis:
H5: Social influence has a significant impact on behavioral intention.

2.6 Self-Efficacy

Self-efficacy was another important variable of consideration for the study. Self-efficacy is the level at which a person becomes confident about their ability to overcome artistic challenges and pursue the course. When students have higher self-efficacy, their level of participation in arts education increases (Blotnicky et al., 2018). According to Kim et al. (2010), self-efficacy is a key component of human behavior that inspires people and their actions.

Self-efficacy, a concept introduced by Bandura (1977), refers to an individual's belief in their ability to perform a specific behavior successfully. Motivating individuals to engage in certain actions and achieve desired outcomes is crucial. Numerous studies have examined the influence of self-efficacy on health-related behavioral intentions. For instance, a meta-analysis by Sheeran et al. (2016) demonstrated that individuals with higher self-efficacy towards exercise were more likely to have a stronger intention to engage in regular physical activity. Thus, a hypothesis is in line with earlier studies:
H6: Self-efficacy has a significant impact on behavioral intention.

2.7 Effort Expectancy

Effort expectancy was another important variable in understanding students' behavioral intention toward arts education. Effort expectancy in this regard refers to the

amount of work an individual needs to exert to accomplish a task (Shen et al., 2017). The concept of effort expectancy is also part of the UTAUT model, which measures how easy it is to use a given information condition (Onaolapo & Oyewole, 2018). In definition, effort expectancy can be described as the effort of work an individual requires to exert to accomplish their goal. It is based on the concept that there is a relationship between the effort put forth at work, the results achieved by the effort, and the rewards received due to that effort (Ghalandari, 2012). It implies a level of expectation for university students that learning the subject matter of an art course relative will require little physical and mental effort.

Effort expectancy is particularly relevant in the context of technology adoption and usage. In the field of Information Systems, Davis (1989) introduced the Technology Acceptance Model (TAM), which highlights effort expectancy as a key determinant of users' intention to adopt and use technology. Studies based on TAM have consistently demonstrated that individuals are more likely to adopt technology if they perceive it as easy to use and not to require significant effort (Venkatesh & Davis, 2000; Venkatesh et al., 2003). Consequently, a hypothesis is suggested:
H7: Effort expectancy has a significant impact on behavioral intention.

2.8 Behavioral Intention

Behavioral intentions are factors that motivate or influence individuals to engage in certain behaviors or engage in certain actions. In this case, the stronger the intention, the likelihood of engaging in certain behavior. Essentially, stronger intentions suppress weaker intentions toward a behavior. This is in the subjective belief of norms that most people approve or disapprove of within a society. Davis (1989) describes behavioral intention as the intent of undertaking a specific task. In this case, the sudden adoption of arts education can be attributed to the intent that the latter can help in career and professional development.

3. Research Methods and Materials

3.1 Research Framework

The conceptual framework of this study was developed based on nine variables, including factors from the social sphere, academic sphere, education satisfaction, attitude, social influence, self-efficacy, effort expectancy, and behavioral intention. These models were then combined to form the research framework for this study. For instance, Kim and Song (2021) investigated the effectiveness of online arts education by examining the differences between educators and students in terms of satisfaction through online and offline comparisons, arts education, social interaction, satisfaction, and behavior. Min et al. (2022) empirically revealed that perceived ease of use, usefulness, social influence, effort expectancy, and self-efficacy significantly influenced behavioral intentions, highlighting their importance for enhancing student engagement in online learning. Another study conducted by Shroff et al. (2011) explored analyzing students' behavioral intention to use an electronic portfolio system in the context of a course. The conceptual framework of this study is presented in Figure 1.

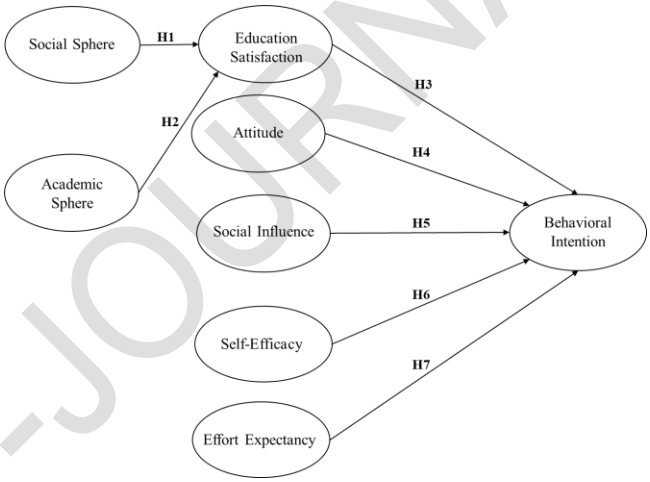

Figure 1: Conceptual Framework

H1: Social sphere has a significant impact on education satisfaction.
H2: Academic sphere has a significant impact on education satisfaction.
H3: Education satisfaction has a significant impact on behavioral intention.
H4: Attitude has a significant impact on behavioral intention.
H5: Social influence has a significant impact on behavioral intention.
H6: Self-efficacy has a significant impact on behavioral intention.
H7: Effort expectancy has a significant impact on behavioral intention.

3.2 Research Methodology

A quantitative research approach was adopted for this study, and data were collected by administering a questionnaire as the primary research instrument. The questionnaire was designed to gather information about the factors influencing university students' behavioral intention to engage in arts education.

This study uses questionnaires, essential tools for data collection for research studies. These instruments help gather participant data to address the research objectives and test the research hypotheses (Fowler, 2013). Research instruments refer to the tools, techniques, or methods used to collect data in research studies. These instruments can take various forms, such as surveys, questionnaires, interviews, observation protocols, and standardized tests (Dillman et al., 2014). Developing effective questionnaires requires careful consideration of the research objectives, the target population, and the data types needed. Questionnaires should have clear and concise questions, use appropriate response formats (e.g., multiple-choice, Likert scale), and follow a logical flow to ensure participants can understand and respond accurately (Presser et al., 2004). This research has three parts in the questionnaire, including screening questions, five-point Likert scale items, and demographic information.

To ensure the validity and reliability of the questionnaire, a pilot test was conducted with 50 participants. The pilot test allowed researchers to assess the clarity and relevance of the questionnaire items. Additionally, the item-objective congruence (IOC) index and Cronbach's alpha were utilized for validity and reliability testing, respectively. These statistical measures helped determine the consistency and accuracy of the questionnaire in measuring the intended constructs. The results of the IOC evaluation were scrutinized against a predetermined pass score of 0.6 and above. Typically, a Cronbach's Alpha value above 0.70 is deemed acceptable, though disciplinary variations may warrant distinct criteria (Nunnally & Bernstein, 1994).

In conclusion, this research sheds light on the factors impacting university students' behavioral intention toward arts education. By adopting a quantitative research approach and employing CFA and SEM techniques, this study seeks to contribute to the existing body of knowledge in arts education and inform educators and policymakers on strategies to enhance students' interest and engagement in this domain.

3.3 Population and Sample Size

The target population is fundamental in research design and data analysis. In this research, the target population includes students participating in arts education programs at three universities in Chengdu, China, namely Sichuan University, Southwest Jiaotong University, and Chengdu University. According to Soper's (2023) calculation, the minimum sample size required for the study is 444. However, to ensure efficient data analysis for structural equation modeling (SEM), the researcher has opted to collect a larger sample of 500 undergraduate students.

3.4 Sampling Technique

The sampling techniques used in this study include judgmental, quota (Table 1), convenience, and snowball sampling methods. These approaches were chosen to ensure the inclusion of a diverse group of students who have experienced arts education across different universities and programs.

Table 1: Sample Units and Sample Size

Universities	Undergraduate Population Size	Proportional Sample Size
Sichuan University	45,000	214
Southwest Jiaotong University	38,132	181
Chengdu University	22,000	105
Total	**105,132**	**500**

Source: Constructed by author

4. Results and Discussion

4.1 Demographic Information

According to the data presented in Table 2, the study involved 500 participants. The participants' demographic information included their gender, frequency of student year/program and duration of arts education. The questionnaire was distributed among 500 students who were in their third year. Of these respondents, 307 were females, accounting for 61.4% of the total sample, while 193 were males, making up 38.6%. In terms of student year/program, 19% were in their first year of undergraduate studies, 25.6% were in their second year, 33% were in their third year, and 22.4% were in their fourth year. Regarding the duration of art education, 37.8% of students reported having one year or less of art education, 31% reported having 2-4 years, and 31.2% reported having five years or more.

Table 2: Demographic Profile

Demographic and General Data (N=500)		Frequency	Percentage
Gender	Male	193	38.6%
	Female	307	61.4%
Student Year/Program	First Year of Undergraduate	95	19%
	Second Year of Undergraduate	128	25.6%
	Third Year of Undergraduate	165	33%
	Fourth Year of Undergraduate	112	22.4%
Arts Education Experience	1 Year or Below	189	37.8%
	2-4 Years	155	31%
	5 Years or Above	156	31.2%

4.2 Confirmatory Factor Analysis (CFA)

CFA was used before analyzing the measurement model with the structural equation model (SEM). Typically, a Cronbach's Alpha value above 0.70 is deemed acceptable, though disciplinary variations may warrant distinct criteria (Nunnally & Bernstein, 1994). The result of CFA indicated that all items in each variable are significant and have factor loading to prove discriminant validity. Stevens (1992) considered a satisfactory item when item loadings are greater than 0.50 with a p-value lower than 0.05 for the Confirmatory factor analysis. Furthermore, aligning with the recommendation from Fornell and Larcker (1981), if Average Variance Extracted (AVE) is less than 0.5 but Composite Reliability (CR) is higher than 0.6, the convergent validity of the construct is still adequate, as shown in Table 3.

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
Social Sphere (SS)	Sudhana et al. (2020)	5	0.826	0.686-0.713	0.826	0.488
Academic Sphere (AS)	Kim and Song (2021)	4	0.880	0.757-0.850	0.883	0.654
Education Satisfaction (ES)	Kim and Song (2021)	5	0.828	0.625-0.775	0.830	0.496
Attitude (ATT)	Shroff et al. (2011)	4	0.914	0.809-0.888	0.915	0.728
Social Influence (SI)	Liu et al. (2019)	4	0.817	0.656-0.807	0.819	0.532
Self-Efficacy (SE)	Sudhana et al. (2020)	4	0.770	0.562-0.753	0.778	0.469
Effort Expectancy (EE)	Venkatesh et al. (2003)	3	0.884	0.828-0.872	0.885	0.719
Behavioral Intention (BI)	Sudhana et al. (2020)	4	0.782	0.625-0.719	0.784	0.476

The adequacy of the fit of the research model was evaluated by examining the goodness-of-fit indices presented in Table 4. These indices were compared against predetermined acceptance criteria to determine if the model fits the data well. The calculated values for the indices were as follows: CMIN/DF = 1.407, GFI = 0.928, AGFI = 0.913, NFI = 0.921, CFI = 0.975, TLI = 0.972, and RMSEA = 0.029. Based on these results, it can be concluded that all of the data met acceptable standards. Therefore, the proposed conceptual framework demonstrated compatibility with the confirmatory factor analysis (CFA).

Table 4: Goodness of Fit for Measurement Model

Fit Index	Acceptable Criteria	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	657.293/467 = 1.407
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.928
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.913
NFI	≥ 0.80 (Wu & Wang, 2006)	0.921
CFI	≥ 0.80 (Bentler, 1990)	0.975
TLI	≥ 0.80 (Sharma et al., 2005)	0.972
RMSEA	≤ 0.08 (Pedroso et al., 2016)	0.029
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

In order to assess discriminant validity, the square root of the Average Variance Extracted (AVEs) was computed, following the methodology suggested by Fornell and Larcker (1981). The findings of this study reveal that the discriminant validity exceeds the inter-construct/factor correlations, as shown in Table 5. This significant finding strongly supports the presence of discriminant validity in the study.

Table 5: Discriminant Validity

	SE	SS	ES	ATT	SI	EE	BI	AS
SE	**0.685**							
SS	0.533	**0.698**						
ES	0.660	0.568	**0.704**					
ATT	-0.026	-0.122	-0.046	**0.853**				
SI	0.466	0.171	0.378	0.038	**0.730**			
EE	0.670	0.535	0.529	-0.025	0.314	**0.848**		
BI	0.621	0.610	0.682	-0.017	0.285	0.626	**0.690**	
AS	0.265	0.199	0.222	-0.065	0.172	0.275	0.200	**0.808**

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 statistical analysis utilized structural equation modeling (SEM) to explore the causal relationships between the social sphere, academic sphere, education satisfaction, attitude, social influence, self-efficacy, effort expectancy, and behavioral intention. As detailed in Table 6, the hypotheses shed light on the connections among these variables. SEM provided a comprehensive approach to investigating the intricate interplay between the variables and was a robust statistical framework to draw meaningful conclusions.

The SEM analysis after modification yielded satisfactory results, as indicated by CMIN/DF = 2.568, GFI = 0.861, AGFI = 0.840, NFI = 0.848, CFI = 0.901, TLI = 0.893, and RMSEA = 0.056. Thus, Table 6 showed that the modified SEM model had met the desired fit criteria.

Table 6: Goodness of Fit for Structural Model

Index	Acceptable	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	1253.425/488 = 2.568
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.861
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.840
NFI	≥ 0.80 (Wu & Wang, 2006)	0.848
CFI	≥ 0.80 (Bentler, 1990)	0.901
TLI	≥ 0.80 (Sharma et al., 2005)	0.893
RMSEA	≤ 0.08 (Pedroso et al., 2016)	0.056
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 significance of each variable was evaluated by analyzing its standardized path coefficient (β) and t-value, as outlined in Table 7. The results of this study confirmed the significant impact at $p<0.05$ of H1, H2, H3, H6, and H7, whereas H4 and H5 are not significant.

Table 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-Value	Result
H1: SS→ES	0.567	8.783*	Supported
H2: AS→ES	0.131	2.830*	Supported
H3: ES→BI	0.532	7.692*	Supported
H4: ATT →BI	0.019	0.403	Not Supported
H5: SI →BI	-0.015	-0.309	Not Supported
H6: SE →BI	0.187	3.591*	Supported
H7: EE→ BI	0.367	6.769*	Supported

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

The research model was analyzed to determine the significance of each construct using the Standardized Path Coefficient (β) and t-value, as displayed in Table 7. The results of the hypothesis testing are summarized as follows:

H1: The standardized path coefficient between social sphere and education satisfaction was found to be 0.567 (t-value = 8.783*), indicating a significant influence between these variables. Therefore, H1 was supported.

H2: The standardized path coefficient between academic sphere and education satisfaction was determined to be 0.131 (t-value = 2.830*), indicating a significant impact of Academic sphere on Education satisfaction. Thus, H2 was accepted.

H3: The standardized path coefficient between education satisfaction and behavioral intention was calculated as 0.532 (t-value = 7.692*). However, no significant influence was found between perceived usefulness and Attitude. Therefore, H3 was not supported.

H4: The standardized path coefficient between attitude and behavioral intention was measured as 0.019 (t-value = 0.403). However, no significant influence was found between Attitude and Behavioral Intentions. Therefore, H4 was not supported.

H5: The standardized path coefficient between social influence and behavioral intention was determined to be -0.015 (t-value = -0.309), indicating that social influence does not have a significant impact on Behavioral Intention. Therefore, H5 was not accepted.

H6: The standardized path coefficient between self-efficacy and behavioral intention was calculated as 0.187 (t-value = 3.591*), demonstrating a significant impact of self-efficacy on behavioral intention. Therefore, H6 was accepted.

H7: The standardized path coefficient between effort expectancy and behavioral intentions was measured as 0.367 (t-value = 6.769*), indicating a significant impact of effort expectancy on behavioral intention. Consequently, H7 was accepted.

These findings provide insights into the relationships between the constructs in the research model and shed light on the significant factors influencing undergraduate students' behavioral intention to learn arts education in Chengdu, China.

5. Conclusion and Recommendation

5.1 Conclusion and Discussion

In the conclusion and discussion of the study, several key findings emerged. Firstly, in the social sphere, factors such as peer influence, family support, and social recognition were identified as significant predictors of students' behavioral intention to learn arts education. This highlights the importance of social factors in shaping students' decisions and motivations in pursuing art education.

Secondly, within the academic sphere, factors such as perceived academic value, curriculum relevance, and teacher support significantly impacted students' behavioral intentions. These findings emphasize the significance of academic factors in influencing students' interest and commitment to arts education.

Furthermore, education satisfaction was identified as a crucial factor affecting students' behavioral intention. Students who reported higher levels of satisfaction with their education experience were more likely to have a positive intention to continue learning arts education. This indicates the importance of creating a supportive and fulfilling

learning environment for students to foster their interest in arts education.

Moreover, the study revealed that students' attitudes toward arts education significantly determined their behavioral intention. Students with a positive attitude towards arts education were more likely to demonstrate a strong intention to continue their studies in this field. This underscores the need to promote positive perceptions and attitudes toward arts education among students.

Lastly, social influence was a significant factor in shaping students' behavioral intentions. The study showed that students who received encouragement and support from their peers and teachers were more likely to have a higher intention to pursue art education. This highlights the influence of social factors on students' decision-making processes.

Overall, the findings of this study provide valuable insights into the factors that significantly influence undergraduate students' behavioral intention to learn arts education in Chengdu, China. These findings can inform educational institutions, policymakers, and educators in designing effective strategies to promote and support arts education among students.

5.2 Recommendation

Based on the significant factors influencing undergraduate students' behavioral intention to learn arts education in Chengdu, China, several recommendations can be made to enhance the overall learning experience and promote students' interest in this field. Raising awareness about the benefits and value of arts education among students, parents, and the community is important. This can be achieved through targeted marketing campaigns, informational sessions, and collaborations with local art organizations and institutions. By showcasing the positive outcomes and career opportunities associated with arts education, more students may be encouraged to pursue this field. To attract and engage students, developing a dynamic and relevant curriculum that aligns with industry standards and trends is essential. Incorporating practical and hands-on learning experiences, such as workshops, field trips, and internships, can give students real-world exposure and enhance their understanding and appreciation of arts education. Investing in the professional development of arts education teachers can significantly impact students' learning experiences. Providing opportunities for teachers to update their knowledge and skills, attend workshops and conferences, and collaborate with industry professionals can improve the overall quality of instruction.

Additionally, encouraging innovative teaching methods, such as project-based learning and technology integration, can make learning more engaging and effective. Creating a supportive and inclusive environment is crucial for promoting students' behavioral intention to learn arts education. This can be achieved by establishing art clubs, organizing exhibitions and performances, and encouraging student collaborative projects. Providing spaces and resources dedicated to arts education can also contribute to a vibrant and inspiring learning environment. Collaborating with local art organizations, cultural institutions, and industry professionals can offer students valuable networking opportunities, internships, and mentorship programs. These partnerships can bridge the gap between academia and the industry, providing students with practical insights and connections to enhance their learning experience and future career prospects.

Regularly evaluating the effectiveness of arts education programs and gathering feedback from students, teachers, and stakeholders is essential for improvement. This feedback can help identify areas of strength and areas that need further attention, ensuring that the curriculum and teaching methods remain relevant and impactful.

By implementing these recommendations, educational institutions in Chengdu, China, can create a thriving arts education ecosystem that fosters students' behavioral intention to learn and excel in this field. Such initiatives can contribute to developing a creative and culturally enriched society while nurturing the talents and aspirations of undergraduate students.

5.3 Limitation and Further Study

These limitations highlight areas for further study and exploration. Sample size and representativeness: The assessment might have been conducted with a limited sample size, which may only partially represent part of the population of undergraduate students in Chengdu. To enhance the generalizability of the findings, future studies could include a larger and more diverse sample, encompassing students from various disciplines and institutions. Cross-sectional design: The assessment may have utilized a cross-sectional design, capturing data at a specific point in time. This design limits the ability to establish causality or examine changes in behavioral intention over time. Future studies could employ longitudinal designs, allowing for a deeper understanding of the factors influencing behavioral intention and how they may evolve over an extended period.

The limited scope of factors in the assessment may have examined a specific set of factors related to behavioral intention, such as social sphere, academic sphere, education satisfaction, attitude, and social influence. Future studies could expand the scope to include additional variables, such as personal characteristics, financial considerations, or institutional factors, to provide a more comprehensive

understanding of the factors influencing behavioral intention.

Addressing these limitations and conducting further studies will contribute to a more robust understanding of the factors influencing undergraduate students' behavioral intention to learn arts education. This knowledge can inform educational institutions, policymakers, and educators in developing effective strategies to promote and support arts education among students in Chengdu, China, and beyond.

References

Ahghar, G. (2016). Chapter Five School Climate and Teachers. *The Psychology of School Climate, 74*(1), 1-10.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior* (1st ed.). Prentice-Hall.

Alamri, M. M. (2021). Using blended project-based learning for students' behavioral intention to use and academic achievement in higher education. *Education Sciences*, *11*(5), 207. https://doi.org/10.3390/educsci11050207

Allen, M., Bourhis, J., Burrell, N., & Mabry, E. (2002). Comparing student satisfaction with distance education to traditional classrooms in higher education: A meta-analysis. *The American journal of distance education*, *16*(2), 83-97. https://doi.org/10.1207/s15389286ajde1602_3

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215. https://doi.org/10.1037/0033-295x.84.2.191

Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of Consumer Susceptibility to Interpersonal Influence. *Journal of Consumer Research, 15*(4), 473-481. http://dx.doi.org/10.1086/209186

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*(2), 238-246. https://doi.org/10.1037/0033-2909.107.2.238

Blotnicky, K. A., Franz-Odendaal, T., French, F., & Joy, P. (2018). A study of the correlation between STEM career knowledge, mathematics self-efficacy, career interests, and career activities on the likelihood of pursuing a STEM career among middle school students. *International journal of STEM education*, *5*(1) 1-15. https://doi.org/10.1186/s40594-018-0118-3

Catterall, J. S., Dumais, S. A., & Hampden-Thompson, G. (2012). The arts and achievement in at-risk youth: Findings from four longitudinal studies. *National Endowment for the Arts, 1*(2), 1-28.

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly, 13*(3), 319-340. https://doi.org/10.2307/249008

Deasy, R. J., Catterall, J. S., Hetland, L., & Winner, E. (2013). The arts and the creation of mind. In J. S. Catterall, R. Chapleau, J. Iwanaga, & C. Freeman (Eds.), *Critical links: Learning in the arts and student academic and social development* (pp. 3-22). Arts Education Partnership.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method* (4th ed.). Wiley.

Driver, M. (2002). Exploring student perceptions of group interaction and class satisfaction in the web-enhanced classroom. *The Internet and Higher Education*, *5*(1), 35-45. https://doi.org/10.1016/s1096-7516(01)00076-8

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/10.1177/002224378101800104

Fowler, F. J. (2013). *Survey Research Methods* (4th ed.). SAGE Publications.

Fry, P. S., & Coe, K. J. (1980). Interaction among dimensions of academic motivation and classroom social climate: A study of the perceptions of junior high and high school pupils. *British Journal of Educational Psychology*, *50*(1), 33-42. https://doi.org/10.1111/j.2044-8279.1980.tb00795.x

Ghalandari, K. (2012). The effect of performance expectancy, effort expectancy, social influence and facilitating conditions on acceptance of e-banking services in Iran: The moderating role of age and gender. *Middle-East Journal of Scientific Research*, *12*(6), 801-807.

Goldsmith, R., Flynn, L., & Goldsmith, E. (2003). Innovative Consumers and Market Mavens. *Journal of Marketing Theory and Practice*, *11*(4), 54-64. https://doi.org/10.1080/10696679.2003.11658508

Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th ed.). Pearson Education.

Johnson, C. C., Walton, J. B., Strickler, L., & Elliott, J. B. (2023). Online Teaching in K-12 Education in the United States: A Systematic Review. *Review of Educational Research, 93*(3), 353-411. https://doi.org/10.3102/00346543221105550

Kim, K. C., & Song, J. H. (2021). The Impact of Interaction of Art Education in the Era of Pandemic on Satisfaction and Behavioral Intent: Focusing on Online and Offline Comparisons. *Journal of the Korea Convergence Society*, *12*(9), 99-111.

Kim, T. T., Suh, Y., Lee, G., & Choi, B. (2010). Modelling roles of task-technology fit and self-efficacy in hotel employees' usage behaviors of hotel information systems. *International Journal of Tourism Research, 12*(6), 709-725. http://doi.org/10.1002/jtr.787

Liu, L., Schuster, G. L., Moosmüller, H., Stamnes, S., Cairns, B., & Chowdhary, J. (2022). Optical properties of morphologically complex black carbon aerosols: Effects of coatings. *J. Quant. Spectrosc. Radiat. Transfer, 281,* 108080. https://doi.org/10.1016/j.jqsrt.2022.108080

Liu, L., Zhao, X., Liu, Y., Zhao, H., & Li, F. (2019). Dietary addition of garlic straw improved the intestinal barrier in rabbits. *J. Anim. Sci., 97*(10), 4248-4255

Min, Y., Huang, J., Varghese, M. M., & Jaruwanakul, T. (2022). Analysis of Factors Affecting Art Major Students' Behavioral Intention of Online Education in Public Universities in Chengdu. *AU-GSB e-JOURNAL, 15*(2), 150-158.

Nebor, J. N. (1986). Parental Influence and Involvement on Reading Achievement. *Eric*, 1-13.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). McGraw-Hill.

Onaolapo, S., & Oyewole, O. (2018). Performance expectancy, effort expectancy, and facilitating conditions as factors influencing smart phones use for mobile learning by postgraduate students of the University of Ibadan, Nigeria. *Interdisciplinary Journal of e-Skills and Lifelong Learning, 14*(1), 95-115. https://doi.org/10.28945/4085

Pedroso, R., Zanetello, L., Guimaraes, L., Pettenon, M., Goncalves, V., Scherer, J., Kessler, F., & Pechansky, F. (2016). Confirmatory factor analysis (CFA) of the crack use relapse scale (CURS). *Archives of Clinical Psychiatry, 43*(3), 37-40.

Presser, S., Couper, M. P., Lessler, J. T., Martin, E., Martin, J., Rothgeb, J. M., & Singer, E. (2004). Methods for Testing and Evaluating Survey Questions. *Public Opinion Quarterly, 68*(1), 109-130. https://doi.org/10.1093/poq/nfh008

Ramírez-Montoya, M. S., Castillo-Martínez, I. M., Sanabria-Z, J., & Miranda, J. (2022). Complex thinking in the framework of Education 4.0 and Open Innovation—A systematic literature review. *Journal of Open Innovation: Technology, Market, and Complexity*, *8*(1), 4.

Ramsden, P. (1979). Student learning and perceptions of the academic environment. *Higher education*, *8*(4), 411-427. https://doi.org/10.1007/bf01680529

Reinke, W. M., Herman, K. C., & Newcomer, L. (2016). The Brief Student–Teacher Classroom Interaction Observation: Using dynamic indicators of behaviors in the classroom to predict outcomes and inform practice. *Assessment for effective intervention*, *42*(1), 32-42.

Russell, D. R. (1997). Rethinking genre in school and society: An activity. *Written Communication*, *14*(4), 504-554. https://doi.org/10.1177/0741088397014004004

Sharma, G. P., Verma, R. C., & Pathare, P. (2005). Mathematical modeling of infrared radiation thin layer drying of onion slices. *Journal of Food Engineering, 71*(3), 282-286.

Sheeran, P., Maki, A., Montanaro, E., Avishai-Yitshak, A., Bryan, A., Klein, W. M., Miles, E., & Rothman, A. J. (2016). The impact of changing attitudes, norms, and self-efficacy on health-related intentions and behavior: A meta-analysis. *Health psychology: official journal of the Division of Health Psychology, American Psychological Association*, *35*(11), 1178-1188. https://doi.org/10.1037/hea0000387

Shen, C. W., Ho, J. T., Kuo, T. C., & Luong, T. H. (2017, April 3-7). *Behavioral intention of using virtual reality in learning* [Paper Presentation]. In 26th International World Wide Web Conference, WWW 2017 Companion.

Shroff, R. H., Deneen, C. C., & Ng, E. M. W. (2011). Analysis of the Technology Acceptance Model in Examining Students' Behavioural Intention to Use an e-portfolio System. *Australasian Journal of Educational Technology, 27*(4), 600-618. https://doi.org/10.14742/ajet.940

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.

Soper, D. S. (2023). *A-priori Sample Size Calculator for Structural Equation Models*. www.danielsoper.com/statcalc/default.aspx

Stevens, J. P. (1992). *Applied multivariate statistics for the social sciences* (2nd ed.). Erlbaum.

Sudhana, P., Noermijati, N., Hussein, A., & Indrawati, N. (2020). The mediating role of self-congruity in transnational higher education choice: a proposed framework. *Journal of Applied Research in Higher Education, 13*(3), 811-829. https://doi.org/10.1108/JARHE-05-2020-0141

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing, 77*(2), 203-220. https://doi.org/10.1016/s0022-4359(01)00041-0

Upitis, R., Smithrim, K., & Souto-Manning, M. (2016). Learning through the arts: Lessons of engagement. In R. Upitis, K. Smithrim, & M. Souto-Manning (Eds.), *Learning through the arts: A resource guide for teachers and teaching artists* (pp. 1-8). Queen's Printer for Ontario.

Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science, 46*(2), 186-204. https://doi.org/10.1287/mnsc.46.2.186.11926

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425-478. https://doi.org/10.2307/30036540

Vululleh, P. (2018). Determinants Of Students' E-Learning Acceptance in Developing Countries: An Approach Based on Structural Equation Modeling (SEM). *International Journal of Education and Development Using Information and Communication Technology, 14*(1), 141- 151.

Weerasinghe, I. S., & Fernando, R. L. (2017). Students' satisfaction in higher education. *American journal of educational research, 5*(5), 533-539.

Winner, E., Goldstein, T. R., & Vincent-Lancrin, S. (2013). Art for art's sake? The impact of arts education. *Educational Research and Innovation, 1*(1), 1-28.

Wu, J. H., & Wang, Y. M. (2006). Measuring KMS success: A respecification of the DeLone and McLean's model. *Information and Management, 43*(6), 728-739. https://doi.org/10.1016/j.im.2006.05.002

Zhang, C. (2023). A Model for Developing Student Satisfaction for Undergraduate Students in Private Higher Education Institutions in Singapore. *International Journal of Sociologies and Anthropologies Science Reviews*, *3*(2), 165-180. https://doi.org/10.14456/jsasr.2023.25

Zhong, K., Feng, D., Yang, M., & Jaruwanakul, T. (2022). Determinants of Attitude, Satisfaction and Behavioral Intention of Online Learning Usage among Students During COVID-19. *AU-GSB E-JOURNAL*, *15*(2), 49-57. https://doi.org/10.14456/augsbejr.2022.71