

Anxiety Intervention for University Students in Yunnan: Needs Characteristics and Practical Effects of Painting Therapy Courses

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Abstract

Anxiety among university students has become increasingly prevalent; however, research on painting therapy interventions targeting high-anxiety groups in science and engineering majors remains scarce. Notably, high-anxiety students face a dilemma in seeking help: they often fall into a predicament of “the more eagerly seeking help, the harder it is to speak up”—anxiety drives their desire for support, yet it also leads them to avoid seeking help. This contradictory psychology hinders their access to effective support. This study, which focuses on students from universities in Yunnan, aims to explore the anxiety characteristics of this group and their demand for painting therapy courses, verify the intervention effects of the courses, and explore approaches to resolve the avoidance of help-seeking caused by anxiety. A total of 472 valid questionnaires were collected, and combined with a single-group pretest–posttest design, data analysis was conducted via the SCL-90 psychological scale and a self-designed course demand questionnaire. The results revealed that (1) 81.5% of the students in Yunnan universities experienced anxiety of varying degrees and that major had a significant impact on anxiety levels—students in science and engineering majors had significantly higher anxiety levels than did those in other majors did; (2) a significant “help-seeking paradox” existed: there was a significant negative correlation between anxiety frequency and willingness to participate in courses, with the initial willingness of high-anxiety students to participate in courses being only 27%; (3) after intervention with the painting therapy course, which was based on the three modules of “Emotional Parachute”, “Emotional Regulation Toolbox”, and “Social Icebreaker”, the total score of students’ anxiety factors decreased significantly, especially among science and engineering students; and (4) after adopting a low-threshold promotion strategy, the participation rate of high-anxiety students in the course increased from 27% to 44%. These findings indicate that anxiety among university students in Yunnan is prominent, with science and engineering students being a high-risk group. The “help-seeking paradox” significantly restricts high-anxiety students’ access to support. The designed painting therapy course can effectively alleviate anxiety, and the low-threshold promotion strategy provides a feasible path to overcome this paradox, which has important practical significance and promotion value and offers insights for university mental health education.

Keywords

university students’ anxiety, course intervention, demand characteristics, painting therapy

1. Introduction

Against the backdrop of rapid social development, mental health issues have gradually become the focus of global public health (World Health Organization [WHO], 2022)). The mental health of university students not only significantly predicts their individual development efficiency and career achievements but also has a spillover effect on social stability and sustainable development at the macro level. As a core component of the youth group, university students face prominent and diverse mental health risks. University students report significant anxiety symptoms; the prevalence of anxiety in this group is the result of the synergistic effect of multiple stressors, such as academic pressure, tense peer relationships, uncertainty about career development, financial constraints, and family expectations, leading to the spread of anxiety in the university context (Zhang and Lan, 2020). Persistent anxiety has become an important psychological factor that interferes with university students' normal studies and daily lives. It not only significantly reduces their learning efficiency and causes withdrawal from social behaviors but also may induce serious mental health problems such as depression and obsessive-compulsive disorder if it has accumulated for a long period of time. This not only poses potential and severe threats to the physical and mental health of university students but also may have long-term negative impacts on their future career development and quality of life (Wu, Huang, He, Tang, and Pu, 2015). Therefore, in the current field of mental health research, the exploration of effective intervention strategies and practical paths for university students' anxiety has become one of the core issues that needs in-depth discussion.

As a unique form of psychotherapy, painting therapy has gradually emerged in the field of mental health in recent years. Through artistic creation forms such as painting and sculpture, painting therapy provides individuals with a nonverbal platform for emotional expression and emotional regulation (Meng, 2009). Studies have shown that painting therapy has a significant effect on alleviating negative emotions such as anxiety and depression and can help individuals enhance their self-awareness and improve their emotional management ability (Marchiordi, 2008). However, systematic research on painting therapy targeting university students, especially high-anxiety groups in science and engineering majors, is relatively insufficient. Owing to high academic pressure and difficult courses, the sources and manifestations of anxiety among science and engineering students are significantly different from those of students in other majors (Dela Cruz and de Guzman, 2023). This makes the existing research results of painting therapy unable to meet their needs, and intervention strategies and course designs need further exploration and optimization.

In addition, in the process of anxiety intervention for university students, the "help-seeking paradox" has become increasingly obvious. That is, students with higher anxiety levels actually have a lower willingness to take the initiative to seek help and participate in anxiety-alleviating courses. This situation prevents highly anxious students from obtaining timely and effective psychological assistance, resulting in their anxiety problems not being properly addressed and thus increasing their psychological pressure.

This study takes students from universities in Yunnan as the research object, aiming to analyze the anxiety characteristics and demand for painting therapy courses of this group, verify the intervention effect of targeted courses, and explore the path to resolve the "help-seeking paradox". This study not only enriches the theoretical system of painting therapy in the field of university students' anxiety intervention and provides a solid theoretical basis for subsequent research but also provides practical intervention plans for university mental health educators, promotes the innovative development of university mental health education, helps university students alleviate anxiety, and improves their mental health.

1.1 Overview of University Students' Anxiety and Painting Therapy

1.1.1 Characteristics of University Students' Anxiety

The anxiety exhibited by university students is multifaceted. From a cognitive perspective, they often have excessive worries about the future, such as fear of poor academic performance, inability to meet parents' expectations, worry about not finding an ideal job after graduation, or fear of interpersonal relationship handling, which leads them to experience repeated negative thinking and find it difficult to eliminate (Huang, Guo, Ding, and Hong, 2021). For example, before the exam week, many students continuously think about the possible consequences of failing the exam, which undoubtedly increases their psychological pressure. From a physical perspective, anxious university students are more likely to experience physical discomfort. For example, when their hearts beat faster, they can clearly feel the intense beating of the heart even in a quiet environment; in addition, they may also experience physical symptoms such as headaches and stomachaches. Some students have sleep problems due to long-term anxiety, such as difficulty falling asleep, frequent dreams,

and easy awakening, which makes them feel listless the next day and further affects their studies and daily life (Zhang and Lan, 2020). In terms of behavior, some university students show avoidance attitudes due to anxiety (Wu et al., 2015). For example, because they are afraid of speaking in class, they may choose to sit in the back row of the classroom or even avoid class on the pretext of being sick; in social activities, they may avoid taking the initiative to communicate with others, thereby reducing their participation in group activities. Some students still procrastinate—they delay when facing assignments or tasks and only rush to respond when the final deadline approaches.

1.2 Core Concepts, Development Context, and Main Schools of Painting Therapy

Owing to its nonverbal artistic expression characteristics, painting therapy has become an important and effective method for anxiety intervention, and its theoretical and practical system has gradually improved with the development of different orientations. Painting therapy is a psychotherapy method that uses artistic creation as a medium for communication and expression. In a professional therapeutic relationship, it helps individuals release emotions, integrate personalities, and promote mental health through art forms such as painting and handcraft (Edwards, 2016). Its development context can be traced back to the mid-20th century. In the early stage, influenced by psychoanalytic theory, Margaret Naumburg proposed the “Mandala painting therapy” procedure as the core technology. This method guides individuals to first conduct free painting creation, and then, the therapist helps establish a connection between the symbolic elements in the paintings and the unconscious sources of anxiety. The process of “expression-interpretation” helps individuals complete emotional catharsis and realize internal insight into the root causes of their own anxiety (Nunberg, 2025). The Jungian orientation focuses on symbolism and integration. With the help of classic forms such as Mandarin painting and “house-tree-person” theme painting, it externalizes an individual’s abstract anxiety experience into concrete images such as “shadow” and “self” under the framework of collective unconsciousness. Through the exploration and understanding of these images, the balance and integration of various parts of personality can be promoted (Caozhudaoren, 2023). The Gestalt orientation focuses on the “here and now” creative experience. Through experimental intervention methods such as impromptu doodling and empty chair dialog, visitors can consciously perceive the interaction cycle between physical feelings, emotional fluctuations, and thinking modes in the current creation process, thereby breaking the chain of automatic negative reactions caused by anxiety (Peng, 2025). The humanistic orientation takes self-actualization as the core. Maslow noted that when the painting therapy environment can provide individuals with unconditional positive attention, individuals can transform the psychological energy carried by anxiety into “self-actualizing creativity”. In artistic creation, they gain a sense of control over emotions and a sense of self-worth and finally achieve the alleviation of anxiety (Maslow, 2021). Although different orientations have different intervention logics, they all focus on the core of nonverbal expression and provide diverse and effective practical paths for anxiety intervention.

1.3 Theoretical Basis for Painting Therapy in Alleviating Anxiety

As a form of art therapy, painting therapy emphasizes nonverbal expression and has significant therapeutic effects, especially when dealing with traumatic memories, childhood experiences, and emotional conflicts. Human unconsciousness, especially emotions and traumatic memories, is often stored in the right hemisphere. It is difficult to achieve these deep-seated emotions via simple verbal therapy. However, through sensory stimulation, such as vision and touch, painting therapy can directly interact with the unconscious, enabling individuals to externalize indescribable emotions and conflicts in their hearts in the form of images, thereby alleviating anxiety (Zhou, Cui, Xu, and Wang, 2023). As Adrian Hill, a British artist and art teacher, discovered, painting can not only show repressed emotions in the unconscious (Langer, 1953) but also release these emotions and help alleviate internal pressure (Hill, 1945). To gain a deeper understanding of the core mechanism of painting therapy, we can draw on image theory and emotional expression (Croce, 1998). The aesthetic psychological experience in painting therapy is manifested mainly as the cognitive process of “form” and “meaning” and the imaginative activities of self-image, self-emotion, and self-feeling. Kant and other Western aesthetic experts hold the view that an image is a subjective viewpoint shaped by imagination and that it is a concrete way of emotional expression. From an aesthetic perspective, painting therapy enables people to generate aesthetic experiences through artistic activities. In the process of art therapy, the images created by individuals become manifestations of images and carry their inner emotions (Kant, 2002). In the process of painting, individuals continuously construct their own aesthetic images through imagination and

association. When individuals display these images, they can transform their inner anxiety and other emotions into external expressions, thereby achieving emotional release and relief.

The theoretical framework of iconology provides a solid theoretical basis for painting therapy. Gombrich believes that humans are symbolic animals and that their behaviors are governed by a certain symbolic system, which is the image. In his book *Symbolic Images: Essays on the Iconology of Art*, Gombrich clearly states that images not only have symbolic properties but can also effectively convey emotions and thoughts. These images not only represent diseases but also express patients' thinking and exploration of self-identity and, at the same time, contain rich social and cultural information. During the treatment process, the works of art created by patients often display symbolic images, which reveal their internal psychological state and emotional experiences (Liu and Li, 2013; Gombrich, 1990). In painting therapy, works of art convey the relationship between humans and the world with "objects" as the carrier, and this relationship is reflected in the spiritual connotation expressed by the creator. By interpreting these images, therapists can help patients better understand their emotions and the problems they are facing, thereby effectively alleviating their anxiety and adjusting their emotions (The Second Affiliated Hospital of Henan Medical University, 2025). Art creation is a spiritual activity that not only requires artists to have high artistic literacy and aesthetic ability but also requires creators to have rich imagination, creativity, and a strong sense of subjectivity. In addition, the process of artistic creation itself has unique healing capabilities. Therefore, art therapy is an effective and practical psychological counseling method. It brings new perspectives to visitors in a unique way and thus has an enormous impact. As Meng Peixin noted, through artistic creation, participants can achieve a state of concentration, and in the process of creation, they can realize emotional release and self-awareness. In the process of painting therapy, individuals can shift their attention from external factors that may cause anxiety through various methods, such as painting and pottery, and express their emotions through artistic creation, thereby achieving self-healing (Nie, 2020).

1.3.1 The Power of Nonverbal Healing: Exploration of Painting Therapy as an Effective Choice for Anxiety Intervention

In recent years, the incidence of anxiety among university students has continued to rise. Traditional talk therapy often has limited effects on young groups with high defensiveness and a strong sense of shame (Institute of Psychology, Chinese Academy of Sciences [IPCAS], 2022). By using nonverbal and symbolic artistic creation, painting therapy bypasses language defense and provides an "emotional visualization" channel for anxious individuals (Edwards, 2016). Neuroaesthetic research has shown that painting can simultaneously activate the emotional center of the right hemisphere and the cognitive integration area of the left hemisphere, promoting emotional reprocessing and cognitive reappraisal (Li, et al, 2024). Therefore, painting therapy is considered an important means to reduce the anxiety level of university students and improve their emotional regulation ability.

1.3.2 Empirical effects of painting therapy: Research results and conclusions

The effectiveness of painting therapy in the field of anxiety intervention has been supported by a large number of empirical studies. Its core value lies in overcoming the limitations of language expression through artistic creation, helping individuals externalize anxiety and reduce their degree of psychological defense. Marchiordi (2008) noted that art creation can enable university students to transform vague and indescribable anxiety in their hearts into visual works of art, provide a concrete carrier for emotional guidance, and alleviate negative emotions such as tension and pressure. The study also revealed that students are more willing to participate in therapy through practical creation, which is consistent with the conclusion of relevant studies that "60% of students prefer practical creation guidance". This further confirms that practical creation can enhance students' sense of participation and autonomy and improve the attractiveness and effectiveness of the therapy process (Marchiordi, 2008). According to the results of different research designs, the anxiety intervention effect of painting therapy is outstanding: at the quantitative research level, McDonald (2022) conducted 8 sessions of group painting therapy with 96 university students. The results revealed that the SCL-90 anxiety score decreased significantly after the intervention, with an effect size of $d=0.72$, indicating that painting therapy can effectively reduce the anxiety level of university students (McDonald, 2022). At the qualitative research level, a controlled study by Müller et al. (2021) revealed that the frequency of using emotional regulation strategies (such as cognitive reappraisal and positive distraction) in the painting therapy group was 40% greater than that in the control group. Through thematic analysis of interview data, it was

further revealed that “emotional externalization-renarration” is the core mechanism of the effect of therapy—after anxiety is transformed into paintings, individuals will reinterpret the meaning of the work and construct a new emotional cognitive framework (Müller, Albrecht, and Petersen, 2021). At the meta-analysis level, Li Xiong et al. (2024) included 23 randomized controlled trials (RCTs) for combined analysis. The results revealed that the combined effect size of painting therapy in alleviating youth anxiety was $g=0.58$, and when the intervention adopted the “art + psychology” dual-tutor model, the therapeutic effect was more stable, suggesting that professional collaboration can further optimize the intervention quality (Li et al., 2024). The above studies have verified the significant effect of painting therapy in anxiety interventions in different dimensions, providing a solid empirical basis for its popularization and application in practice.

1.4 This study

This study focuses on high-anxiety university students in science and engineering majors and conducts two studies: Study 1 is “A Study on the Current Situation of University Students’ Anxiety, Demand for Painting Therapy Courses and Influencing Factors”, which mainly investigates the current situation of university students’ anxiety, analyzes their emotional regulation ability, course demand and influencing factors, and explores how to design an effective painting therapy intervention program for this group. Study 2 is “A Study on the Intervention Effect of Group Art Healing Courses on the Anxiety Level of Students in a School in Yunnan”, which aims to evaluate the intervention effect of group art healing courses on the anxiety level of students in Yunnan and explore the application of art healing in emotional regulation and anxiety alleviation. In terms of research design, this study combines the four schools of painting therapy (psychoanalysis, Jungian, Gestalt, and humanistic) to design an innovative three-module course of “Emotional Parachute - Emotional Regulation Toolbox - Social Icebreaker”. Combined with a mixed implementation model of online convenient recruitment and offline immersive workshops, it explores the intervention effect, mechanism, and sustainability through pretest and posttest measurements, qualitative interviews, and other methods. It focuses on the “help-seeking paradox” phenomenon of students in science and engineering majors and adopts a low-threshold design to improve participation. The goal is to significantly reduce anxiety levels, enhance the self-efficacy of emotional regulation, and provide a replicable painting therapy intervention program for universities.

2. Study 1: A Study on the Current Situation of University Students’ Anxiety, Demand for Painting Therapy Courses and Influencing Factors

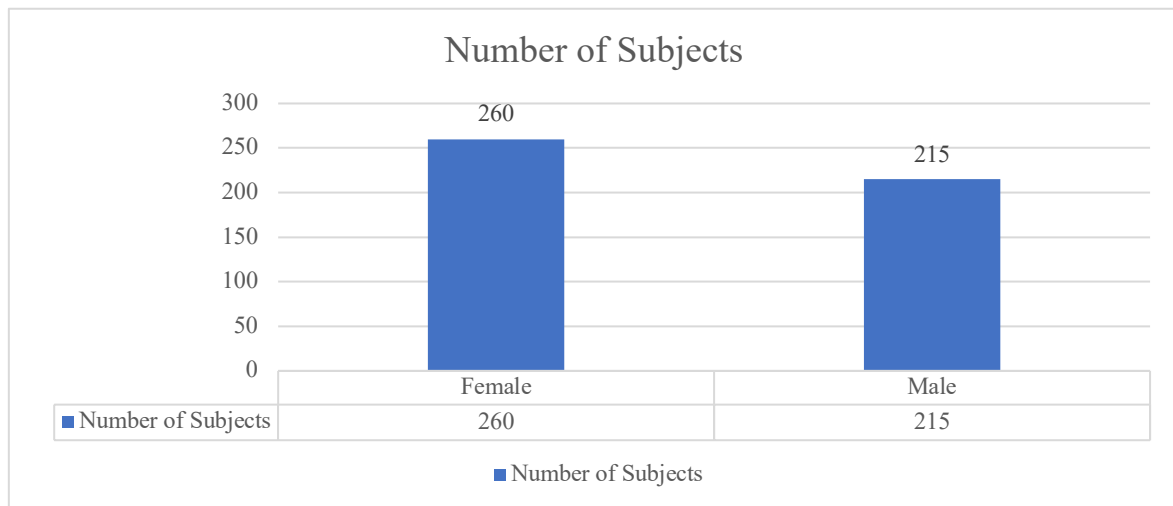
2.1 Research purpose

This study aims to explore the current situation of university students’ anxiety, the demand characteristics for painting therapy courses, and related influencing factors to provide an empirical basis for the design and promotion of university mental health education courses.

2.2 Research Objects

This study conducted a survey among university students via an online questionnaire. After excluding invalid responses, a total of 475 valid samples were retained. Before data collection, informed consent was obtained from the students themselves, their departments, and the relevant school authorities. All the participants were informed that they could withdraw unconditionally at any stage of completing the questionnaire and that their responses would be used only for academic research, with personal information strictly kept confidential. Among the 475 valid subjects, 260 were female (54.7%), and 215 were male (45.3%). The grade distribution covered freshmen to postgraduates and above, including 25.7% freshmen, 26.1% sophomores, 18.7% juniors, 19.8% seniors, and 9.7% postgraduates and above. The disciplines involved 9 categories, including science, engineering, liberal arts, economics, management, law, education, art, and agriculture. Science students accounted for the highest proportion (26.5%), followed by art students (18.9%) and liberal arts students (17.5%). The average age was 19.4 years ($SD = 1.83$). The demographic characteristics of the samples are shown in Figure 1, Figure 2, and Figure 3.

Figure1: Gender distribution of the samples



As shown in Figure 1, the number of female subjects was slightly greater than that of male subjects, but the overall distribution was relatively balanced.

Figure 2: Grade distribution chart

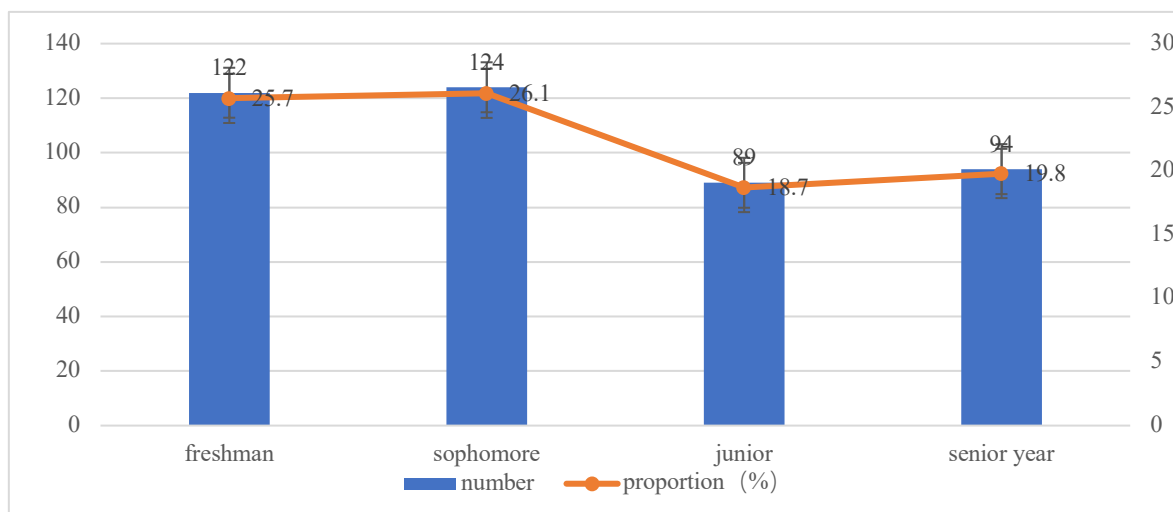
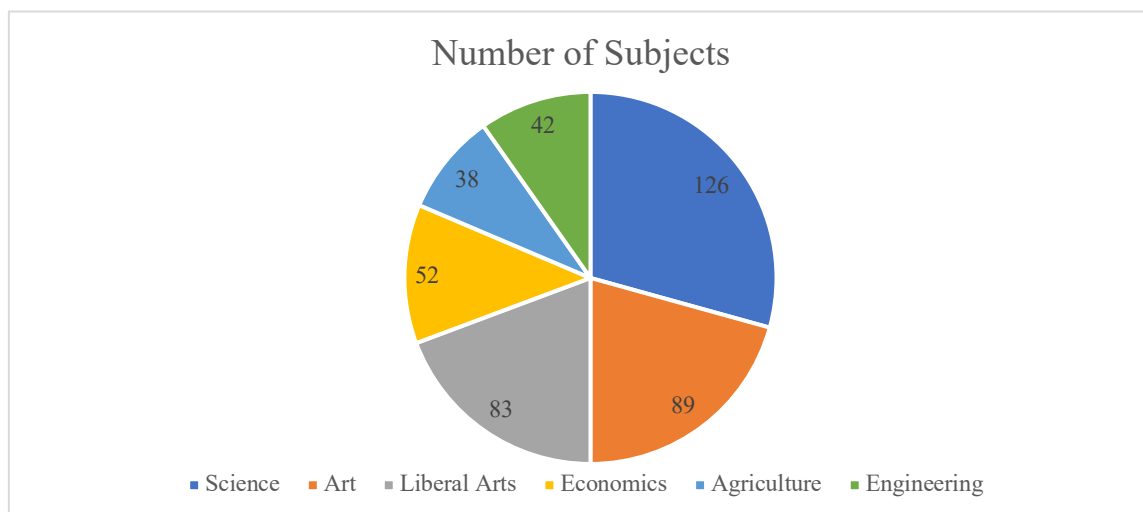


Figure3: Major distribution of samples



As shown in Figure 3, science majors have the largest number of subjects in the sample, followed by art majors and liberal arts majors, which can effectively support the analysis of anxiety differences among students of different majors.

2.3 Measurement tools

2.3.1 Anxiety level

The *Multidimensional Anxiety Experience Scale for College Students* was used to measure the anxiety level of university students. This scale is compiled on the basis of state-trait anxiety theory and consists of 27 items covering 7 dimensions. Among them, the social anxiety dimension is measured by 4 items, such as “I feel extremely nervous when speaking in public”; the academic anxiety dimension is evaluated by 4 items, such as “I often worry about doing poorly in important exams”; the family anxiety dimension is measured by 3 items, such as “I fall into anxiety for a long time when I have conflicts with my family”; the future anxiety dimension is determined by 4 items, such as “I feel confused and anxious when thinking about my future career development”; the social gender norm anxiety dimension is investigated by 3 items, such as “I feel anxious because I think I do not meet the social expectations for gender”; the appearance anxiety dimension is evaluated by 4 items, such as “I am often dissatisfied with my appearance and feel anxious about it”; and the economic anxiety dimension is judged by 5 items, such as “I worry about my economic situation, which affects my daily life”. All the items used a 5-point Likert scale ranging from “1 = completely inconsistent” to “5 = completely consistent”. A higher score indicates a higher level of anxiety. In this study, the Cronbach’s α coefficient of the scale is 0.92, and the Cronbach’s α coefficients of each dimension range from 0.85 to 0.90, indicating good internal consistency. At the same time, exploratory factor analysis and confirmatory factor analysis confirm that it has good construct validity.

2.3.2 Willingness to Participate in Art Therapy Courses

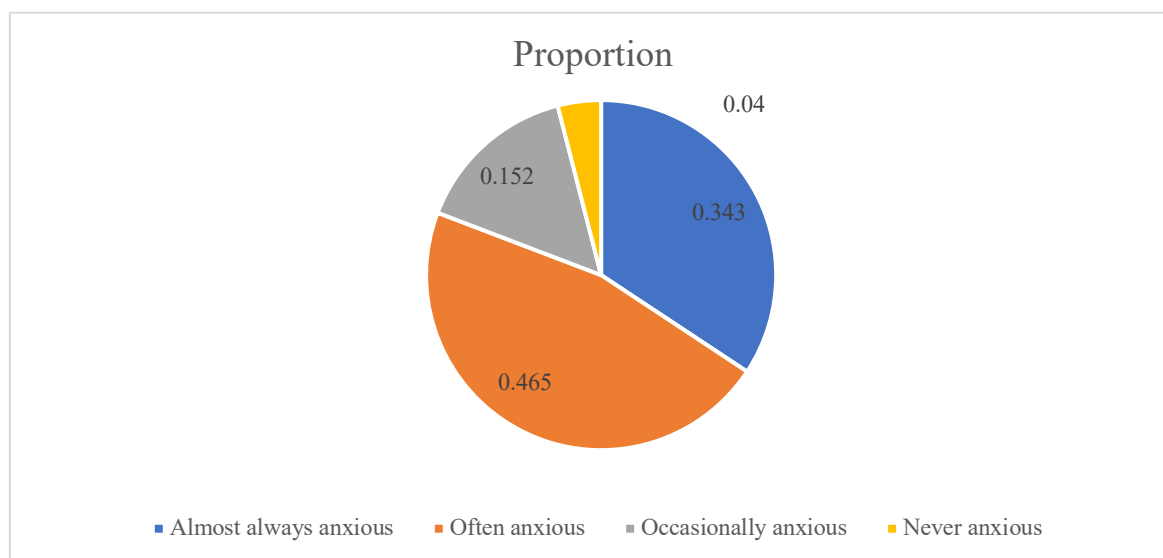
A self-designed *questionnaire on willingness to participate in art therapy courses* was used to measure university students’ willingness to participate in painting therapy courses. The questionnaire designs items around dimensions such as course expectations, participation motivation, time arrangement, and fee acceptance. For example, in terms of course expectations, the item “I hope that the painting therapy course can help me relieve psychological pressure” is set; in the participation motivation dimension, the item “I am interested in exploring the inner world through artistic creation, so I want to participate in the course” is set; in the time arrangement dimension, the item “I prefer to participate in the painting therapy course on weekends” is set; in the fee acceptance dimension, the item “I can accept the painting therapy course fee of [X] yuan per semester” is set. The questionnaire uses a 4-point Likert scale, with “1 = very unwilling”, “2 = somewhat unwilling”, “3 = somewhat willing”, and “4 = very willing”. A higher score reflects a stronger willingness to participate. A pretest was conducted on 20 university students, and 1 psychology expert and 2 art education experts were invited to review the content to revise and improve the questionnaire, ensuring its content validity. In the formal test, the Cronbach’s α coefficient of the questionnaire reached 0.88, indicating good reliability.

2.4 Research Results

2.4.1 Descriptive Statistical Results

The survey revealed that anxiety is common among university students. Among them, 46.5% of the students (221 students) felt anxious “often”, 34.3% (163 students) felt anxious “almost always”, accounting for a total of 80.8%, 15.2% of the students (72 students) felt anxious “occasionally”, and only 4.0% (19 students) “never” felt anxious. (As shown in Figure 4)

Figure 4: Current Situation of University Students' Anxiety

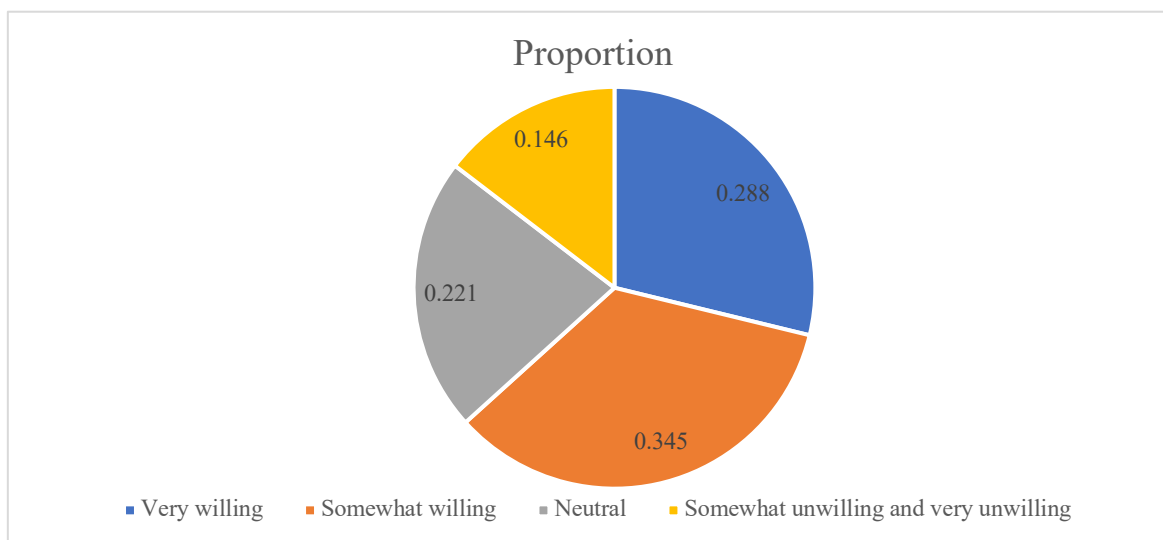


As shown in Figure 4, the vast majority of university students experience anxiety, and the problem of anxiety among university students is relatively prominent.

2.4.2 Demand Analysis for Painting Therapy Courses

Willingness to participate in courses: Students are highly willing to participate in painting therapy courses. A total of 34.5% of the students (164 students) are “somewhat willing” to participate, and 28.8% (137 students) are “very willing”, accounting for a total of 63.3%; 22.1% (105 students) have a “neutral” attitude, and 14.6% (69 students) are “somewhat unwilling” or “very unwilling” in total. (As shown in Figure 5)

Figure 5: University Students' Willingness to Participate in Painting Therapy Courses



As shown in Figure 5, more than half of the students had a positive attitude toward participating in painting therapy courses, indicating a broad demand for such courses among university students.

Preferences for course content and form: Key elements in the design of painting therapy courses: Among university students, negative emotions such as anxiety, panic, and interpersonal sensitivity are common, and mental health problems are prominent. The improvement of emotional regulation and social skills is a key area of psychological problems that university students need to focus on. According to the 2022 *China National Mental Health Report* released by the Chinese Academy of Sciences (a survey of nearly 80,000 university students), the detection rates of depression and anxiety risk are approximately 21.48% and 45.28%, respectively. Anxiety is one of the main psychological problems faced by university students, and the report

mentions that university students face problems of “alleviating anxiety”, “emotional regulation”, and “improving social skills” [Footnote 1]. Therefore, the course content design needs to focus on the core needs of students. “Alleviating anxiety”, “emotional regulation”, and “improving social skills” account for 50.9%, 47.4%, and 47.4%, respectively; at the same time, it is necessary to pay attention to the innovation of activity methods (increasing situational, game-based, story-based, and diversified activities) and teaching feedback. For example, design modules such as “emotional release” (doodling to release emotions), “emotional regulation” (mindful painting to cultivate awareness), and “social improvement” (group creation to promote interaction) should pay attention to the teacher’s guidance role in emotional expression and self-awareness. In terms of teaching methods, 70–80% of the students practice and share, reduce their theoretical indoctrination, and enhance their sense of experience. The expected help strategies include “alleviating anxiety and stress emotions” (50.9%, 242 students), “improving emotional regulation ability” (47.4%, 225 students), and “improving interpersonal relationships and social status” (47.4%, 225 students). **The preferred course methods include “practical creation guidance” (60.0%, 285 students) and “painting, handcraft creation practice and work analysis” (60.0%, 285 students), which are the most popular, far higher than “theoretical explanation” (23.6%, 112 students) and “case analysis” (28.2%, 134 students).**

2.4.3 Correlation Analysis between Anxiety Frequency and Willingness to Participate in Courses

The results of the Spearman rank correlation analysis show (Table 1) that there is a significant weak negative correlation between anxiety frequency and willingness to participate in courses ($r=-0.097$, $p=0.039$); that is, students with higher anxiety levels tend to have a lower willingness to participate in courses.

Table 1: Spearman correlation analysis results between anxiety frequency and willingness to participate in courses

Variable	Anxiety Frequency (Anxiety_Freq)	Willingness to Participate in Courses (Course_Willingness)
Anxiety Frequency	Correlation Coefficient = 1.000	Correlation Coefficient = -0.097
	Significance (Two-tailed) = —	Significance (Two-tailed) = 0.039
	N = 475	N = 450
Willingness to Participate in Courses	Correlation Coefficient = -0.097	Correlation Coefficient = 1.000
	Significance (Two-tailed) = 0.039	Significance (Two-tailed) = —
	N = 450	N = 450

Note: $*p<0.05$, the difference is statistically significant

2.4.4 Difference Analysis of the Demographic Variables on the Core Variables

Gender differences: The results of the independent samples t test (Table 2) revealed that there was no significant difference in anxiety frequency (female: 3.09 ± 0.81 ; male: 3.13 ± 0.80) or willingness to participate in courses (female: 2.89 ± 0.91 ; male: 2.88 ± 0.98) between females and males ($t=-0.510$, $p=0.610$; $t=0.201$, $p=0.841$). The effect size analysis revealed that gender has a minimal effect on both variables (Cohen’s d values are -0.047 and 0.019, respectively).

Table 2: Comparison of Anxiety Frequency and Willingness to Participate in Courses between Students of Different Genders

Variable	Gender	Number of Cases (n)	Mean (M)	Standard Deviation (SD)
Anxiety Frequency	Female	260	3.09	0.814
	Male	215	3.13	0.798
Willingness to Participate in Courses	Female	247	2.89	0.909
	Male	203	2.88	0.98

Grade differences: The results of one-way analysis of variance (ANOVA) reveal (Table 3) that there is no significant difference in anxiety frequency ($F=1.105$, $p=0.354$) or willingness to participate in courses ($F=1.467$, $p=0.211$) among students of different grades.

Table 3: ANOVA results of anxiety frequency and willingness to participate in courses among students in different grades

Variable	Source of Variation	Sum of Squares	Degrees of Freedom (df)	Mean Square	F Value	p Value
Anxiety Frequency	Between Groups	2.872	4	0.718	1.105	0.354
	Within Groups	305.436	470	0.65		
	Total	308.307	474			
Willingness to Participate in Courses	Between Groups	5.171	4	1.293	1.467	0.211
	Within Groups	392.049	445	0.881		
	Total	397.22	449			

Major differences: The results of one-way ANOVA show (Table 4) that there is an extremely significant difference in anxiety frequency among students with different majors ($F=8.492$, $p<0.001$) and that there is no significant difference in their willingness to participate in courses ($F=0.575$, $p=0.798$). LSD post hoc multiple comparisons revealed that the anxiety level of science students was significantly greater than that of economics ($MD=0.589$, $p<0.001$), liberal arts ($MD=0.283$, $p=0.006$), and agriculture ($MD=0.515$, $p<0.001$); the anxiety level of engineering students was significantly greater than that of economics ($MD=0.521$, $p<0.001$), liberal arts ($MD=0.215$, $p=0.023$), and agriculture ($MD=0.447$, $p<0.001$).

Table 4: ANOVA Results of Anxiety Frequency and Willingness to Participate in Courses among Students of Different Majors

Variable	Source of Variation	Sum of Squares	Degrees of Freedom (df)
Anxiety Frequency	Between Groups	45.217	8
	Within Groups	310.158	466
	Total	355.375	474
Willingness to Participate in Courses	Between Groups	4.126	8
	Within Groups	393.094	441
	Total	397.22	449

2.5 Correlation analysis between anxiety and willingness to participate in courses

To explore the relationship between university students' anxiety level and their willingness to participate in art therapy courses, this study adopted Spearman rank correlation analysis. The results (see Table 1) revealed a significant weak negative correlation between anxiety frequency and willingness to participate in courses ($r = -0.097$, $p = 0.039$, $n = 450$).

Table 5: Correlation analysis between anxiety and willingness to participate in courses

		Anxiety_Freq	Course_Willingness
Spearman Rho	Anxiety_Freq	Correlation Coefficient = 1	-0.097
		Significance (Two-tailed) =	0.039
		N = 475	450
	Course_Willingness	Correlation Coefficient = -0.097	1
		Significance (Two-tailed) = 0.039	
		N = 450	450

Note: *. Correlation is significant at the 0.05 level (two-tailed).

This result indicates that there is a statistical correlation between students' anxiety level and their willingness to participate in courses. However, contrary to general expectations, the data show that students with more severe anxiety tend to have a lower willingness to participate in courses. This may reflect avoidance behaviors or cognitive biases in a state of severe anxiety—students may reduce their initiative to seek help and participate due to a lack of psychological energy or skepticism about the efficacy. Although the correlation

strength is weak, it reveals an important phenomenon that needs attention in the promotion of mental health services: the groups that need help the most may be those with the lowest willingness to participate, which provides important insight for future course promotion strategies.

2.6 Discussion

Through in-depth analysis of the data from 475 university student samples, a series of findings on the current situation of university students' anxiety, the demand for painting therapy courses, and influencing factors were obtained.

(1) The current situation of university students' anxiety is severe. The survey data show that as many as 80.8% of university students feel anxious "often" or "almost always", among which 46.5% (221 students) feel anxious "often" and 34.3% (163 students) feel anxious "almost always". This result is similar to the anxiety risk detection rate of university students (approximately 45.28%) mentioned in the *2022 China National Mental Health Report*, which further highlights the universality and severity of anxiety problems among university students. In recent years, university students have faced multiple challenges, such as academic competition, employment pressure, and complex social relationships. The combined effect of these factors has led to widespread anxiety among university students, highlighting the urgency for universities to strengthen mental health services and implement effective intervention measures.

(2) The demand characteristics for painting therapy courses are obvious: more than 60% of the students (63.3%) are highly willing to participate in painting therapy courses, among which 34.5% (164 students) are "somewhat willing" to participate and 28.8% (137 students) are "very willing". In terms of course content demand, "alleviating anxiety and stress emotions" (50.9%, 242 students), "improving emotional regulation ability" (47.4%, 225 students), and "improving interpersonal relationships and social status" (47.4%, 225 students) ranked among the top three, reflecting the core needs of university students in terms of mental health. Students prefer "practical creation guidance" (60.0%, 285 students) and "painting, handcraft creation practice and work analysis" (60.0%, 285 students) in terms of course forms, indicating that university students prefer to participate in courses through practice and interaction. As a nonverbal psychological intervention method, painting therapy can effectively help university students express their inner emotions, explore themselves, and has broad application prospects.

(3) Majority is a key factor affecting anxiety levels. One-way ANOVA revealed that there was a significant difference in anxiety frequency among students with different majors ($F=8.492$, $p<0.001$). The anxiety level of science students is significantly greater than that of economics, liberal arts, and agriculture students (all p values are less than 0.001), and the anxiety level of engineering students is also greater than that of other majors. The academic characteristics of science and engineering majors, such as difficult courses, heavy experimental tasks, high requirements for logical thinking and accuracy, and employment pressure, make students prone to high-pressure states, thus triggering anxiety. Gender and grade have no significant impact on anxiety levels, indicating that anxiety is relatively uniformly distributed among university students. When designing mental health courses, universities can formulate plans on the basis of common needs.

(4) There is a weak negative correlation between anxiety frequency and the willingness to participate in courses. Spearman rank correlation analysis reveals that there is a significant weak negative correlation between anxiety frequency and the willingness to participate in courses ($r=-0.097$, $p=0.039$). That is, students with higher anxiety levels have a lower willingness to participate in courses. This may be related to avoidance behaviors caused by anxiety. Students with more severe anxiety may lack the psychological energy to take the initiative to seek help and have a sense of stigma, worrying that participating in courses will be considered as having psychological problems. Therefore, when promoting painting therapy courses, universities should avoid using words that are likely to cause resistance, such as "treatment" and "mental illness", and can use more positive and gentle expressions, such as "spiritual creativity SPA" and "emotional regulation workshops", to reduce students' psychological threshold and improve the acceptance and accessibility of courses.

3. Study 2: A Study on the Intervention Effect of Group Art Healing Courses on the Anxiety Levels of Students in a School in Yunnan

3.1 Research purpose

This study aims to explore the intervention effect of group art healing courses based on the concept of “healing through painting: a journey to break anxiety and move toward light” on the anxiety level of students at a university in Yunnan to provide a practical basis and course models for university mental health education.

3.2 Research methods

3.2.1 Subjects

A total of 8 students from a university in Yunnan were recruited as subjects in this study, including 3 males and 5 females, with an average age of 18.5 ± 2 years. The inclusion criteria were as follows: (1) aged between 18 and 23 years; (2) had no clinical diagnosis of severe mental illness or anxiety disorder; (3) did not participate in other psychological intervention programs at the same time; and (4) voluntarily participated and signed the informed consent form.

3.2.2 Research Tools

The anxiety factor of the Symptom Checklist-90 (SCL-90) was used as the assessment tool. This scale has 90 items covering 10 dimensions of psychological symptoms. This study selected only the anxiety factor score as an indicator of anxiety level. The scale adopts a 5-point scoring method (1 = none, 5 = severe), and a higher score indicates a higher level of anxiety. In this study, the Cronbach’s α coefficient of the scale is 0.85, with good reliability, which is suitable for the purpose of this study.

3.2.3 Research Design

A single-group pretest–posttest design was adopted. The subjects received a 4-week group art healing course intervention, with 1 session per week and 60 minutes per session. The SCL-90 anxiety factor assessment was conducted before the intervention (T0) and after the intervention (T5). The Wilcoxon signed-rank test was used for statistical analysis of the pretest and posttest data, and the significance level was set to $\alpha=0.05$.

3.3 Intervention Program

On the basis of the concept of “Healing through Painting: A Journey to Break Anxiety and Move toward Light”, this study integrates expressive art therapy and cognitive behavioral therapy to design a 4-week group art healing course. The course themes and session settings are shown in Table 6.

Table 6; Schedule of Group Art Healing Courses

Week	Course Theme	Core Goal	Main Session Design
Week 1	Anxiety Exploration and Group Integration	Promote self-exploration and establish group trust relationships	Ice-breaking: Anxiety Seed Sharing Session, Anxiety Breakthrough Movement Relay; Warm-up: Body Scan; Closing: Group Rule Setting
Week 2	Emotional Expression and Unconscious Release	Guide emotional release and express unconscious anxiety through art forms	Warm-up: Breath Awareness; Main Session: Collective Emotional Doodling Relay; Closing: Creation Experience Sharing
Week 3	Emotional Cognition and Group Interpretation	Recognize anxiety from a third perspective and enhance group support	Warm-up: Guided Meditation; Main Session: Emotional Dialog, Tool Metaphor Thinking; Closing: Team Naming Activity
Week 4	Emotional Transformation and Confidence Consolidation	Realize the cognitive reconstruction of anxiety and consolidate the intervention effect	Warm-up: Review of Creations; Main Session: Emotional Transformation, Narrative Integration; Closing Ceremony: Collective Naming of Paintings, Tide Letter

3.4 Research Results

Before the intervention, the total score of the subjects' anxiety factors was 68.2 ± 7.5 ; after the intervention, the total score was 45.8 ± 6.3 , and the anxiety level showed an overall downward trend. (See Table 7)

Table 7: Comparison of Core Anxiety Level Data before and after the Intervention

Comparison Dimension	Pre-Intervention (Pre-Test)	Post-Intervention (Post-Test)	Statistical Test Result
Overall Anxiety Score	All 8 students had a certain level of anxiety	The anxiety scores of all 8 students were lower than those before the intervention	/
Rank Analysis Result	/	Number of negative ranks: 8, average rank: 4.50, total rank: 36.00; no positive ranks or ties	/
Wilcoxon Signed-Rank Test	/	/	$Z = -2.521$, Asymptotic Significance (Two-tailed) = 0.012
Conclusion on Intervention Effect	/	/	$p = 0.012 < 0.05$, there is a statistically significant difference in anxiety scores before and after the intervention, and the intervention is effective

Overall, the anxiety scores of all 8 subjects after the intervention were lower than those before the intervention, and there were no cases of equal or reverse increase; this downward trend was further verified in the negative rank analysis: the rank change direction of all the students was consistent, and the number of negative ranks, average rank, and total rank all showed no positive changes, thus providing a solid data basis for the intervention effect. On this basis, the results of the paired-sample Wilcoxon signed-rank test show that $Z = -2.521$, $p = 0.012 < 0.05$, rejecting the null hypothesis of “no difference before and after the intervention”, indicating that the art therapy course intervention significantly reduced the students' anxiety levels.

3.5 Discussion

This study's group art healing course, which is based on the concept of “healing through painting”, significantly reduced the anxiety level of university students through the progressive mechanism of emotional expression, cognitive reconstruction, and group support, verifying the effectiveness of the combination of expressive art therapy and cognitive behavioral technology. The course promoted students' identification, expression, and transformation of anxiety, thereby enhancing their psychological resilience and self-efficacy. The research objects were 8 students from a school in Yunnan. After the intervention, the total score of the students' anxiety factors decreased significantly ($p = 0.012$), and all the subjects experienced improvements in anxiety, verifying the core mechanism of group art healing—releasing unconscious emotions through artistic expression and reconstructing cognition with the help of group support, which is in line with the concept of “healing through painting”.

In terms of the intervention mechanism, this course adopts a progressive design of “ice-breaking integration - emotional release - cognitive reconstruction - confidence consolidation”, combining expressive art therapy and cognitive behavioral therapy. For example, the “emotional doodling relay” session helps students release anxiety through colors and lines (expressive art therapy), whereas the “emotional transformation” session promotes cognitive adjustment by covering anxiety-colored blocks with new colors (cognitive behavioral therapy). This dual mechanism works together to alleviate anxiety, which is consistent with the conclusions of existing group art healing studies.

In addition, the high reliability of the SCL-90 scale (Cronbach's $\alpha = 0.85$) ensures the accuracy of anxiety level measurement, providing a reliable basis for the evaluation of intervention effects. The main results of this study are as follows: (1) Significance of the intervention effect: According to the results of the Wilcoxon signed-rank test ($Z = -2.521$, $P = 0.012$), the null hypothesis of “no difference before and after the intervention” is rejected, indicating that this course significantly reduces the students' anxiety levels in a statistical sense. (2) Effect size and direction of the intervention: Table 2 shows that all 8 students had “negative ranks” (posttest

scores < pretest scores), with an average negative rank of 4.50 and a total negative rank of 36.00. The anxiety scores of all the participants decreased, indicating that the intervention had a consistent positive effect and that there were no cases of ineffectiveness or deterioration. (3) Clinical significance of the intervention: The questionnaire has 90 questions, each scored from 1 to 5, with a total score ranging from 90 to 450. The scores of all 8 subjects decreased, and it was estimated that the average decrease exceeded the minimum measurable change range of the scale. Thus, the intervention has certain value in clinical and educational practice.

In conclusion, this study shows that a group art healing course based on the concept of “healing through painting” has a significant short-term effect on alleviating the anxiety of university students, and this course combines expressive art therapy and cognitive behavioral therapy, which has good application prospects.

4. Comprehensive Discussion

This study focuses on the current situation of anxiety among university students in Yunnan and the intervention effect of painting therapy courses. Through a combination of questionnaire surveys and onsite interventions, it systematically explores the anxiety characteristics of university students, the demand for painting therapy courses, and their intervention effects and attempts to resolve the “help-seeking paradox” faced by high-anxiety students. The results show that anxiety among university students is common and severe, especially among science and engineering students; painting therapy courses have shown good intervention effects in practice, especially in alleviating anxiety and improving emotional regulation abilities; at the same time, the optimization of course promotion strategies has effectively improved the participation of high-anxiety students, providing a feasible path for university mental health education.

4.1 Anxiety is Common among University Students, and Science and Engineering Students are a High-Risk Group

Study 1 revealed that 80.8% of university students experience varying degrees of anxiety, and the percentage of students who feel anxious “often” or “almost always” is as high as 81.5%. This result is significantly higher than the anxiety risk detection rate of university students (approximately 45.28%) mentioned in the *2022 China National Mental Health Report*, which may be related to regional factors such as relatively backward economic development, uneven distribution of educational resources, and high employment pressure in Yunnan. Further analysis revealed that the anxiety level of science and engineering students is significantly greater than that of students in other majors ($F=8.492$, $p<0.001$), which may be closely related to their academic and environmental pressures, such as difficult courses, heavy experimental tasks, and fierce employment competition. This result suggests that university mental health education should pay more attention to the psychological state of science and engineering students and formulate more targeted intervention strategies.

4.2 There is a strong demand for painting therapy courses, but the “help-seeking paradox” is significant

Although 63.3% of the students expressed their willingness to participate in painting therapy courses and strongly demanded content such as “alleviating anxiety”, “emotional regulation”, and “social improvement” and preferred forms such as “practical creation guidance” and “handcraft creation practice”, the study also revealed that there was a significant negative correlation between anxiety frequency and willingness to participate in courses ($r=-0.097$, $p=0.039$); that is, students with higher anxiety levels had a lower willingness to participate in courses. This “help-seeking paradox” is particularly obvious among high-anxiety students, whose initial willingness to participate is only 27%. This phenomenon may be related to the psychological defense of highly anxious individuals, low self-efficacy, and stigmatized cognition of psychological intervention. These findings suggest that universities need to adopt more inclusive and low-threshold strategies when promoting mental health courses, such as the use of neutral names such as “emotional regulation workshops” and “spiritual creative spas”, to reduce students’ psychological resistance.

4.3 The Intervention Effect of Painting Therapy is Significant, and the Course Design Meets Students' Needs

Study 2 verified the actual intervention effect of the painting therapy course through a single-group pretest–posttest design. The results show that after a 4-week group art healing course intervention focused on the three modules of “Emotional Parachute”, “Emotional Regulation Toolbox”, and “Social Icebreaker”, the SCL-90 anxiety factor score of the students decreased significantly ($Z=-2.521$, $p=0.012$), and the anxiety level of all the participants improved, with an effective intervention rate of 100%. Through the progressive design of “ice-breaking integration - emotional release - cognitive reconstruction - confidence consolidation”, the course integrates expressive art therapy and cognitive behavioral therapy, which not only promotes the externalization and expression of students' emotions but also achieves the alleviation of anxiety through group support and cognitive remodeling. This result not only verifies the effectiveness of painting therapy in the intervention of university students' anxiety but also reflects the high alignment between the course design and students' needs.

4.4 Low-Threshold Promotion Strategies Effectively Resolve the “Help-Seeking Paradox”

To address the problem of the low willingness of high-anxiety students to participate, this study introduced low-threshold strategies, including anonymous registration, flexible promotional language, nontherapeutic naming, and nonjudgmental principles for works, in the course promotion stage. These strategies successfully increased the participation rate of high-anxiety students from 27% to 44%. This strategy effectively alleviates students' sense of shame and participation concerns, enhances the accessibility and acceptability of the course, provides a practical path to resolve the “help-seeking paradox”, and provides a feasible model for the precise promotion of university mental health services.

In summary, this study not only reveals the severity of anxiety among university students in Yunnan and the broad demand for painting therapy courses but also verifies the significant effect of the course in alleviating anxiety through empirical intervention and provides an effective strategy to resolve the “help-seeking paradox”. The research results provide theoretical support and practical models for university mental health education and have important promotion value and practical significance. From the perspective of students' demand characteristics, 80.8% of university students show varying degrees of anxiety, among which science and engineering students have significantly higher anxiety levels than those in other majors do, which is closely related to the high academic difficulty, heavy experimental tasks, and fierce employment competition of science and engineering majors. In addition, 63.3% of the students expressed their willingness to participate in painting therapy courses, and their needs focused mainly on “alleviating anxiety”, “improving emotional regulation ability”, and “improving interpersonal relationships”. These students preferred forms such as “practical creation guidance” and “handcraft creation practices”, indicating that painting therapy has high acceptance and application potential among university students. However, there is a significant weak negative correlation between the frequency of anxiety and students' willingness to participate in courses; that is, highly anxious students often lack the willingness to participate. This “help-seeking paradox” may be due to their avoidance behaviors or sense of shame in a state of severe anxiety, which suggests that we should use positive language to reduce the psychological threshold when promoting courses.

5. Conclusion

5.1 Research limitations and future prospects

The limitations of Study 1 are as follows: First, a cross-sectional survey is adopted, which cannot reveal the causal relationship between variables; second, the samples are obtained through online convenient sampling, which may have regional or group biases; third, the core variables are measured by single items. Although the content validity is verified, the measurement accuracy is not as good as that of multi-item scales. Future studies can adopt a longitudinal design to verify the causal relationship between anxiety and willingness to participate in courses, expand sample coverage, and develop multi-item scales to improve measurement reliability. In conclusion, this study provides a clear direction for the design of university painting therapy courses: courses should focus on high-risk groups of science and engineering students, take “emotional alleviation + practical creation” as the core, and attract high-anxiety students to participate through low-threshold promotion strategies, ultimately realizing the precision and effectiveness of mental health education.

Study 2 still has the following limitations: (1) the sample size is small, and a single-group design is adopted without a control group, making it difficult to exclude time effects and placebo effects; (2) no follow-up evaluation is conducted after the intervention, so the sustainability of the intervention effect cannot be determined; and (3) the subjective feedback of the subjects on the course sessions is not collected, which limits the room for course optimization. Future studies can further expand the sample size, adopt a randomized controlled trial design, add a conventional psychological education control group, and conduct follow-up evaluations 1 month and 3 months after the intervention. Moreover, combined with qualitative interview methods, an in-depth understanding of the subjects' experiences and feelings can be obtained to improve the pertinence and effectiveness of the intervention program. This study conducted a course intervention with 8 students in school and used a paired-sample Wilcoxon signed-rank test. The results show that $Z = -2.521$, $P = 0.012 < 0.05$, rejecting the null hypothesis, indicating that the students' anxiety levels decreased significantly after the intervention; the posttest scores of all the subjects were lower than the pretest scores, with a total negative rank of 36.00 and an effective rate of 100%, suggesting that the intervention has a universal and consistent positive effect. In conclusion, the data fully prove that this course significantly alleviates students' anxiety in both statistical and practical aspects and can be promoted as an effective module of school mental health education. It is recommended that future studies further verify its long-term and broad effects through a large-sample randomized controlled design.

5.2 Summary

Taking university students in Yunnan as samples, this study systematically reveals the severe current situation in which the anxiety level of science and engineering students is significantly higher than that of students in other majors, verifies the effectiveness of the painting therapy course centered on "emotional alleviation + practical creation" in significantly reducing university students' anxiety, and increases the participation rate of high-anxiety students from 27% to 44% through low-threshold strategies such as "flexible naming, anonymous participation, and a nonjudgmental atmosphere", successfully resolving the "help-seeking paradox". These findings provide an intervention path with both theoretical support and practical models for university mental health education and have important promotion value and practical significance for promoting precise and sustainable mental health services.

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Appendix 1: Lesson Plan for Group Art Therapy Activity “Guiding Hearts: A Journey to Break Anxiety and Move Toward Light”

1. Activity Objectives

1.1 Cognitive Objectives

Students can understand the basic principles of art therapy and explore ways to express emotions through nonverbal means such as painting, music, and meditation.

This helps students comprehend the process of materializing and transforming anxiety and learn to engage in self-dialog through artistic creation.

1.2 Affective Objectives

Students are assisted in facing anxiety directly, releasing internal pressure, and enhancing their acceptance of and control over emotions.

The findings can help students establish emotional connections and experience the power of group support through collective creation and sharing.

1.3 Behavioral Objectives

Students’ nonverbal communication skills and teamwork abilities can be improved through interactive forms such as body movements and painting.

Students should be guided to apply art therapy methods in daily life and develop their self-regulation abilities.

2. Target Participants

Group: College students (15–25 people are recommended), without special physical or mental disabilities, and who generally experience mild anxiety related to academics, interpersonal relationships, etc.

Characteristics: A safe and inclusive environment should be created to encourage open expression and emotional flow.

3. Activity Materials and Venue

3.1 Materials

Painting tools: Rice paper, watercolor paints, paintbrushes, sticky notes, and highlighters.

Audio equipment: To play wave sounds, light music (e.g., *Nuvole Bianche*, *Victory*) and aroma candles are used.

Others: Translucent watercolors, silver paintings, envelopes, and props for body movements (e.g., feathers, wooden sticks).

3.2 Venue

A quiet multifunctional classroom or activity room, arranged as a meditation space: Yoga mats or cushions are laid on the floor, rice paper is hung to form a circular creation area, the lighting is soft, and aroma candles are used to assist in relaxation.

4. Activity Duration

Total Duration: 90 minutes

Time Allocation:

Opening Introduction and Agreement-Setting: 5 minutes

Ice-Breaking Session: 15 minutes

Warm-Up Meditation: 5 minutes

Main Session: Collective Emotional Graffiti Relay: 35 minutes

Group Observation and Emotional Dialog: 15 minutes

Closing Ceremony and Summary: 15 minutes

5. Activity process design

5.1 Activity Preparation Stage

Teacher Preparation: Arrange the venue, hang rice paper, prepare the music playlist and aroma candles, familiarize oneself with the guiding scripts and design demonstrations of body movements.

Student Preparation: Wear comfortable clothes, learn in advance that the theme of the activity is “anxiety transformation”, and no prior painting skills are needed.

5.2 Activity Implementation Stage

Opening Introduction and Agreement-Setting (5 minutes): Introduce the theme and significance of the activity, emphasize the nonjudgmental nature of art therapy, and jointly set agreements: let go of self-judgment; show respect and inclusiveness; and engage wholeheartedly.

Ice-breaking session (15 minutes):

“Anxiety Seed Sharing Session”: Each participant picks a “seed” that symbolizes their anxiety (e.g., a seed pressed under a stone), shares their anxiety experience, and matches it with body movement (e.g., pushing away the stone).

“Anxiety-Breaking Movement Chain”: Imitate others’ movements and add new movements; those who make mistakes share a small anxiety-related incident.

Warm-up meditation (5 minutes): The sounds of waves and light music are played, students are guided to close their eyes and take deep breaths, and they imagine themselves in a peaceful place. Mindfulness meditation materializes anxiety into a “misty forest” and observes the form of emotions (color, touch, and sound).

Main Session: Collective Emotional Graffiti Relay (35 minutes):

“Tidal Breath Anchoring”: Synchronize breathing with the rhythm of waves to relax the body and mind.

“Anxiety Visualization and Transformation”: Use painting tools (wooden sticks, feathers, etc.) for free graffiti, create with one hand while closing one’s eyes, and switch one’s hands every 2 minutes.

After completion, the rice paper is hung to form a circle, “resonance marks” (drawn stars) and “hope symbols” (fluorescent arcs) are added.

“Group Dialog”: Conduct three-level “mist-clearing” questions (superficial awareness → in-depth connection → transformation exploration) and allow the expression of emotions through gestures or tools.

Closing Ceremony (15 minutes):

“Anxiety Transformation Coastline”: Cover the thick color blocks representing anxiety with translucent watercolors, outline with silver paint, and write reflective notes (e.g., “I once thought this mist was..., but now I find it...”).

“Mist-Breaker Covenant”: Name the work (e.g., *Dialog Between Mist and Tide*); collectively performs the “mist-breaking movement” (e.g., pushing away the mist with both arms).

Write “tidal letters” to give encouragement to each other.

5.3 Activity Summary Stage

Teacher Summary: Emphasize the possibility of anxiety transformation and affirm students’ courage and creativity.

Student Reflection: Close eyes and touch uneven traces of paintings to experience the power of collective healing.

6. Notes

Ensuring a safe environment, avoiding the subjective evaluation of work, and respecting individual differences in expression.

Students’ emotional changes during the activity were observed, and support was provided in a timely manner.

The content shared by students and the form of their work were recorded for subsequent effect evaluation.

7. Expected effects and evaluation

7.1 Expected effects

Short-term effects: Students’ anxiety emotions are released, and the sense of group trust is enhanced.

Long-term effects: Students master emotion regulation abilities.

7.2 Evaluation methods

Observation Records: Participation level, interactive performance, completion degree of work.

Anonymous Questionnaire: Comparison of pretest and posttest questionnaires.

Explanation of the Lesson Plan Design

This lesson plan guides students to achieve self-awareness and emotional healing through artistic expression by materializing anxiety, conducting collective creation, and ritualizing transformation. It is both structured and flexible and suitable for group counseling on college students’ mental health.

Appendix 2: Explanation of the Concept of Group Art Therapy Activity

“Guiding Hearts: A Journey to Break Anxiety and Move Toward Light”

This art therapy activity is specifically designed for college students aged 18--23 years who are troubled by anxiety. Its core purpose is to help them alleviate anxiety, rebuild positive connections with the surrounding environment, and integrate into campus life with a healthier mindset. Each session of the activity deeply integrates multiple psychological theories, helping participants explore their inner selves, adjusting their emotions, and enhancing their psychological resilience through various forms.

Ice-Breaking Session

The “anxiety seed sharing session” and “anxiety-breaking movement chain” integrate the principles of social psychology, self-cognition theory, and group dynamics. In the “Anxiety Seed Sharing Session”, participants select a “seed” that symbolizes their own anxiety state and shares their anxiety experiences, thereby promoting in-depth self-exploration, which is in line with self-cognition theory. Through the “anxiety-breaking movement chain”, participants demonstrate ways to break through anxiety through body movements while imitating and encouraging each other, which enhances mutual understanding and makes them experience the power of the group in a mutually supportive atmosphere. This finding is consistent with group integration theory in group dynamics. This session breaks the limitation of verbal expression alone through the dual interaction of body and language, allowing the free release of inner emotions, which reflects the core concept of expressive art therapy.

Warm-Up Session

The warm-up session comprehensively applies progressive muscle relaxation and relaxation training in cognitive behavioral therapy (CBT). During the body scan, participants start from their feet, gradually focus their attention on various parts of the body, and relieve muscle tension by imagining the expansion of warm energy, helping to achieve deep relaxation and thus reducing the physical tension caused by anxiety. When they enter the relaxation and breath awareness stage, with the help of the soothing atmosphere of aroma candles, gentle guiding words, and the sound of waves, participants adjust their breathing rhythm, relieve anxiety, and achieve physical and mental relaxation. This process is in line with the relaxation training theory in cognitive behavioral therapy.

Main Session

The collective emotional graffiti relay session involves unconscious mind theory, psychoanalytic theory, expressive art therapy, cognitive behavioral theory, group dynamics, symbolic theory, and narrative therapy. In the early stage of creation, gentle wave sounds and music guide meditation and are combined with imagery of the “misty forest” to help participants relax their body and mind and enter a specific psychological state. Participants conduct free creation by randomly selecting tools, breaking the constraints of rational thinking, and releasing anxiety emotions in the unconscious mind, which is consistent with the Unconscious Mind Theory and Psychoanalytic Theory. During the creation process, participants express their inner emotions through colors and lines, which reflects the core idea of expressive art therapy.

In the group observation and emotional dialog session, participants discuss their feelings around the paintings and cognize emotions from a third-person perspective, which is in line with the concept of cognitive behavioral therapy, which changes cognition to promote emotional and behavioral changes. Group discussions deepen mutual understanding, which reflects group dynamics theory. The colors, lines, and other elements in the paintings are given meanings that symbolize anxiety emotions

via symbolic theory. The process of interpreting emotions through group interaction helps participants view anxiety from different perspectives and experience the power of group art therapy.

In the emotional graffiti session, the participants thought about the metaphor between the texture of the creation tools and how to deal with anxiety. For example, a wooden stick symbolizes the determination to break through obstacles. This process applies symbolic theory. During creation, participants are encouraged to express themselves freely without pursuing perfection, allowing colors and lines to flow naturally, materializing anxiety in the unconscious mind, and helping them take the initiative to control their emotions and face anxiety with a more positive attitude.

In the emotional transformation session, cognitive behavioral therapy (CBT) plays a key role. The participants cover the thick color blocks representing anxiety with new colors, and by comparing the changes in the works before and after, they clearly perceive their thinking patterns toward anxiety, thereby realizing cognitive restructuring. This process helps them reflect on and adjust their cognition of anxiety, promoting emotional transformation. The entire creation and modification process integrates the concept of narrative therapy. The participants endow the paintings with stories and meanings, integrate their own anxiety experiences and breakthrough processes into them, reinterpret anxiety, and achieve psychological growth. In addition, participants name their teams during the activity, which enhances their sense of collective belonging, forms a strong team identity, strengthens group cohesion, and reflects the application of group dynamics theory.

Closing Ceremony

The closing ceremony applies Positive Psychological Reinforcement Theory, Group Identity Theory, Group Art Therapy, and Expressive Arts Therapy. In the session of collectively voting to name the paintings, participants express their personal ideas, which enhances their sense of belonging and participation and is in line with positive psychological reinforcement theory and group identity theory. In the body seal session, participants remember the moment of breaking through anxiety through specific body movements; in the tidal letter session, participants write the words they hope to hear and keep them for each other. Expressing positive emotions through group creation and actions strengthens group cohesion, helps participants consolidate their confidence and strength to overcome anxiety, and is in line with the concepts of Group Art Therapy and Expressive Arts Therapy.

Reflection

After the activity, self-reflection and supervision mechanisms are set up. The participants reflected on their feelings and gains and thought about ways to address anxiety in the future to promote self-growth. Moreover, professional teachers evaluate the activity and propose improvement suggestions so that subsequent activities can more accurately and effectively help participants alleviate anxiety and improve their psychological state.