

# A STUDY ON THE RELATIONSHIP BETWEEN ART LEARNING INTEREST AND CREATIVITY TENDENCY OF SENIOR PRIMARY SCHOOL STUDENTS IN GUANCHENG EXPERIMENTAL SCHOOL, CHENGDU CITY, SICHUAN PROVINCE, CHINA

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**Abstract:** This study aimed to investigate the current interest in and creativity tendency among senior primary school students in Chengdu City, Sichuan Province, and to understand the differences in interest and creativity tendency among different demographic backgrounds. Explored the relationship between them among senior primary school students. There were 1118 primary school students. This study adopted a convenient sampling method and completed sampling selected 265 samples. The data were collected and imported into SPSS to conduct statistical analysis. The results of this study showed that the overall art learning interest of senior primary school students in Chengdu was moderate, and creativity tendency was high. Regarding art learning interest, the females, fifth-grade students, only-child group, and students in urban areas were higher. In terms of creativity tendency, females, sixth-grade students, only-child, and urban students were higher. There was a significant positive correlation between the art learning interest and the creativity tendency among senior primary school students. Finally, according to the relevant research results and analysis, art teachers should continuously improve their art teaching abilities, and the school may regularly carry out rich art practice activities inside and outside the school.

Keywords: Senior Primary School Students, Art Learning Interest, Creativity Tendency

#### Introduction

In the 21st century, international competition has become increasingly fierce, and the core of the competition is often the development of technology and talent cultivation (Deng & Peng, 2019). In the "21st Century Skills" education reform, the United States regarded learning and innovative skills as the primary content, emphasized the need to pay attention to students' creativity in the education process, and took the cultivation of creative ability as the focus of education reform. Subsequently,



Britain, Australia, and other countries began to regard creativity evaluation as an essential standard for teacher education and student learning evaluation.

At that time, creativity was considered a critical component of students' core literacy in the core literacy framework put forward by 24 economies and 5 international organizations worldwide, and the importance of creativity development for students' individual growth and academic development was also recognized by Chinese scholars (Han, 2022). It could be seen that "creativity" had become an important ability that individual competition masters in society, so children's creativity level had become a country's core competitiveness to a certain extent.

"Innovation" was mentioned more than 50 times in the report of the 19th National Congress of the Communist Party of China. At the same time, China put forward in the Outline of the National Medium-and Long-Term Education Reform and Development Plan (2010-2020) that the main task in the future would be to "highlight the cultivation of innovative scientific and technological talents."

It could be seen that the Chinese government had realized the critical role of innovation in national development. It also suggested that educators should focus on improving students' creativity through education (Wu, 2019) and strengthen their ability to train and improve their innovation ability in education (Zhou, 2022). Generally speaking, in the current primary school teaching activities, teachers' teaching tasks were not only to let students master cultural knowledge but also to cultivate pupils' creativity.

The school was the cradle of students' cultural knowledge and the main learning environment for developing students' creativity. Primary school art curriculum not only undertook the responsibility of aesthetic education but also focused on stimulating students' ability to create and imagine (Wei, 2022). Therefore, improving the creative development of primary school students through an art curriculum was of high practical value. In the art teaching of senior primary schools, the majority of art teachers paid great attention to students' painting skills and the development of students' creativity to the relevant requirements of the government (Lv, 2022). The senior primary school students' mental development level was higher than other primary school students, and they had a strong desire for hands-on operation, so it was feasible to cultivate their creativity. Therefore, it became an important issue that many educators paid attention to developing their learning interests through art classrooms and then integrating them into art learning activities to improve their creativity further.

Due to the attention of the Chinese government and educators to the cultivation of primary school students' creativity, and with the deepening reform of China's education system, the forms of art courses for senior primary schools were gradually enriched, such as appreciation courses, sculpture courses, craft courses, computer design courses, etc. The above courses were closely related to students' lives, which could enable students to actively participate in the classroom, make students enjoy production in experience activities, and enrich their imagination and creativity while improving their



practical ability (Bao, 2022). However, few studies have combined the art learning interest and creativity tendency of senior primary school students to explore whether the art learning interest impacts the creativity tendency of senior primary school students. In addition, there were few studies based on the background that the international community and the Chinese government paid attention to developing children's creativity, and the above research results had limited practical value.

To sum up, it became a realistic problem for primary school educators and front-line art teachers against the background that the international community and the Chinese government paid great attention to developing children's creativity, students' creativity tendency, and even effectively cultivating creativity. And "interest was the driving force for developing creative thinking (Liu, 2021)". Was it feasible to promote the creativity tendency of senior primary school students through art learning interests? Did art learning interest positively impact the creativity tendency of senior primary school students, investigated them on the spot, and then analyzed the collected data scientifically. Finally, from the perspective of art learning interest, it put forward some beneficial suggestions to improve the creativity tendency of senior primary school students to lay a foundation for enhancing their creativity.

#### **Research Objectives**

(1) To understand the current art learning interest and creativity tendency among senior primary school students at Guancheng Experimental School, Chengdu City, Sichuan Province.

(2) To explore the different art learning interests and creativity tendency of senior primary school students in Guancheng Experimental School, Chengdu City, Sichuan Province, under different demographic backgrounds (gender, grade, whether only child or not, birthplace).

(3) To investigate the relationship between art learning interest and creativity tendency among senior primary school students at Guancheng Experimental School, Chengdu City, Sichuan Province.

#### **Literature Review**

#### **Research on Creativity Tendency**

The creativity tendency, also known as the creative personality, was first proposed by American psychologist Williams (1980). Building on previous research, Williams further elaborated that creativity tendency was a personality characteristic of an individual's positive, creative psychological tendency displayed in activities. It could be seen that since the concept of creativity tendency was formed, the correlation between creativity tendency and creative personality has not yet been separated. Because the concepts of creativity and creativity tendency originated from foreign countries and were relatively mature, Chinese scholars explored the definition of these concepts less. Niu (2022) believed



that creativity tendency was a psychological characteristic of tendency, and individuals could gradually develop, consolidate, and improve through the process of learning. The creativity tendency was also a characteristic of cultivating innovative talents; it could promote and regulate individual creativity.

In the research on the factors influencing creativity tendency, the respondents involved many groups, from young to college students. Especially under the requirement of the Chinese government to "highlight the cultivation of innovative scientific and technological talents," research on the creativity tendency of college students has become more urgent.

However, at the same time, some scholars realized that cultivating students' creativity tendency needed to start with primary school students. Xia & Zhou (2017) took middle and high school students as research objects in related research. The research found that primary school students' creativity levels developed well. Still, there were also significant gender and grade differences, which teachers had to consider in the teaching process. In addition, through correlation tests, the research found that primary school students' creativity tendency was significantly related to Chinese and mathematics scores, suggesting that primary school Chinese and mathematics teachers should have cultivated primary school students' creativity tendency. In addition, in the study on the demographic backgrounds of primary school students' creativity tendency, Wang (2020) found that female students scored significantly lower in the dimension of adventurous than male students, and Niu (2022) showed that adventurous and curiosity had significant gender differences. According to the study by Gong et al. (2020), the reason for girls' higher creative tendency is that girls' intellectual development and physical and mental development are slightly earlier than boys. Zhang (2017) found that the creativity level of rural primary school students was generally low.

#### **Research on Art Learning Interest**

By combing the existing literature, it was found that art learning interest was a subordinate concept of learning interest, and there were very few empirical studies on students' art learning interests alone. The latest research result was Chen's (2018) research. The research results showed that 75.54% of students were interested in art learning, which led most students to maintain a positive attitude towards art subjects. They were willing to take art courses, which provided good conditions for art teachers to guide and enhance students' art learning interests in the future.

In addition, in the study on the demographic backgrounds of primary school students' art learning interests, Chen (2006) showed that the proportion of male students who were not interested in art learning was much higher than that of female students. Ye (2018) found that primary school students' art learning interests decreased with grades increasing. Zhang (2022) found that parents of only children had significantly higher educational expectations than parents of non-only children. Tian et al. (2022) believed that educational resources in urban areas were more abundant, and children of urban residents had more opportunities to learn from the external environment, so they had a higher interest in learning.



But in the meantime, it was found that different from the research on the current situation and influencing factors of art learning interest, the research on the promotion strategy of art learning interest was vibrant. Scholars focused on different perspectives and comprehensively explored the techniques for developing primary school students' art learning interests.

Some scholars emphasize improving the drawbacks of traditional art teaching. Xu (2020) believed that primary school students, due to their immature physical and mental development, were mainly motivated by their art learning interests rather than individual development. Therefore, to improve the effectiveness of art classroom teaching, art teachers must pay attention to students' art learning interests. It was recommended that teachers create a good classroom atmosphere for students from the perspectives of classroom atmosphere, teaching methods, and teaching tools. In addition, research suggested that students had a high level of interest in the peer evaluation process and that art teachers could carry out planned peer evaluations of works among students in combination with teaching content. Wei (2020) emphasized that the educational concept of improving students' art learning interest came from "student-centered." Only by respecting students' learning needs and personality development would students' art interests and classroom participation improve. In hierarchical teaching, because teachers purposefully set learning goals for students with different classmates, students would not have lousy learning emotions because of differences in learning ability, which was conducive to improving students' academic self-confidence and stimulating students' interest in learning.

#### Research on the Relationship between Learning Interest and Creativity Tendency

By combing the existing literature, it was found that the research on the direct relationship between art learning interest and creativity tendency was very scarce. Still, some scholars combined learning interest with creativity and explained the relationship between learning interest and creativity to a certain extent.

Ma & Wang (2021) took junior high school labor technology course as the research object. They discussed ways to improve junior high school students' creativity in labor and technology training. They emphasized that it was necessary to improve the teaching content and present students with learning content that met their learning needs to enhance their learning interests. Students had high learning participation, so the teacher should cultivate students' practical abilities. Students' creativity would also be formed by creating and developing functional skills.

Xu (2021) believed that innovation ability was closely related to interest, and interest was an excellent thrust for developing students' innovation ability. This study took high school students as the survey object, and the results showed that deep learning strategies play an intermediary role between high school students' learning interests and innovation ability. That learning interest affects innovation ability through deep learning strategies.



Li (2021) believed that the learning objectives of art courses include cultivating students' creativity and imagination. Art courses could be seen as a direct way for students to develop their creativity. Quality education was widely promoted in primary and secondary schools. Cultivating students' creativity in art courses should gradually be transformed into independent creativity. That was, students should spontaneously engage in learning activities to improve their creativity level. Teachers' teaching process should focus on inspiration and guidance while developing students' learning psychology represented by their learning interests.

Through practice, Liu (2022) found that the DBL teaching mode of junior high school information technology oriented to creativity cultivation has achieved good results in junior high school information technology teaching. The teaching design of this model was reasonable, which could effectively improve students' knowledge levels and grades and promote the development of creativity among middle school students. At the same time, due to the application of advanced teaching methods, this course could also enhance students' classroom participation and stimulate their interest in learning.

#### Summary of Reviewed Literature

The related research results were vibrant from the above, whether it was an art learning interest or a creativity tendency. However, there were still some differences between art learning interests and creativity tendency. First of all, from the perspective of research objects, although the concept of creativity tendency came into being earlier, it was widely considered by Chinese scholars later. It was not until the Chinese government's requirement of "highlighting the cultivation of innovative scientific and technological talents" those Chinese scholars paid attention to the concept of creativity tendency. Therefore, the research objects were mainly college students, and the research on primary school students was scarce. Secondly, from the perspective of the research paradigm, art learning interests mainly discuss how to improve the promotion strategy of art learning interests effectively, and many scholars discuss it with their work experience. Therefore, the art learning interest paradigm was primarily normative and lacked empirical research. Finally, from the direct research results of art learning interest and creativity tendency, although some scholars have begun to pay attention to the relationship between learning interest and creativity, the direct research results of art learning interest and creativity tendency were very scarce, which needed to be further verified by empirical research.

#### Methodology

In the formal investigation stage, the liaison staff of this school distributed questionnaires to the senior students of Guancheng Experimental School, Chengdu City, Sichuan Province. There were 856 fifth-grade students and sixth-grade students in this school. According to the Morgan Table standard of Krejcie and Morgan (1970), it was estimated that 265 students would be sampled



reasonably. To ensure that the number of qualified questionnaires collected was 265, 300 questionnaires were distributed in this study. After recovery, invalid questionnaires were eliminated, and 265 valid questionnaires were retained; the effective return rate reached 88.33%.

The questionnaire on the art learning interest of senior primary school students in Guancheng Experimental School, Chengdu City, Sichuan Province, which was selected in this study, originated from the Questionnaire of Art Learning Interest of Primary School Students compiled by Chen (2018). In this study, 265 questionnaires were used to test the reliability of the questionnaire. The results showed that the Cronbach's  $\alpha$  of each dimension was between 0.701 and 0.761, which was higher than 0.7. The overall Cronbach's  $\alpha$  was 0.873, and the general reliability level was higher than 0.8, which showed that the reliability of the questionnaire has a strong reliability level and could be used for further statistical analysis. In this study, 265 questionnaires were used to test the validity of the questionnaire. The KMO value of the questionnaire was 0.891, which was greater than 0.8 and has significance at the level of. 001, indicating that the questionnaire was suitable for factor analysis. Through exploratory factor analysis, it found that five common factors were extracted from the questionnaire on art learning interest of senior primary school students, and the cumulative contribution rate was 59.139% after being rotated by the maximum variance method, which showed that the questionnaire of art learning interest of senior primary school students had good structural validity.

The questionnaire on the creativity tendency of senior primary school students in Guancheng Experimental School, Chengdu City, Sichuan Province, which originated from the Creativity Assessment Packet (CAP) by Williams (1980), was selected for this study. In this study, 265 questionnaires were used to test the reliability of the questionnaire on the creativity tendency of senior primary school students. The results showed that the Cronbach's  $\alpha$  of each dimension ranged from 0.900 to 0.920, higher than 0.9, and the overall Cronbach's  $\alpha$  was 0.958, higher than 0.9. Therefore, the questionnaire's reliability met this study's statistical solid standard, which could be used for further statistical analysis. In this study, 265 questionnaires were used to test the validity of the questionnaire. The KMO value of the questionnaire was 0.946, which was greater than 0.9 and has significance at the level of. 001, indicating that the questionnaire was suitable for factor analysis. Through exploratory factor analysis, we found that four common factors were extracted from the questionnaire on creativity tendency of senior primary school students, and the cumulative contribution rate was 72.696% after being rotated by the maximum variance method, which showed that the questionnaire of creativity tendency of senior primary school students had good structural validity.

#### Results

#### Demographic Analysis of the Respondents

In this study, the senior primary school students in Chengdu City, Sichuan Province, were

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investigated by questionnaire, and 265 valid questionnaires were collected and sorted out. The demographic backgrounds analyzed for demographic factors mainly include gender, grade, whether only child or not, and birthplace. In the valid questionnaire, there were 132 males, accounting for 49.8%, and 133 females, accounting for 50.2%. On the whole, the gender ratio of the students surveyed was relatively balanced. In terms of grades, there were 142 fifth-grade students, accounting for 53.6%, and 123 sixth-grade students, accounting for 46.4%. The sixth-grade students are less willing to accept the survey because they were pressured to enter higher schools. As for whether only child or not, there were 129 only-child groups, accounting for 48.7%, and 136 non-only-child groups, accounting for 51.3%. With the introduction of China's "three-child" policy, the number of only-child groups has gradually decreased. Regarding birthplace, there were 173 students in urban areas, 65.3%, and 92 students in rural areas, accounting for 34.7%. Because Guancheng Experimental School was located in urban areas, the number of students in rural areas was negligible.

#### Descriptive Statistical Analysis

1) From the descriptive statistical results in Table 1, it could be seen that the art learning interest of senior primary school students was 3.198, which was moderate. Among which the learning content was the highest, followed by teachers teaching and caring. The art learning interest and learning environments were the lowest.

Dimensions	Mean	SD		
Learning interest in fine arts	3.193	0.590		
Learning tendency	3.220	0.659		
Learning content	3.283	0.718		
Learning environment	3.070	0.760		
Teachers teaching and caring	3.224	0.720		
Overall art learning interest	3.198	0.508		

Table 1: Overall Art Learning Interest among Senior Primary School Students (N=265)

2) According to the descriptive statistical results in Table 2, the creativity tendency of senior primary school students was 3.607, which was a high level. Among which curiosity was the highest and difficulty was the lowest.

 Table 2: Overall Creativity Tendency among Senior Primary School Students (N=265)

Dimensions	Mean	SD
Adventurous	3.632	0.669
Curiosity	3.722	0.634
Imagination	3.580	0.706
Challenging	3.496	0.708
Overall creativity tendency	3.607	0.552



#### Statistical Analysis of Differences

Among the senior primary school students, the art learning interest among females, fifth-grade students, only-child groups, and students in urban areas was higher. In terms of creativity tendency, female students, sixth grade students, only child groups, and urban students had a higher mean.

#### **Correlation Statistical Analysis**

Using Pearson correlation analysis, this study investigated the correlation between art learning interest and the creativity tendency of senior primary school students. The relevant situation was shown in Table 3.

**Table 3:** Correlation Analysis Between Art Learning Interest and Creativity Tendency of Senior

 Primary School Students

	1	2	3	4	5	6	7	8	9	10	11
1	1										
2	.411***	1									
3	.395***	.454***	1								
4	.356***	.374***	.644***	1							
5	.449***	.382***	.438***	.355***	1						
6	.684***	.703***	$.808^{***}$	.761***	.717***	1					
7	.296***	.225***	.203**	.184**	.270***	.316***	1				
8	.269***	.167**	.203**	.192**	.205**	.279***	.676***	1			
9	.208**	.138*	.212**	.211**	.250***	.278***	.509***	.497***	1		
10	.156*	.141*	.175**	.141*	$.150^{*}$	.206**	.557***	.571***	.483***	1	
11	.283***	.205**	.244***	.224***	.269***	.331***	.839***	.834***	.772***	.808***	1

Note: \*p<.05, \*\*p<.01, \*\*\*p<.001

Note: 1 meant Learning interest in fine arts; 2 meant Learning tendency; 3 meant Learning content; 4 meant learning environment; 5 meant Teachers teaching and caring; 6 meant Overall art learning interest; 7 meant Adventurous; 8 meant Curiosity; 9 meant Imagination; 10 meant Challenging; 11 meant an Overall creativity tendency

From the results of the correlation analysis, we could see that the correlation coefficient r between the overall art learning interest and creativity tendency of senior primary school students was 331, which reaches a significant level at the level of. 001, indicating that senior primary school students' art learning interests and creativity tendency were significantly positively correlated. The correlation coefficient between each dimension of art learning interest and the overall mean value of creativity tendency was 0.205-0.283, and the dimension with the highest correlation coefficient between each dimension of art learning interest and the overall mean value of art learning interest (r=0. 283, p<. 001). The correlation coefficient between creativity tendency and art learning interest was 0.206-0.316, and the highest correlation coefficient between creativity tendency and art learning interest was risk (r=0. 316, p<. 001).



#### Discussion

# Current Art Learning Interest and the Creativity Tendency among Senior Primary School Students

According to the survey, the art learning interest of senior primary school students was generally moderate, which was close to Chen's research results (2018). This study held that the senior primary school students' art learning interest has a high rising space. Still, from the mean score of each dimension, the mean of the learning environment dimension was relatively low. It showed that to effectively improve the senior primary school students' art learning interest, students should build a learning environment conducive to their art learning activities. At the same time, Chen believed that many external factors influenced primary school students' art learning interest, so teachers' effective teaching and reasonable guidance were needed.

According to the survey, the creativity tendency of senior primary school students was high, which was close to the research results of Wang (2020). However, combined with the data, it could be seen that the development of each dimension of creativity tendency of senior primary and secondary school students in this study was unbalanced, among which adventurous, curiosity, and imagination were high level, while the challenging dimension was at the middle level, which showed that if the study wanted to make the creativity tendency of senior primary school students develop in an all-round way, it should also pay attention to the cultivation of students' challenging.

### Differences in Art Learning Interest and Creativity Tendency among Primary School Senior Students with Different Demographic Backgrounds

Among the senior primary school students, the art learning interest among females, fifth-grade students, only-child groups, and students in urban areas was higher. In terms of creativity tendency, female students, sixth grade students, only child groups, and urban students had a higher mean. These findings were consistent with the research results of Chen (2006), Ye (2018), Zhang (2022), Tian et al. (2022), Wang (2020), Niu (2022), Gong et al. (2020), Li (2017).

## Relationship between Art Learning Interest and Creativity Tendency of Senior Primary School Students

The correlation test showed that senior primary school students' art learning interests and creativity tendency were significantly positively correlated. That was, the higher the art learning interest of senior primary school students, the higher their creativity tendency.

Li (2021) believed that the teaching goal of art education was to improve students' aesthetic level and creativity. Therefore, it could be said that art textbooks have the function of cultivating students' creativity tendency. Combined with the research results, the dimension with the highest correlation coefficient between art learning interest and the overall mean value of creativity tendency was art learning interest, which showed that art classroom teaching was conducive to cultivating the



creativity tendency of senior primary school students. At the same time, the highest correlation coefficient between creativity tendency and the overall mean value of art learning interest was adventurous, which showed that art classrooms would have a positive impact on students' adventurous in the process of cultivating students' creativity tendency.

Risk-taking meant that individuals could face criticism, adjust their emotions and continue to complete tasks even if they encounter failure situations when carrying out strenuous activities (Wang, 2020). Combined with the gender differences in art learning interests of senior primary school students, many students had low art learning interest because they could not complete teachers' tasks. In the art class learning process, because the first adventurous students played the highest role in promoting development, students with a higher level of risk could better deal with difficulties, face criticism, and adjust their emotions to complete the task successfully. In this process, their art learning interest would also increase.

#### Conclusions

1) The overall level of art learning interest of senior primary school students was moderate. The creativity tendency of senior primary school students was high.

2) Among the senior primary school students, the art learning interest among females, fifthgrade students, only-child groups, and students in urban areas was higher. In terms of creativity tendency, female students, sixth grade students, only child groups, and urban students had a higher mean.

3) There was a significant positive correlation between the art learning interest and the creativity tendency among senior primary school students.

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