Examining the Effect of Painting Art on Student Well-Being and the Design Principles of Public Art on Campus

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Research Article

Keywords: Painting Art, Sense of Happiness, Public Space, Campus Art, High-quality Artworks

Posted Date: August 28th, 2023

DOI: https://doi.org/10.21203/rs.3.rs-3283953/v1

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Abstract

Painting as an art form has the potential to evoke positive emotions and enhance students' well-being. Integrating it into campus art can improve public spaces and cultivate happiness among students. The study aims to explore sketch art's impact on students' happiness and propose adaptable design principles for 3D art on campus. Results indicate artists can effectively use cognitive and visual aspects to create exceptional artworks that harmonize with the campus environment, ultimately elevating student happiness. Further research is recommended to explore how campus art promotes public space development, enhances campus culture, and stimulates student happiness, providing valuable guidance to artists for creating high-quality campus art.

1. Introduction

With the progress of time, campus arts have increased their presence in students' lives and studies. Campus arts are vital in campus culture, campus spirit, and campus life. A well-crafted campus art design beautifies our campus and touches students' hearts through artistic expression. However, there seems to be a dearth of commercial interest and authoritative guidance for artists regarding exhibiting their works in public spaces (Campbell & Selwood, 2018).

Painting is an art form that inspires public joy visually and brings unlimited motivation to artists. Modern art giants such as Salvador Dali (1904–1989) and Henri Matisse (1869–1954) have recognized the impact and modern art inspiration on students, breaking through the iconic phases of primitivism, abstractionism, and expressionism. However, almost all modernist art works have been criticized as dull and empty, lacking appeal to the public (Luo et al., 2022). Therefore, we are motivated to transform students' painting into a method for campus art, so that campus art becomes more approachable, and by enhancing student interaction and participation with campus art, provides greater happiness. As the quality of life continues to improve, students' demands for campus environment and public cultural space have also increased, promoting the development of campus arts. Therefore, considering the current digital era, we suggest studying and exploring the development and creation methods of campus arts. Finally, we suggest that campuses include students' artwork as part of campus art, as it is well known that students feel positive when they see their own work.

The research on painting and campus art primarily relies on individual and independent studies. Campus art is art for the public. The candid and imaginative language in painting may be a visual experience that is lacking in the spiritual life of our adults. To address this situation, the objective of this study is to investigate whether incorporating painting features into campus art can enhance people's engagement and interaction with the artworks. Additionally, it seeks to enrich artists' creative concepts and techniques, enhance the campus public spaces, and ultimately promote feelings of joy and happiness among the campus community.

2. Research method
The review of literature in this article adopts the method of "systematic literature review integrated process". This process involves an independent literature review, aiming to establish the foundational theories during the early stages of research by comprehending existing literature on the subject. In this study, Ibrahim's research question (RQ) structural classification technique was employed to categorize the main research questions into three distinct structures: "WHO," "WHAT," and "HOW." Specifically, "WHO" pertains to the elements influenced by the study, "WHAT" relates to the necessary information or knowledge system for problem-solving, and "HOW" concerns the intended impact of the research. The characteristics of student drawings were identified as "WHAT," the process of transforming them into campus art as "HOW1," and the identification of public space as "HOW2." This study aims to answer the following research questions:

(1) What factors influence the impact of student drawing features on student well-being?

(2) How does student drawing impact students' subjective well-being (SWB)?

(3) How does campus art featuring student drawings affect public space and student well-being?

After completing the bibliography search, this study reviewed the abstracts of selected journals and allocated them to specific sub-topics based on their importance. Finally, the findings of this exercise produced a comprehensive summary for the main topic individually, and further cross-analysis was carried out to integrate possibilities and determine the priority of comprehensive summaries to investigate the impact of campus art featuring students' drawings on public space and student well-being. Finally, this study used the EAGLE Navigator online system to extract essential synthesis extracts according to the stages in the departure point (POD) tree diagram and the synthesis process. The flowchart representing the methodology of the literature review conducted for the study is depicted in Fig. 1.

3. Results and discussion

3.1. What factors influence students' painting characteristics and their impact on student happiness?

Student painting is a form of creativity that involves observing the various objects in the real world, using one's imagination and creativity, and creating artwork through methods such as painting and sketching. The study of student painting can be traced back to the late 19th century. This artistic expression resembles a playful companion to students' growth, mirroring their innocent and untainted souls while serving as a unique channel for students to convey their inner emotions and ideas (Morady Moghaddam & Murray, 2022). The study's primary focus lies in examining student paintings' cognitive and visual attributes and subsequently delving into how these characteristics influence students' overall sense of happiness.
3.1.1. Thinking characteristics of students' painting

Drawing is essential for students to communicate and express themselves. It acts as a symbol they use to share their thoughts and is just as crucial as using words to express ideas. Drawing is a way for students to express themselves and a process of knowledge processing and play. Essentially, a student's drawings reflect their thoughts, growth, and psychological state and possess typical visual characteristics (Campbell & Selwood, 2018). As children grow, they transform their observations into drawings that students can recognise and observe, forming the parts of student drawings. Research shows that student drawings possess typical visual features, allowing students to understand their background and character. Children exhibit a high degree of uncertainty and spontaneity in the process of drawing, which involves their imagination, expressiveness, and creativity, and is fluid in perspective. Student drawings are influenced by the drawing environment and available resources, stem from their life experiences and previous encounters withdrawing. (Lee, 2023). Student drawings possess randomness and fun, which can stimulate their creativity and interests (Koshanova et al., 2021).

Although existing academic research has conducted in-depth analyses of student drawings, scholars' understanding of student drawings and art remains controversial, depending on cultural background and regional choices. This study advocates for respecting and understanding the thinking characteristics of students in drawing and analyzing the aspects of student drawings, such as randomness, exaggeration, and imagination, which are crucial to enhancing our understanding of artistic thinking (Lee, 2023). Student drawings exude spontaneity and enjoyment, fostering children's enthusiasm and focus on the realm of creativity while enhancing their imagination, creativity, and observation skills. Furthermore, scholars interpret student drawings differently, with these interpretations often tied to their cultural background and regional preferences (Portex et al., 2017).

Finally, this study emphasizes student drawings' types, artistic expressions, and characteristics and explores their randomness, exaggeration, symbolism, uniqueness, and fun. Therefore, researching the types, creative expressions, and artistic aspects of student drawings is essential.

3.1.2. The visual characteristics of student drawings

The impact of student psychological development on their artwork has always been an important area of research (Piaget, 1971). The content of student artwork is influenced by their cognitive development, which is reflected in their understanding of visual information at different ages (Kellogg, 1969). The quality of artwork is affected by various elements such as composition, lines, colors, and shapes, which are also influenced by factors such as student psychological development and environmental influences (Rouse, 1964). Therefore, student artwork has its own unique characteristics. The variations in student artwork, ranging from linear progression to distinctive attributes in shape, color, and composition, are intricately linked to their life experiences and individual personality traits over time. (Wilson et al., 1981).
During the process of creating artwork, children progress from simple and concise linear development to distinctive attributes in shape, color, and composition (Wieren et al., 2013). Children's understanding of color varies at different ages, which is why they often use contrasting and highly pure colors in their artwork. At the same time, semiotic art is an important means of achieving cross-border communication, helping to analyze student artwork. These findings have great practical implications for educators and parents in their children's art education.

Research on student artistic development shows that messy composition is a common characteristic in student artwork. This composition style has no fixed arrangement, as students can paint based on their feelings. However, due to poor control over object size, they tend to overlook details (Gabrielli et al., 1999). Additionally, children typically use lines to split their artwork, creating a exclusive creation style. However, the appearance of baseline composition makes the picture more orderly by drawing a line to separate the ground and sky. This composition style indicates that children have begun to think about arranging elements in order. As children grow, theme composition emerges in their artwork. Through strategically arranging primary and secondary images to emphasize the central content, students create a cohesive theme and effectively convey their unique ideas (Gabrielli et al., 1999). According to Lijima et al., gender differences in student expressive painting are evident in various aspects such as content of the subject, color choice, character composition, and expression. Boys tend to lean towards drawing moving and mechanical pieces with dark or light colors, often incorporating overviews in their compositions. On the other hand, girls tend to depict figures, particularly girls and women, along with flowers and butterflies, using light and warm colors. They also tend to arrange patterns continuously on the ground (Iijima et al., 2001).

However, there are some questionable assumptions in the research on student artistic development. Some believe that student artwork may follow a universal pattern in the early stages, but this pattern is not influenced by culture or gender, but will not change in the initial phases of so-called original art, despite of the person's place of birth (Gondor, 1981).

Through an analysis of cognitive development-based student artistic development universality, Piaget found that there are universal patterns in student artwork in all cultures and countries, but they vary with the stages of development (Tivers, 1971). Although some research has explored the visual characteristics of student artwork, the issue is still not fully resolved. In the early 20th century, the study of student artwork focused mainly on visual data such as space, lines, and perspective abilities (Indicated, 1966; Laroche, 2015; Zurmuehien, 1970), without discussing other elements of their artwork (Victoria et al., 2016). In contrast, Loureiro et al. used semiotics to analyze student artwork, but this would be more academic if the scope of research were broader (Loureiro et al., 2020).

Similarly, Bolwerk summarized and analyzed student artwork, concluding its modular structures (such as effortlessness, universality, flat modeling, parallel vision, autonomous modeling, and active viewpoint expression), color features (such as bright colors, bold contrast, and high purity), and composition
features (such as messiness, baseline, theme composition, freedom, casualness, and theme highlight) (Dean & R., 1984).

Therefore, this study suggests analyzing student artwork for more elements and characteristics, as Victoria did (Victoria et al., 2016). Furthermore, this study also proposes exploring the visual characteristics of student artwork, such as simplicity, independence, bold contrast, high purity, freedom, casualness, and theme highlights, which will help to apply many elements of student artwork more widely in artistic creation.

3.1.3. The influence of student painting on student Subjective well-being (SWB)

SWB (Subjective Well-Being) is defined as a feeling of happiness obtained through pleasure and avoiding pain, closely related to a hedonic state of mind, as it varies on peculiar feelings at precise times (Sheldon & Lyubomirsky, 2006). In the early 20th century, student art became a serious topic of study for scholars, making it seen as art (Cunliffe, 2010). Art possesses a unique charm, enriching and regulating the spiritual lives of students, while also alleviating various societal pressures (Jones et al., 2017). Student painting, as an valuable topic of art, has an intricate connection with student happiness.

Artist Paul Klee particularly emphasized the participatory aspect of student art, collecting student creations and viewed them as a route to art (Klee, 1961). The surrealist elements present in the works of the renowned artist Miró share a significant connection with student art, leading to the exploration of novel artistic territories. Many of the artist's creations showcase simple shapes, childlike expressions, and a remarkable degree of spontaneity and randomness, often drawing inspiration from memories stored from his early years (Joana et al., 2017). Student painting attracts artists with its honest naivety, vivid colors, and unchecked thoughts. Student painting not only holds a unique position in the art field but also provides visual pleasure (Andrews, 2014).

The concept of happiness has been a longstanding theme in philosophical research (Huta & Waterman, 2014). Throughout different periods, diverse definitions of an individual's overall happiness have emerged, leading to various interpretations. The age-old philosophical debate between "happiness" and "hedonism" in ancient Greece is an early example of the quest to define an individual's sense of happiness. The hedonistic school, led by Epicurus, believed that happiness comes from enjoying life and pleasure (Bendik-Keymer, 2008). It is well known that student painting can evoke thoughts of relaxation and joy. Hence, visual arts, such as student painting, can accelerate a sense of happiness (Kaimal et al., 2016).

The process of creating student art involves more than individual effort, challenging the notion that artwork merely mirrors students' thoughts. Art is widely believed to contribute to the improvement of student happiness (Bolwerk et al., 2014). Additionally, there exists a dynamic interaction between student art and avant-garde art.
The innocence and naturalness of student painting evoke positive emotions, so student painting can visually influence student happiness (Lachman-Chapin & Mildred, 1993). It embodies the simplest and most efficient means of expressing one's thoughts. If we consider primitive art as the basis of all artistic expression, then student art can be viewed as a genuine reflection of the artist's authentic self-expression. Innocence and infantile behavior are very optimistic features; they naturally vibrate with people, making them feel deeply relaxed and free while also bringing happiness. Innocence and childlike wonder are the initial motivation and ultimate goal of artistic creation (AlMannai & Abdulla, 2005). There are many similarities between the works of modern art masters and student paintings (Vine et al., 2013). For example, Picasso hoped to imagine like a child when creating, without complex emotions, and expressing what he wanted to prompt in a simple and pure way. Student painting not only enhances the pleasure of adults but also helps children develop exceptional visual concepts and improve their aesthetic ability, satisfying their need to express emotions, which is also essential for enhancing their happiness (Güss et al., 2017). However, there is still much controversy surrounding the actual meaning of student painting, with some arguing that the images are unclear, the line quality is low, and the composition is messy, among other criticisms. However, student art can transcend language and express emotions, enhancing public happiness through emotional resonance (Wang & Ma, 2019). The audience's feelings and recognition of student works can be seen as the first indication of their future achievements. Therefore, it is recommended that educators, psychologists, and artists all view student art progress as a unique and indispensable part of their complete learning (Tobbell & Burton, 2015). Overall, student painting plays a certain role in enhancing happiness (Leckey, 2011), while also holding a unique position in the art field and visually (Zhukovsky & Pivovarov).

Student painting can provide inspiration and creativity for artists. At the same time, student painting provides new sources of inspiration for artistic works (Okada & Ishibaishi, 2017). The study analyzed the artistic features of student painting from four aspects: point, line, surface, and color, and found that a strong ability to summarize, imagine, and create can be achieved based on these, while also combining with other elements of other art forms, such as modeling, color application, composition, and expression.

This study believes that student painting not only provides artistic experiences but also relieves student mental stress, inspires artists, and stimulates subjective happiness through visual images.

### 3.1.4. Developing the conceptual framework

The aim of the present study is to investigate how student artwork can evoke joy in students. Researchers analyzed the cognitive and visual characteristics of student artwork to determine which types may elicit a sense of happiness. The results indicate that exploring the uncertainty, embellishment, representation, individuality, and naughtiness in student artwork can increase awareness of the artistic thinking process. In addition, specific visual features such as simplified and independent shapes, bold color contrasts, high purity, freedom and emphasis on subject composition can enhance the visual appeal and artistic value of student artwork. As an important art form, student artwork can provide artistic experiences through visual images, alleviate psychological stress, and stimulate creativity and subjective well-being. The study suggests that analyzing the cognitive and visual characteristics of student artwork can inspire artists to
create more creative and alluring works of art, thereby enhancing the audience's artistic enjoyment. Figure 2 presents the conceptual framework proposed in this study.

3.2. Design principles of campus art and their impact on people’s happiness

This study aims to investigate the model values of transforming student art characteristics into campus art, and whether this transformation can improve students' sense of happiness. Student art holds a unique position in the art world as well as brings visual pleasure to people. The characteristics of student art can enhance students' subjective sense of happiness. Therefore, this study seeks to investigate whether campus art with student art characteristics can inspire people's independent sense of happiness. Specifically, this section examines the appropriate design principles for transforming student art into campus art and then further analyzes the characteristics of student art elements that influence campus art.

3.2.1. Best design principles for campus art

During the early 20th century, contemporary campus art experienced significant growth in Mexico and the United States, characterized by a growing self-awareness. However, it wasn't until the 1980s that it entered the theoretical research stage, coinciding with extensive discussions on public space and propaganda. The inception of contemporary campus art history in 1989 marked the commencement of its evolution and exploration. The establishment of Campus Art Review in 1987 played a pivotal role in propelling campus art into the realm of theoretical research. American artist Serra’s Tilted Arc was moved from Manhattan's Federal Plaza due to strong public protests, becoming a famous event in public history in the same year (Lippard & Lucy, 1980).

Today, campus art is no longer limited to murals, campus sculptures, or campus architectural spaces. It has evolved into a variety of expression forms including festivals, exhibitions, events, or campus cultural spirit. Studies have shown that campus art has different effects on landscape visual features and emotional evaluations. Different campus art can create different memorable visual features that are usually associated with pleasure (Ramakreshnan et al., 2020). Therefore, campus art plays a positive role in improving campus life and campus image.

Public art creation must conform to students' aesthetic emotions and have artistic value. Campus art relies on artistic forms to convey the notions of beauty and emotion to students through visual elements like images, texture, and color, thus impacting the public by enlightening them and evoking a sense of beauty (Fross & Gumińska, 2020). Apart from meeting basic aesthetic standards, campus art should also fulfill the practical needs of the public in their daily lives (Dalton et al., 2018).

Modern campus art is not only an important part of campus landscape, but also a link between students and campus environment. Therefore, when designing modern campus art, a balance must be achieved in
both art and function, including practicality, aesthetics and symbolic significance in environmental art design. Solving the functional design of campus art and its design in the campus environment is crucial. Artists can design high-quality campus art according to design principles (XU, 2014).

The word "public" in campus art implies the public nature of campus art. Propaganda is not just about placing random things in public spaces. It is what everyone sees and hears in public places, such as tables that many people see. Therefore, when designing campus art, the public's perspective must be taken into account. Campus art has a wider humanistic dimension, and its connection depends on the appreciation and acceptance of students from different cultural backgrounds and different eras. Campus art design promotes the development of campus culture by considering the aesthetic needs of the masses and improving their aesthetic level (Murray, 2011).

The connection involving campus art and its spectators is a relationship of involvement and communication, which embodies the extremely important traits advocated by campus art. Therefore, the validation of social organizations and the embodiment of student rights are crucial to promoting campus art. Campus art can become an important part of campus form, injecting aesthetic and communicative value into campus art design, truly integrating into the public environment, and enhancing the aesthetic taste of public life (Hatch & Schultz, 2010).

An example of this is a public art installation at the Sichuan Fine Arts Institute, which features graffiti structures built around the campus to attract students and the wider community (see Fig. 3). One of the installation pieces is the "Human Form Sculpture Series" placed on the walls of the teaching building. These sculptures have become a beloved feature of the campus landscape. The success of the installation pieces is partly due to their interaction with the public and their ability to create a sense of community awareness around the artwork.

For years, art has been neglected in its interaction with the public. However, with the continuous development of interactive technology and the increase in interactive forms in campus public environments, there is now a more reasonable basis for the theory of campus art interaction. Involvement in campus art is one of its most significant attributes. Audience participation promotes the aesthetic value of campus art, making it an important part of contemporary public art. In the specific development of modern campus art, external interactive forms include physical, emotional, and conceptual interactions (Wang, 2022). The high-quality development of modern information interactive technology and the transformation of campus environments have brought more and more dynamic, outdoor opportunities for campus art, and also revealed a drift of constant development in the specific interactive process (Browning et al., 2014).

In campus art, artistic and innovative are essential, and therefore, these two points are the focus that campus art design must consider. For considering art work as true art, it needs to have a certain level of artistic quality, and its energy comes from always trying new things. The principle of creativity in art is important for design activities, including campus art design (Graham, 2007). So, it's important to bring the idea of artistic innovation into campus art design. To do this, we should treat campus art design as a
plan and look for good and unique ideas and clever ways to break old patterns, create new things, and explore new possibilities for development.

In campus planning and design, campus art design is inseparable and important because it is closely related to nature, campus, architecture, and gardens, and is an indispensable part of the campus. Artworks that embody the essence of student paintings should be seamlessly incorporated into the campus space, creating a unified campus style that showcases the unique cultural characteristics of the institution and enhances the overall ambiance. It is important that artworks should harmoniously coexist with the environment, rather than interfering with it. The value of campus art lies not only in its artistic charm, but also in its harmonious symbiosis relationship with its environment, bringing new life experiences to people.

Interestingly, campus art works are not only for independent existence, but can also be used to reflect culture and history, thereby creating unique experiences for people. For example, the graffiti works in Sichuan Academy of Fine Arts campus shown in Fig. 4 not only express artistic atmosphere, but also respond to the surrounding buildings, forming a unique spatial atmosphere (Cheng et al., 2020).

In summary, campus art works should be closely connected to the overall planning and design of the campus in order to achieve the best aesthetic effect as well as cultural and historical value.

In campus art and landscape design, safety is one of the most fundamental principles. This includes considering the structural capacity, performance, and quality of the material, waterproofing, slip resistance, fire prevention, electrical safety, and even potential hazards. Therefore, a high degree of safety awareness is required before designing and carefully reviewing the relevant design standards and specifications as a critical source for design. Currently, campus art structure has entered a new period of development. Campus art plays an important role in campus space, with different types of campus art having different functions and artistic values. Campus art serves as a reflection of contemporary campus culture, providing a distinctive means to capture, commemorate, and appreciate the ideals and enthusiasm of campus life. Moreover, it acts as a symbol representing the geographical location and regional identity of the campus culture (Runco et al., 2014; Schønning et al., 2019).

Although there have been many independent studies exploring the role and benefits of campus art in the atmosphere, the impact of campus art on the visual characteristics and expressive assessment of campus landscapes, and critical discussions on campus art created by artists in public campus spaces around the world, there is a lack of comprehensive research. Campus art created in public campus spaces by artists around the world has obtained interest and crucial analysis. Scholars from different fields are concerned with various aspects of campus art, from community campus art to permanent sculptures in campus landscapes and functions related to art education. Some scholars also focus on the impact of campus green space and campus space on student well-being (Lewis; Parrott, 1994).

Overall, the essence of campus art lies in its public and interactive nature, serving as the fundamental and central aspect of its creation. It embodies the campus culture and has the potential to elevate the
campus's image. When campus art is well-designed and aesthetically appealing, it becomes attractive and carries elements of regional culture that foster a sense of belonging and happiness. Guided by principles of exposure, interactivity, artistry, functionality, incorporation with the environment, livability, and safety, campus art becomes an inspiring and enriching part of campus life.

3.2.2. The relationship between the characteristics of student painting elements and campus art

Campus art is a richly creative subject that can showcase the image of a campus. Campus art can be comprehended from two essential viewpoints. Firstly, it serves as a symbol of progress and development, but at the same time, it becomes a means for critique and dissent against these forces. Numerous artists believe that straightforward and unpretentious expressions in student paintings capture the essence of true artistic expression. This pure approach instills new energy and inspiration in children. For instance, renowned modern art figures such as Paul Klee and Pablo Picasso incorporated the charm of student painting elements into their own works (Madanipour, 2003), presenting a childlike style that brims with fascination.

Not just Klee and Picasso, many outstanding artists in the early 20th century also found a connection between primitive culture and the appeal of student art. Artists borrowed from the expressive forms and painting techniques of student painting and imitated these elements. However, what artists most want to find is a pure, authentic, and simple form of art, which allows them to return to the most primitive state. Because student creativity is not the same as general creativity, artists explore and reference the pure aesthetic elements of student painting, expanding the expression and creation methods of campus art design.

However, not every scholar believes that student painting can have an optimistic influence on campus art. Some messy works and desperately complex colors in student paintings are not apt for campus art, so some selection ought to be made when displaying artwork. Outstanding art should be groundbreaking and able to stimulate the imagination and sensory experiences of the audience (Latham & Layton, 2019). The application of creative thinking in campus art design can attract the audience's attention and emotionally resonate with them. For example, student artists' "wall painting" design project is highly innovative in shape and color, which has sparked widespread resonance among the audience.

The unique characteristics of student artwork can provide endless inspiration and creativity for artists. Student artwork is a form of artistic expression rooted in students' natural tendencies. It embodies goodness and purity, which can evoke a sense of purity. Through this liberation of the soul, student artwork possesses artistic value in and of itself. They have tremendous inspiration and meaning, which can stimulate students' thoughts and establish a positive environment. Finally, integrating student artwork into the creation of campus art can enhance the creativity and artistic qualities of the artwork, as student artwork can provide new energy and inspiration for artists. Overall, campus art design needs to showcase the unique characteristics of artists and designers, emphasizing originality and innovation.
The pure aesthetic elements and creativity found in student artwork can serve as an important resource for campus art design, expanding the forms and methods of expression in campus art.

### 3.2.3. The process of conceptual framework formation

In order to enhance the positivity and inspiring atmosphere of the campus environment, school art in public spaces can reinterpret students' painting elements. Students can resonate with these works and enjoy the visual experience. Therefore, this study explores the design principles of how to transform student paintings into campus art. Through research, we observed that well-designed and artistically contenting campus art works should follow the principles as mentioned above. In addition, excellent campus art works should also possess pleasant cultural parts that inspire happiness. Further, we found that combining the attributes of student paintings into the making of campus art can augment its artistic and creative qualities, as students' paintings can present new energy and inspiration for artists. Most importantly, promoting and interacting with campus art is not only a fundamental element but also the core content of campus art. When students see outstanding public art with strong invention and artistic style, they will feel happy and inspired. In summary, by following these principles and incorporating student painting elements into the creation of campus art, we can enhance student happiness, habitability, and safety, while also enhancing the novelty and attraction of campus art works. Figure 6 shows the conceptual framework of the influence of the design principles of campus art on student happiness.

### 3.3. The impact of student painting elements of campus art on public space and student well-being

Recently, there has been great interest among academics and practitioners in the impact of environmental aspects and individual qualities on personal well-being. This study investigates the influence of campus art with student art aspects on both public space and student subjective well-being. To achieve this research goal, we first analyzed the role of public space. In the following section, we investigate whether campus art pieces with student art elements can stimulate students' happiness.

#### 3.3.1. Public art and public space

As time goes on, global interconnectivity and communication have become increasingly easy, making the fusion of various cultures more convenient. This injection of cultural diversity has provided a more diverse and content-rich development direction for campus arts. As campus arts develop, their functions have become increasingly diverse, including practicality, ornamental value, commemoration, entertainment, recreation, and pre-activity (Devlin & Arneill, 2003). As an important part of campus landscape, campus arts aim to improve campus surroundings, increase the complete aura of the campus, enrich spiritual life of students, and improve their quality of life. On this basis, campus arts have become an crucial language and element of campus culture. Scholars have discussed the limitations of the potential of public spaces in improving student well-being from different perspectives (Fitzgerald & Jenkins, 1997). Campus arts, as an important feature of environmental art, are "public" in nature. First,
campus art works are products of modern society and an explicit phase in historical advancement. Second, campus art works serve the public. Then, campus arts are placed in public open spaces on campus compared to art that may exist in private bounded spaces, they occur within a historical cognitive process of continuous changes in time forms. Finally, campus arts contain a sense of public dialogue and rational communication, and the assembly of shared spirit will endow shared spirit with meaning and connotation. These characteristics further highlight the value and importance of campus arts.

The connection between campus arts and public space is necessary in the macro world of campus arts and space. Public space has an important impact on the presentation of campus arts, and campus arts enrich public space through various means such as decoration, commemoration, and entertainment (Rotenberg, 2001). Research on campus environmental design underscores the significance of high-quality public spaces and their positive impact on student well-being (Kawahigashi et al., 2012). Public spaces can take various forms, ranging from unauthorized street corners to extensive municipal facilities. Throughout history, public spaces have served as vital hubs of various residential areas and focal points for public life, activities, and events.

Within campus settings, public spaces serve as primary areas for students' leisure and entertainment, tightly woven into their daily lives. The infrastructure of campus public spaces mirrors the campus's development journey and represents its image. Moreover, campus public spaces play a pivotal role in enhancing student well-being. By enhancing and improving these spaces, the overall campus environment is elevated, offering students a delightful experience.

Recent studies emphasize the significance of public spaces in fostering "human health and happiness" and creating an "attractive and livable campus." (Carmona, 2019).

In the process of campus construction and renovation, we must consider issues of sustainability and inclusiveness of public space. Research scholars have made important contributions to this end. For example, author García researched the correlation between public culture and campus public space, and conducted a detailed evaluation of public space (García, 2014), while author Du & Ming studied the link between art space, public space, and community development (Du & Ming, 2018). These studies help us to better understand the design and development of public space.

Campus art works are an important part of public space, helping to enhance the vision of the campus and bring new delight to people. Campus scenery aesthetics are also an indispensable part of campus design. Therefore, we need more research to deepen our understanding of campus image design. Campus arts and the image of campus public space mutually add important value to people's experience and campus development (Zhang, 2023). Empirical research has shown that the full use of campus arts to shape campus image is crucial in promoting campus culture and campus development. Although campus arts have universality, openness, and artistry, we should recognize that campus arts have different social and cultural missions and values and have become an integral part of campus culture.
When considering good design of public space, we should base it on an artist's intuitive analysis. As an important carrier and dissemination medium of campus culture, the construction of campus public facilities must be conducted by campus culture, ensuring concord and union with campus culture to form a unique campus image. People and campus arts can converse directly and closely. Art mobilizes students' feelings, insights, memories, views, and dreams in various types, further stimulating students' reactions and approaches (Liu, 2017). Finally, campus public space reflects a campus's evolution and enhancement process, and only a public space that experiences students' aesthetic and life requirements can give students a good physical experience. Campus arts that are culturally adapted to the campus have a unique positive impact on the campus image, and appropriate campus arts can enhance the campus's image and overall competitiveness.

### 3.3.2. The impact of student painting elements of campus art on public space and student well-being

Public spaces are a fundamental feature of campuses, as they represent places for social and face-to-face interactions, providing unique opportunities to enhance subjective well-being (SWB) and mental SWB (M-SWB) experiences (Zhang et al., 2023). The characteristics of student artwork can enhance the inspiration of artists. The features of student artwork incorporating into campus art can enhance its artistic and innovative qualities. Campus art is a part of students' lives, and participating in art can encourage individual happiness. For example, the campus art at Yilan Station in Taiwan (see Fig. 7) is very childish and interesting. When students walk into the station, they feel like they have entered a fairy tale world, providing great visual stimulation and a sense of pleasure.

Design principles of interactivity and innovation are essential for creating good campus art. Excellent campus art can inspire happiness. Numerous studies have shown that participating in art has a positive influence on students' happiness and satisfaction with leisure activities. However, there is little research on the relationship between the campus art innovation and subjective well-being (SWB). Students have also noted that the redevelopment of public spaces in the campus center has resulted in a lack of historic character of public spaces (Ali & Kim, 2020).

This research consistently suggests that campus green spaces (UGS) can improve the health of campus students and make significant contributions to their well-being. Art in public places is considered to add aesthetic value to the surroundings and positively affect environmental quality.

On campus, you may come across a variety of brightly-colored wall murals that have been created by students' imagination and creativity. These graffitied walls add vibrancy to the campus environment and positively influence students' subjective well-being. Several factors such as design, accessibility, social interaction, and safety play a crucial role in the relationship between the campus public space and students' subjective happiness.

Recent research shows that campus artists have begun exploring new territories in artistic formation. For example, studies suggest that there is a underlying connection between creativeness in daily life and
subjective well-being (Liu et al., 2022). Meanwhile, scholars analyzing public spaces from different perspectives are increasingly convinced that campus art in public spaces can improve students’ happiness. Specifically, whimsical campus art can create a relaxed and liberated space for students, relieving their stress from daily life and work. Campus art in public spaces can also enhance students’ perception of beauty, evoke a sense of happiness, and provide important aesthetic education (Luo et al., 2022).

Campus art not only serves aesthetic functions, but also has cognitive, educational, and joyful functions. At the same time, campus art blends the artistic mood of the campus together, providing a creative outlet, a sense of achievement, and a way to express oneself, thereby having positive effects on their emotional resilience and happiness. As an important symbol of the campus, campus art reflects the cultural connotations of the campus, absolutely exhibiting the characteristics of life and spiritual qualities of the students. Campus art permeates the environment through unique shapes, figurative language, artistic influence, and spatial control, enabling students to acquire certain spatial knowledge and evoke their artistic emotions, thus embodying public spirit.

Campus art is an significant reason concerning individual well-being. Research shows that people who participate in artistic activities have a higher subjective sense of well-being than those who do not. Participating in campus art activities can bring happiness and improve students' leisure experiences. Engaging in art has diverse effects on individuals' subjective well-being, with varying areas of satisfaction. Thus, leisure activities play a pivotal role in influencing individuals' sense of well-being, and the satisfaction derived from such leisure experiences can significantly impact personal happiness. In daily life, students express a preference for campus art that is rich in meaning and offers exciting attractions.

Overall, campus art can improve campus life and image. Public art works that fit modern culture can carry out the mission of cultural dissemination. Campus art is an important part of the campus landscape, serving not only as a functional display, but also as an artistic symbolic work. Campus art plays multiple roles in the enhancement of the campus environment by satisfying people's needs for aesthetics and use. Student participation in painting can effect unlimited stimulus to artists, and the personalized and characteristic aspects of student painting can enhance the innovation ability of artistic works. Therefore, innovative campus art can upgrade the value of public spaces. In addition, campus art with imagination and high creativity can augment interface with the public and foster cultural distribution. By enhancing students' leisure experiences and enriching their emotional experiences, campus art can also increase students' happiness.

3.3.3. The process of conceptual framework formation

In this section, the aim of our research is to analyze the impact of campus art, with a focus on student artwork, on public spaces and student well-being. Studies have shown that campus public spaces indicate the process of campus spirit and material development construction, and high-quality public spaces can provide students with a good sensory understanding. Additionally, outstanding campus art
can also have an encouraging impact on the campus image. Suitable campus art can improve the campus image, promote complete effectiveness, and enhance relations with the public. Childlike and creative campus art can boost students' leisure and emotional experiences, promote cultural exchange, and increase student happiness. Based on the above research results, our study concludes that campus art with a focus on student artwork that is suitable for the campus space can not only enhance the campus image but also promote cultural exchange, enhance interaction with the public, and boost student happiness. Figure 8 shows the conceptual framework proposed in our research.

4. Discussion

Campus art is a design principle based on student society, embodying the democratic, open, interactive, and shared values of contemporary public space. It allows for efficient public involvement and collaboration and provides corresponding organized and practical guarantees. However, the term "campus art" should not be compared with "environmental art design," "campus statuette," or "landscape art." It is not a form of art, but a shared design concept. Campus art is often a course art, discovering and trying to solve problems in the dynamic flow of time, particularly highlighting the exposure and resolution of social issues in modern public art. Student painting holds a unique position in the art world and can be visually pleasing. Reinterpreting campus art works based on student painting can create a convinced and encouraging environment because they reverberate with students. However, not all student paintings are suitable for campus art because different public spaces have different needs. Campus art in public spaces must adhere to the principles of human ecological agreement and value the character of public conditions.

This study focuses on the application of student painting in campus art, with a focus on moderately relaxed environments such as squares, housing areas, schools, and other public areas. However, more formal places such as office buildings and shopping malls are not suitable for student-style campus art. The present study analyzes the impression of painting on student happiness, examines and determines the best design principles for campus art works, and the impact of campus art works featuring student painting on public spaces. To achieve the purpose of the study, it is divided into six independent steps that analyze and discuss each aspect in-depth. The intention of the designed research arrangement is to assess the strengths and limitations of several blends of opinions and propose the most suitable target for further research. Based on the POD tree diagram in Fig. 9, this section examines the process of integrating initial findings to create potential theoretical propositions and identify directions for future research.

In section 3.1, we conducted research and discussion on the specific characteristics of student paintings and concluded that these characteristics can evoke pleasure in the public via visual process. In section 3.2, we determined that tremendous campus art should follow the principles of promotion, collaboration, and modernization, and that student painting characteristics can enhance the innovation and attractiveness of campus art. Based on the findings of POD1 and POD2, we determined that when
creating campus art, we should follow the principles of promotion, communication, and novelty and incorporate student works to increase the creativity and attraction of campus art.

In section 3.3, we found that campus art pieces featuring student paintings that are suitable for campus spaces can enhance the image of the campus and evoke a sense of happiness. Based on the findings of POD2 and POD3, we believe that the attributes of student paintings can develop the innovation and appeal of campus art. Campus art with student painting characteristics can improve the superiority of campus public spaces and evoke happiness in students.

After combining POD4 and POD5, we observed that the thoughts and visual elements of student paintings can enhance their innovativeness and fascination. Excellent campus art that fits within the campus culture can improve the excellence of campus public spaces and evoke happiness in students. After combining POD5 and POD6, we concluded that by incorporating the characteristics of student paintings into campus art pieces, artists can improve the innovativeness and attractiveness of campus art, improve the campus image, and evoke happiness in students.

Our extensive research reveals that by incorporating the visual and cognitive aspects of student paintings into campus art, artists can create top-notch campus art pieces suitable for campus spaces. This approach can significantly enhance public spaces and contribute to an improved sense of happiness among students. Based on these insights, we propose transforming student paintings into campus art pieces to elevate public spaces and promotes student well-being.

**Conclusion**

The aim of this study is to use the transformation from student drawings to campus artwork to enhance public spaces and improve student well-being. The study covers aspects such as student drawing elements, conversion to campus artwork, and public space improvement. The study discovered that using the thoughts and visual characteristics of student drawings in campus artwork not only inspires artists, but also stimulates joy in students through visual styles. In addition, the study shows that by examining definite characteristics of student drawings, such as thinking and visual characteristics, artists can create high-quality artwork suitable for campus spaces that can inspire public enjoyment. With student drawings as a feature, campus artwork that conforms to campus aesthetics not only improves the campus image, but also raises student well-being. In summary, this study proposes a conceptual framework for improving student well-being through campus artwork in public spaces. This framework suggests that the thinking and visual characteristics of student drawings should be applied to campus artwork, and through the design of artists, high-quality artwork suitable for campus spaces can be created to improve public spaces and develop student well-being. This study is significant for artists creating high-quality campus artwork that enhances student well-being in public spaces. Future research can further explore the role of campus artwork in promoting public spaces and campus culture, improve the characteristic of campus artwork and public spaces, and use appropriate campus artwork to stimulate student well-being.
References


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Figures

The Role of Painting Art in Reducing Stress and Improving Mental Health in College Students

WHAT: Student’s painting
What are the influencing factors of students' painting characteristics on students' happiness?

HOW1: Campus art
The Influence of Student Painting on Student Subjective Well-being (SWB)?

HOW2: Public space
Student painting elements of campus art impact on public space and student well-being?

Search on WOS, x-mol, and Google Scholar database.

Evaluate and screen the literature

Evaluate its quality and reliability

Extract and integrate data

Write a review report

Figure 1

Schematic representation of literature review synthesis process
Figure 2

Conceptual framework of the impact of student painting characteristics on student well-being.
Figure 3

Graffiti series on campus
Figure 4
Campus graffiti

Figure 5
Student artists' "wall painting" design project

Figure 6
Conceptual framework of campus art design principles
Figure 7

The Art of Graffiti, Chongqing, China

Figure 8

A conceptual framework for enhancing student well-being through artwork in campus Spaces
Figure 9

Point of Departure (POD) tree for the impact of campus artwork on public space and student well-being

1. Problem-solving 2. Emotion-based 3. Association

Creativity
Interactivity
Publicity

Excellent Public Arts

Characteristics of campus’s paintings
People’s happiness

Visual characteristics


Public Spaces

Spiritual civilization
Material civilization
Emotional experience
Figure 10

The conceptual framework of public art in public space is proposed to improve students' happiness