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# Exploring What Drives College Students' Satisfaction in Learning Xinjiang Landscape Painting: A Case Study at an Art College in Yichang, China

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#### **Abstract**

**Purpose:** This study aims to explore the factors that affect the satisfaction of college students with the "creation and learning of Xiajiang landscape painting." The conceptual framework in the study put forward the co-presence, interactivity, intimacy, immersion, confirmation, and interaction factor with significant impact on relationship satisfaction. **Research design, data, and methodology:** A questionnaire survey was conducted among 100 college students in the School of Art of China Three Gorges University after quantitative reliability and validity analyses. The questionnaire was distributed online. Full-time student in the Art College of Three Gorges University (n =100) Experimental group for Intervention Design Implementation (IDI): Full-time student from the same school (n = 30). **Results:** The result is displayed as Intimacy, Co-presence having a significant impact on satisfaction. Interaction Factor significantly impacts satisfaction. Finally, the results from the paired-sample t-test for comparison demonstrated a significant difference in co-presence, intimacy, and interaction, and satisfaction between the post-IDI and pre-IDI stages. **Conclusions:** According to the data collection analysis, the three research hypotheses in the paper are supported. It has a significant effect on satisfaction. Develop teaching plans for the higher. It is suggested that more in-depth studies should be made on many influencing factors. Optimize the teaching program.

Keywords: Satisfaction, Co-Presence, Immersion, Intimacy, Confirmation

JEL Classification Code: I23, J28, L2

# 1. Introduction

China's traditional culture is profound, and in modern times, based on its traditional culture, it has absorbed foreign civilizations, including philosophy, art, literature, music, and other factors through digestion and integration and formed our unique culture (Jie & Xin, 2017). Various forms of Chinese painting share some common characteristics, such as color and texture (Jiang et al., 2006; Sheng & Jiang, 2014). Literati painting is an important kind of Chinese painting and occupies a major position in Chinese painting. Literati painting began in the Tang Dynasty and flourished through the Song, Yuan, Ming, and Qing Dynasties. In philosophy, literati painting has always adhered to Confucianism, Taoism

1\*Yang Lili, Ph.D. Candidate in Art Music Sport Entertainment Management, Assumption University of Thailand. Email: 591791613@qq.com Zen, Confucian cultivation, and gentleman's character (Chiem, 2017). Their pursuit of Taoist freedom, looking at nature from the heart, and Zen's love for natural landscape greatly influenced literati painting. (Weili, 2017). Chinese painting pays more attention to spiritual similarity, which is more important than formal similarity. Artists are encouraged not to copy but to summarize what they observe and to use not focal perspective but scatter perspective, a wandering perspective that focuses more on the mood of the art than the scene (Barnhart et al., 1997).

Chinese painting has a long history, and many masterpieces are handed down from generation to generation. The objects of Chinese traditional landscape painting are rich and diverse, and the works with the characteristics of

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different times have been produced in different periods combined with the corresponding era background. Landscape paintings with different regions have also been produced with the development of transportation and other backgrounds—for example, Xinjiang landscape painting in this study. In the poems of the literati in the past dynasties, there are often works depicting the scenery of the Xia River. After the founding of New China in the 20th century, in the 1950s and 1960s, many painters depicted Xinjiang landscape painting, which continues to influence today.

The Three Gorges area of the Yangtze River has long been a source of inspiration for Chinese landscape painting. Many painters in the past dynasties have depicted this subject, and contemporary painters continue to learn and innovate from it. The Three Gorges of the Yangtze River, consisting of Qutang Gorge, Wu Gorge, and Xiling Gorge, have provided a rich and diverse canvas for Chinese landscape painting, reflecting the power and beauty of nature.

Xinjiang landscape painting is created with traditional Chinese ink that depicts the scenery of rivers and valleys. Since the 1950s, the landscape paintings created by artists have also mainly represented the Three Gorges of the Yangtze River. Fu Baoshi, Qian Songyan, Yaming, Song Wenzhi, and other artists with great traditional skills have created several important descending landscape paintings with the Yangtze River Three Gorges as the theme. There are also painters such as Guan Shanyue, Zhou Shaohua, and Shi Jiangcheng, who continue to express the Three Gorges of the Yangtze River. He created landscape paintings with unique aesthetic conceptions and regional characteristics. There is some research on Xinjiang landscape painting in China, but they are less from the perspective of curriculum satisfaction factors and more on the painting itself. Research on teaching is lacking. This article is based on the current development environment of landscape painting and development problems to analyze and improve the satisfaction of the course.

# 2. Literature Review

# 2.1 Co-presence

Goffman (1963) argued that Co-presence is when individuals feel very close to each other. They can sense each other. What others do and experience feels similar and can be felt. Individuals are in the sense of being perceived by each other. Lombard and Ditton (1997) defined co-presence as a feeling that we are with others. Being together in a physical place, an alive environment, is an interactive partner, and everyone feels together. Wei et al. (2012) state that the learning effect also directly affects students' satisfaction. Co-presence is significant in online classroom

interaction with others (Cho & Proctor, 2001). Only when learners realize they are in the same place as other learners do they begin to communicate with each other? Make a positive impact on the learning classroom. (Chun et al., 2012). the following hypothesis is presented:

H1: Co-presence has a significant impact on satisfaction.

#### 2.2 Immersion

Jung and Dieck (2017) pointed out that immersion is a feeling of deep involvement. He argues that immersion affects people's willingness to engage with something multiple times. Witmer and Singer (1998) defined immersion as a psychological state of being surrounded and contained. Rodriguez and Meseguer (2016) found that learners need to enter a state of immersion in a specific learning environment. Participating in challenging activities also constantly requires learners to enter a state of immersion. Pelet et al. (2017) showed that when an individual feels the immersion of concentration, his attention is completely occupied. Be completely immersed and engaged in the interaction process; everything else is less important. (Bokyung & Youngsoo, 2008) research shows that the application of augmented reality media has a good learning effect and sensory immersion significantly impacts immersive learning and learning effects. Larson (1988), Mayers (1978), Novak and Hoffman (1996), Kim (2000), Park and Kim (2006), and Kim et al. (2001) mentioned in their studies that immersive learning can significantly promote the understanding of learning content. The following hypothesis is presented:

**H2:** Immersion has a significant impact on satisfaction.

# 2.3 Interactivity

Park (2015) believes that interactivity is the interaction between technology and the characteristics of social events in human social practice. It uses the learner as a medium to connect technology, learners, teachers, and their social activities. Andersson and Hatakka (2010) believe that interactivity is a kind of mutual communication between technology applications and people, and it can also be an interaction between people. Ramessur and Santally (2007) believe that providing learners with interactivity in the learning process is a key essence of modern teaching technology. This result is similar to that of Gray and DiLoreto (2016), suggesting that there is a positive relationship between satisfaction, engagement, and learning outcomes. Interactivity is an important component of online learning satisfaction, as well as learning durability. Preferences for types of online interaction also vary by learner type. Interactivity between students and teachers is also considered to be a major variable of online student satisfaction and learning persistence (Rebecca, 2014). the following hypothesis is presented:

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

# 2.4 Intimacy

Morton and Douglas (1981) defined intimacy as a high degree of familiarity with other people's private information and understanding of others. Wood (2002) defines intimacy as a feeling of intimacy and connection. This is consistent with Millar and Rogers's definition (1976), which defines intimacy and the feeling of connection. Qian et al. (2023) conducted a study on intimacy, and the results show that intimacy positively impacts learners' satisfaction with learning. Social factors such as immersion impact learning satisfaction and directly contribute to the willingness to continue learning online. Barbara's (1996) research results show that those tutors who have a high degree of intimacy with students and can run tutoring courses without difficulties are more satisfied. Extracurricular communication may lead to higher trust in the teacherstudent relationship. Previous research has suggested that the better the teacher-student relationship, the better students learn. (Frymier & Houser, 2000). The results of Mahnaz (2015) research on intimacy and immediacy show that when learning strategies emphasize multiple forms of interaction, cooperation between students and feedback from teachers, and teachers are highly present, students will not feel isolated and will be able to form learning communities and feel closer to their classmates and teachers through interactive and collaborative problem-solving activities. Therefore, the study's satisfaction will be improved. The following hypothesis is presented:

H4: Intimacy has a significant impact on satisfaction.

# 2.5 Confirmation

Confirmation refers to the extent to which students' initial expectations of what they have learned are confirmed after using the content (Bhattacherjee, 2001; Lee, 2010). Samar and Ghani (2019) define Confirmation as the degree to which users perceive their initial expectations when using a product during the service. Zhou (2017) conducted a study on Confirmation and believed that the degree of Confirmation positively impacts satisfaction. Cao et al. (2018) and Huang (2019) believe that when users believe that certain technology is very useful, their experience meets or exceeds their initial expectations when they use it, and then Confirmation will affect user satisfaction. Zhou (2017) conducted a study on Confirmation and believed that the degree of Confirmation positively impacts satisfaction. Kathleen (2004) conducted a study on Confirmation, which

showed that teacher confirmation directly impacts the receiver's understanding, and teacher confirmation indirectly impacts learning motivation, emotional learning, and cognitive learning. The above discussion shows that Confirmation of students' initial expectations of an elearning system is critical to their satisfaction after the application experience. (Yung, 2020). the following hypothesis is presented:

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

#### 2.6 Interaction Factor

Moore (1989), Alqurashi (2019), Abrami et al. (2011), and Su et al. (2005) pointed out in their studies that interaction factor refers to the process of establishing meaningful information and thought exchange between more than two people. Interaction factors in learning can be teacher-learner, learner-content, and content-learner. Moore (1989) showed that researchers have identified interactions that may affect online course learning, including interaction factors with content, interaction factors with teachers, and interaction factors with classmates. Madden and Carli (1981) and Powers and Rossman (1985) studied the relationship between teacher-student interaction factors and learning outcomes in traditional classrooms, which has been wellproven. Kurucay and Inan (2017) also mentioned in their research that to build knowledge, individuals need to interact and talk with each other, and the interaction between learners increases the sense of community (Luo et al., 2017). This encourages positive attitudes towards online learning and increases learning satisfaction (Luo et al., 2017; Tawfik et al., 2018; Van & Rogers, 2016). the following hypothesis is presented:

**H6:** Interaction factor has a significant impact on satisfaction.

#### 2.7 Satisfaction

Sweeney and Ingram (2001) defined student satisfaction as happiness and success in the learning environment. Tawfik et al. (2018) define satisfaction as the happiness and success learners get from the learning environment. Elliott and Healy (2001) described the concept of student satisfaction as the behavior derived from students' educational experiences. Believe that student satisfaction is a short-term attitude resulting from students' education and service experience. Asoodar et al. (2016), Queiros and de Villiers (2016), and Mohan et al. (2022) believe that learning satisfaction is a function of learner characteristics and the result of the interaction between individuals, peers, and facilitators. According to Sweeney and Ingram (2001),

factors influencing student satisfaction are multifaceted, including teachers' knowledge and performance, positive learning environment, effective communication, and interaction in the process of teaching and learning, and the reputation and value of institutions.

#### 3. Research Methods and Materials

#### 3.1 Research Framework

Guo and Zeng (2023) social presence model (copresence, intimacy, and immediacy), quoted in This paper, proposes a four-dimensional model of social presence: copresence, immersion, interaction, and intimacy. Ifinedo (2017), Research on the theoretical basis of the technology acceptance model (TAM) (Davis, 1989), innovation diffusion theory (IDT), expectation-confirmation model (ECM) (Bhattacherjee, 2001), The relevant structures of these theoretical frameworks will be used to propose a research model for this study. The researcher has developed a conceptual framework for this study, described in Figure 1.

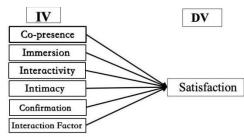


Figure 1: Conceptual Framework

- H1: Co-presence has a significant impact on satisfaction.
- **H2:** Immersion has a significant impact on satisfaction.
- **H3:** Interactivity has a significant impact on satisfaction.
- H4: Intimacy has a significant impact on satisfaction.
- H5: Confirmation has a significant impact on satisfaction.
- **H6:** Interaction factor has a significant impact on satisfaction.

#### 3.2 Research Methodology

From the initial preparation stage, from establishing the research purpose, selecting variables, and constructing the framework, this study has gone through a long time of analysis and exploration. The significance of the topic, problems, and SWOT evaluation analysis. Design of questionnaire. Quantitative analysis was used in this study. Data was collected via an online questionnaire. The developed questionnaire was designed using a 5-Likert scale using a 5-point scale, ranging from (1) "strongly disagree," (2) "disagree," (3) "neutral," (4) "agree," and (5) "strongly

agree." This study adopted multi-stage sampling, and probability and non-probability sampling were used for quantitative analysis.

To complete the questionnaire's design, the scale's reliability and validity must be evaluated. The research tools were validated using the project-objective Consistency index (IOC). IOC test was performed on the questionnaire items, and three experts were invited to evaluate the scale in the study. After designing the scale, its validity should be confirmed. IOC is assessed by three experts who assess each question in the questionnaire. The scoring ranges are +1, 0, -1. +1 is consistent, 0 is ambiguous, and -1 is inconsistent. Items with a final score higher than 0.6 can be retained, and the item's value will be lower than 0.6 when the expert gives it -1. The project is invalid.

After measuring the validity of the IOC scale, 30 questionnaires were distributed to the Art College of Three Gorges University students. To ensure the reliability of the scale entries, Cronbach's alpha coefficient was used, a widely accepted measure in the field. Statistical analysis was conducted using Jamovi 2.3.12 as the software tool, further ensuring the reliability of the research.

After the reliability analysis of variables was verified by Cronbach's alpha, questionnaires were sent out again to Art College of Three Gorges University students. After data collection, invalid questionnaires were eliminated, and multiple linear regression (MLR) was used to analyze the data to test the impact of independent variables on dependent variables and the framework's validity. See how much each variable influences the dependent variable through the data. According to the data, the IDI implementation intervention measures were reformulated, members of the experimental group were selected, intervention plans were made for the experimental group, and intervention was carried out through the implementation of courses. A questionnaire survey was issued before and after the IDI intervention to collect data. The paired T-test of the same variable is used to analyze the change of two sample data of the same variable. Verify the intervention effect, then evaluate and give opinions on the intervention results.

# 3.3 Research Population, Sample Size, and Sampling Procedures

# 3.3.1 Research Population

Considering the product curriculum, I chose the college students of Art College of Three Gorges University. The School of Art was established in September 2000. It has five departments: Music Department, Dance Department, Fine Arts Department, Design Department, and Basic and Theory Department. There are 1298 full-time undergraduates in the university. This study selects the Chinese painting major and

fine arts education major of the College of Art of the Three Gorges University as the study population. It has a population of 290.

#### 3.3.2 Sample size

In the study, the testing phase is done through random surveys. Questionnaires were issued to 30 students from the College of Art, Three Gorges University. To analyze the effectiveness of the questionnaire tool. After that, 100 Art College of Three Gorges University students were given questionnaires. Data were collected and analyzed, and multiple linear regression analysis was done. Finally, 30 students were selected to organize and intervene in the IDI intervention group. The population mainly comes from two directions: Chinese painting major and fine arts education major. Of the 100 people, 47 are Chinese painting majors, and 53 are art education majors.

# 3.3.3 Sampling Procedures

The researchers conducted multiple samples.

The sampling procedure is as follows:

Sample 1: Random sample survey

The validity of the questionnaire was tested with 30 preest data

Sampling 2: Multiple linear regression sampling

The researchers surveyed a sample of 100 students from the art school of China Three Gorges University

Students from art education major and Chinese painting major, respectively

Sampling 3: IDI sampling

The researchers selected 30 students majoring in Chinese painting to form an experimental group.

Students implement IDI.

# 3.4 Research Instruments

# 3.4.1 Design of Questionnaire

Researchers used the following methods to design the questionnaire

Three steps.

Step 1: Identify the source of the survey from previous research questionnaires.

The questionnaires in this paper are from Guo et al. (2022) and Ifinedo et al. (2017).

Step 2: Reconstitute the questionnaire tool for this study.

Step 3: Determine the questionnaire after passing the IOC test.

#### 3.4.2 Components of Questionnaire

The questionnaire items are composed as follows

Two parts:

Part One: Gender, grade, major

Part two: 7 variables in the questionnaire, a total of 29

questions

# 3.4.3 IOC Results

The IOC is the judgment of three experts on the validity of the evaluation items in the questionnaire of factors affecting the learning satisfaction of this institute's creation of the Xiajiang landscape painting. IOC uses the following criteria: +1 = Consistent,0 = Dubious, -1 = Inconsistent. In this study, three experts were asked to evaluate the project. Experts 2 and 3 are experts with rich experience in art, and Expert 1 is an expert with a doctor's degree. They were all independently assessed. In the evaluation, Expert 1 gave the IA3 and INF4 a score of 0. Expert 2 gave CP4 and IN2 a score of 0. Expert 3 gave the IA1 a score of 0. As for the problematic evaluation items raised by the expert, t, the expert agreed to retain these evaluation items after an indepth discussion with the experts.

## 3.4.4 Pilot survey and Pilot test results

In the study, 30 students were surveyed by questionnaire, and data were analyzed. Cronbach's Alpha consistency reliability test was performed. The detailed values are shown in the following table.

Table 1: Pilot Test Result

Variables	No. of Items	Sources	Cronbach' s Alpha	Strength of Association
Co-presence	4	Zeng et al. (2022)	0.720	Good
Confirmation	4	Ifinedo et al. (2017)	0.873	Very Good
Intimacy	4	Zeng et al. (2022)	0.855	Very Good
Interaction	6	Ifinedo et al. (2017)	0.927	Excellent
Factor				
Immersion	3	Zeng et al. (2022)	0.845	Very Good
Intimacy	3	Zeng et al. (2022)	0.815	Very Good
Satisfaction	5	Ifinedo et al. (2017)	0.908	Excellent

# 4. Results and Discussion

#### 4.1 Results

# 4.1.1 Demographic Profile

The study population is the university students of the College of Arts of Three Gorges University (n=100), followed by the IDI population of the activity group (n=30).

Table 2: Demographic Profile

Entire Resear	ch Population (n=100)	Frequency	Percent	
Gender	Male	48	48%	
	Female	52	52%	
Year	First Year	18	18%	
	Second Year	31	31%	
	Third Year	32	32%	
	Fourth Year	19	19%	
Major	Traditional Chinese painting	47	47%	
	Art education major	53	53%	
Total		100	100%	
IDI Par	ticipants (n=30)	Frequency	Percent	
Gender	Male	12	40%	
	Female	18	60%	
Year	First Year	0	0%	
	Second Year	0	0%	
	TD1 1 1 3 7	0	00/	
	Third Year	0	0%	
	Fourth Year	30	100%	
Major		, ,		
Major	Fourth Year Traditional Chinese	30	100%	

# 4.1.2 Results of multiple linear regression

In this research stage, the researchers sent 100 questionnaires to Three Gorges University college students, collected data, and made multiple linear regression analysis (MLR) on the data. Examine the relationship between the six independent variables and the satisfaction of the dependent variables in this study. From the overall data, the R-square value of the mod 1 is 0.833, indicating that the impact of independent variables on satisfaction is 83.3%. The standard coefficients of the independent variables are all greater than 0, indicating that the independent variables positively influence the dependent variables.

**Table 3:** The multiple linear regression of five independent variables on satisfaction

Variables	Standardized Coefficients Beta		p-value	VIF	R2
Co-presence	0.2102	2.757	0.007	3.23	
Confirmation	0.0975	1.173	0.244	3.85	
Immersion	0.1050	1.362	0.176	3.31	
Interactivity	0.0141	0.149	0.882	4.97	.839
Intimacy	0.1809	2.351	0.021	3.29	
Interaction Factor	0.3937	3.743	<.001	6.16	
Dependent variable: Sati	sfaction				

Note: p-value <0.05\*, p-value <0.001\*\*

The above data analyzed the relationship between the independent variable and the dependent variable of the multiple linear regression test. Here are the results of the analysis using Jamovi 2.3.12 software. The P-values were: co-presence (CP) 0.007, immersion (IM) 0.176, interaction

(IA) 0.882, Intimacy (IN) 0.021, confirmation (CONF) 0.244, interaction factor (IF) <0.001; The P values of the independent variable's Co-presence, Intimacy, and Interaction Factor were all <0.005.

The analysis indicates that Co-presence, Intimacy, and Interaction Factors significantly influence satisfaction (SATI). The stand estimate of Interaction Factor, with the highest impact value of 0.3937, has the most significant impact on satisfaction. Intimacy follows with an impact value of 0.2102. Immersion (IM), Interactivity (IA), and Confirmation (CONF) were found to have no significant effect on satisfaction. These findings lead to the hypothesis based on the stage development multiple linear regression analysis results, which suggests that the independent variables Co-presence, Intimacy, and Interaction Factors play a crucial role in determining satisfaction.

H7: There is a significant mean difference in co-presence between pre- and post-strategic plan stages.

H8: There is a significant mean difference in intimacy between the pre-and post-strategic plan stages.

H9: There is a significant mean difference in interaction factors between the post-strategic plan stages.

H10: There is a significant mean difference in satisfaction between pre- and post-strategic plan stages.

# 4.2 IDI Intervention Stage

Based on data collected in the previous study, the IDI intervention in this study was planned for 16 weeks. Before and after IDI, 30-point questionnaires were collected, data were analyzed, and a T-test was performed for comparative analysis and research. The goal was to achieve research and analysis of influencing factors to improve students' satisfaction.

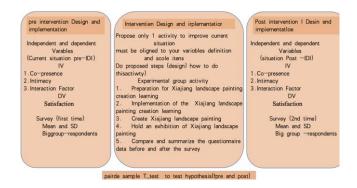


Figure 2: IDI Activities

# 4.3 Results Comparison between Pre-IDI and Post-IDI

In the middle stage of IDI research, 30 questionnaires were distributed before and after IDI, data were collected, and a paired T-test was conducted on four variables for comparative research and analysis. There were no significant changes in IDI before and after the intervention. T-test pairing analysis data are shown in the following table:

Table 4: Paired-Sample T-Test Results

Variables	Mean	SD	SE	p-value	
Co-presence					
Pre-IDI	3.74	0.433	0.0790	<.001	
Post-IDI	4.41	0.407	0.0744		
Intimacy					
Pre-IDI	4.04	0.453	0.0826	0.009	
Post-IDI	4.34	0.433	0.0791		
Interaction					
Factor					
Pre-IDI	3.92	0.437	0.0798	<.001	
Post-IDI	4.52	0.264	0.0482		
Satisfaction					
Pre-IDI	4.09	0.475	0.0867	0.001	
Post-IDI	4.45	0.305	0.0557		

The research findings revealed a significant difference in Co-presence between the pre-IDI (M=3.74, SD=0.0.433) and post-IDI (M=4.41, SD=0.407) conditions; t (29) =-6.21, p <.001, with a mean difference of -0.667. This underscores the importance of our study in understanding the impact of active intervention on Co-presence.

There was a significant difference in Intimacy between pre-IDI (M=4.04, SD=0.453) and post-IDI (M=4.34, SD=0.433) condition; t (29) =-2.79, p=0.009(<0.05) and the mean difference was -0. 300. There is a significant difference in intimacy pre-IDI and post-IDI.

There was a significant difference in Interaction Factor between pre-IDI (M=3.92, SD=0.437) and post-IDI (M=4.52, SD=0.264) condition; t (29) =-5.33, p =<.001 and the mean difference was -0.600. There is a significant difference in Interaction Factor Pre-IDI and Post-IDI.

There was a significant difference in satisfaction between pre-IDI (M=4.09, SD=0.475) and post-IDI (M=4.45, SD=0.305) condition; t (29) =-3.52, p=0.001 (<0.05) and the mean difference was -0.353. There is a significant difference in satisfaction pre-IDI and post-IDI.

The above results show that active intervention, MIDI before stage and stage after IDI data contrast, Co-presence, Intimacy, Interaction Factor, and Satisfaction have significant effects; there were significant differences.

# 5. Conclusions, Recommendations and Limitations

#### 5.1 Conclusions & Discussions

The results show that co-existence, intimacy, interaction, and satisfaction have obvious improvements after the intervention of the IDI activity. After the students' satisfaction is improved, the whole class is pleasant. The activity intervention improves the students' learning enthusiasm. Enhance the relationship between teachers and students, improve the relationship between learners, and improve the interaction. Increased sense of community and team spirit.

This study adopts the method of action research. The whole design, from the design of questionnaire tools, is derived from two previous research articles. The tool was tested for validity by IOC by three experts. In addition, the questionnaire data analysis of 30 students from the College of Art of Three Gorges University used Cronbach's Alpha value to do the pre-test. Ensure the effectiveness and reliability of the tool. After that, 100 questionnaires were distributed to the College of Art and Three Gorges University students, and the data were analyzed by multiple linear regression. The relationship between the satisfaction of six independent and dependent variables was verified. Make new assumptions. The experimental group (n=30) was set up for senior students. Thirty data sets were collected before and after the IDI intervention. Ran a paired T-test. The results show that Co-presence, Intimacy, Interaction factory, and satisfaction significantly improve before and after IDI. IDI activity intervention has a positive effect on satisfaction.

Students show higher satisfaction in creating Xinjiang landscape paintings, which gives them a pleasant learning process that benefits their physical and mental health development. Most learning processes are teacher-led, a relationship between teaching and learning. Students are more passive in this process, and the learning process could be more pleasant. Acceptance of knowledge is also uneven. After intervention in the study, satisfaction was found to be greatly improved. Students are much more relaxed throughout the learning process. Students' satisfaction is an important factor that needs teachers' attention, which can directly reflect students' learning status.

To sum up, the research on factors affecting the satisfaction of college students' creation of Xia River landscape painting shows that the improvement of each factor indicates that students have a better learning experience in the learning process and improve the quality of learning results. The ability of cooperation and communication has been exercised. Students can feel a sense

of common existence and a sense of a collective team, and they can organize activities to make students more active and express themselves. Use all aspects of your abilities and enjoy it. They have established a good relationship with teachers and classmates. Confidence is also greatly improved. These are all factors that deserve teachers' attention.

#### 5.2 Recommendations

Students' satisfaction should be paid special attention to when implementing teacher-oriented teaching. This says something about the state of the student's learning. The causes of problems in learning can give teachers a deeper understanding of students and teaching behaviors in the research process. The teaching plan can be adjusted in time when problems are found. Therefore, teachers need to pay continuous attention to students' satisfaction. It is very necessary to do research. Avoid teacher-centered, unilateral teaching and passive acceptance by students. It did not work out, but I cannot figure out why. Students' satisfaction not only represents students' state of listening to lectures but also directly affects students' sense of experience on courses and further affects students' willingness to continue learning. It also affects students' evaluation of teachers and schools.

Teachers' professional ability is the main item of investigation, but on this basis, we should strengthen teaching methods, teaching resources, and interaction. Diversify your classes. It is also necessary to make different communication methods for different students. We should strengthen the study of modern teaching resources. Increase student interaction and sense of community, and establish common goals with students. Only with strong ability in many aspects can we be guaranteed in all aspects of teaching. This is very important for teaching professional knowledge well. Modern education can add more electronic education applications, multimedia applications, pictures, videos, software, etc., which can make the classroom more vivid, make the classroom more interesting, and improve students' interest in learning. Not so boring. Promote interaction, interaction between professors, interaction between learners, and interaction. Students will be more actively interested. Have a better learning experience.

They were improved in the emotional part of the study. It is conducive to better teaching if teachers and students are familiar with it. In college, teachers usually only meet students in class, so in the teaching process, they should mainly establish emotions with students and cannot only talk about knowledge without interaction. The research shows that when the teacher-student relationship is handled well, it positively impacts students' learning satisfaction. It also has a positive impact on the learning process and results. In the communication process between teachers and students,

values are also transmitted. Can better pay attention to and understand the students.

Organize more students to participate in group discussions and work together. Most students like to study independently and do their homework. When you need a partner, you usually do not communicate with others. Moreover, they do not collaborate. Increasing the formation of group activities can exercise students' ability to cooperate with others and communicate.

Moreover, the ability to think logically about things. How people work together to accomplish a thing or a piece of work. Students should be encouraged to have team spirit, have a common goal, and can overcome many difficulties. It can enhance the feelings between students and gradually exercise the ability of students to communicate with others. Be more proactive and not afraid to interact with people. College students also need the ability to interact and cooperate.

There are few practical courses in school, but practical courses are very important. For example, in this study, when implementing the intervention, there are a lot of practices, such as going out of the classroom and really observing nature and people's lives. In this process, you can not only learn knowledge but also many things that cannot be learned in the classroom: field trips, experiential learning, interdisciplinary interaction, and interactive learning. Under the interaction of teaching, students get greater exercise. In practice, it can be better combined with indoor theoretical classes and better learning. Therefore, we must adhere to the combination of theory and practice. It is also more interesting for students to learn, and much knowledge will not be divorced from reality, avoiding the occurrence of empty theories. In a variety of ways, students' autonomous abilities can be cultivated. In going out to practice, they must have their thinking, not passively accepting knowledge, but actively, which cultivates students' autonomous learning ability—the ability to combine with theory. Then, the result must be more satisfactory.

## **5.3 Limitations for Future Research**

Due to the conditions, this study has some limitations. At the time of the population selection, it is a comprehensive university within the Faculty of Art teaching students of Chinese painting and fine arts. It is a large sample of the population. The data will be more revealing if you choose more targeted students, all of whom are Chinese painting majors or more targeted landscape painting majors. Moreover, it cannot be ruled out that some students must carefully fill in the questionnaire. Then, results would be better with a more precise screening of the prosodion. A joint study of multiple schools will provide more comprehensive and accurate survey results. The population can also do

more, and the data analysis can be more accurate. It is also the first time such an intervention has been attempted in the intervention activity. The program formulation will continue to improve in the following further studies, and the intervention effect will be better. Teachers' theoretical design and activity organization are great challenges. The intervention group is set up temporarily, and the understanding level of teachers and students is still insufficient, and the effect is still insufficient in interactive learning.

Further studies will expand the scope demographically to more eligible populations. The formation of the intervention group will also be familiar in advance, which is more in line with the research intention. Improve intervention programs. Do this research well; the results are more comprehensive.

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