



**TRANSFORMING 2D CHILDREN'S PAINTING INTO 3D
PUBLIC ART FOR IMPROVING PUBLIC SPACES TOWARDS PEOPLE'S
HAPPINESS**

By

LUONA

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia
in Fulfilment of the Requirements for the Degree of Doctor of Philosophy**

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DEDICATION

To my beloved parents

Luo Guangxiu

Nie Guizhen,

My beloved husband

Yang Sen,

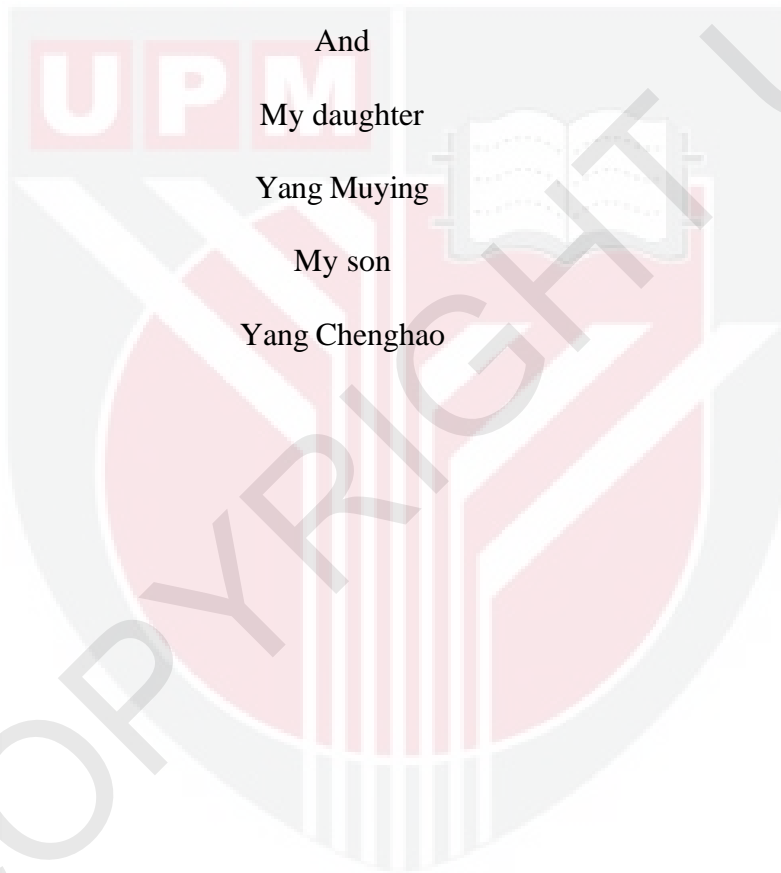
And

My daughter

Yang Muying

My son

Yang Chenghao



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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment
of the requirements for the degree of Doctor of Philosophy

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January 2024

Chairman : Professor Ts. Rahinah binti Ibrahim, PhD
Faculty : Design and Architecture

COVID-19 has caused a large part of the population to suffer depression, hence there is a need for cities to provide mass relief to the public. This thesis formulates a process to transform 2D children's painting into 3D public art in order to help artists produce more quality public arts for cities. The objective of this study is to enhance the quality of urban public spaces to boost people's happiness by transforming 2D children's paintings into 3D public art. This study reviewed extensive literature, focusing on the relationship between children's paintings and public art and people's happiness as well as the principles of public art creation. This study posits that applying the visual characteristics found in 2D children's painting can support its transformation into 3D public art suitable for urban public space which can help boost people's happiness. A case study and in-depth interviews with 7 public arts' artists were conducted to develop a workflow for 3D public art creation with children's paintings as the feature. Then, three public arts were created according to the workflow, namely "Colourful Shadow Print", "Rainbow Swing", and "The Harvest of Happiness". Finally, a statistical

analysis on a survey conducted using a questionnaire found that over 90% of people believe that public art featuring children's paintings in public spaces can alleviate people's mental stress, enhance their leisure experience, and boost sense of happiness. Applying the visual characteristics of 2D children's painting (rich and high-purity colours, simple and general shape, free and random composition) can support transformation into 3D public art (publicity, interaction, innovation) suitable for urban public space (urban culture, enhance the urban image) which helps to improve people's happiness. In conclusion, this study contributes in developing a methodology for transforming 2D children's paintings into 3D public art. Furthermore, this study also encourages Chinese artists to create more public art for urban public spaces that meets people's aesthetic needs. Besides supporting fellow artists to earn more public commissions, public arts located in urban spaces suit people's aesthetic needs, relieve people's stress, and enhance their leisure experience, thereby able to evoke a sense of well-being.

Keywords: Children's paintings' characteristics, Public art, Public space, People's happiness

SDG: Goal 3: Good health and well-being

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

TRANSFORMASI LUKISAN 2D KANAK-KANAK KEPADA ARCA AWAM 3D UNTUK MENAMBAH BAIK RUANG AWAM MENUJU KEBAHAGIAAN RAKYAT

Oleh

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COVID-19 menyebabkan populasi besar mengalami kemurungan justeru, terdapat keperluan untuk bandar-bandar menyediakan bantuan besar-besaran kepada orang ramai yang boleh digunakan di seluruh bandar. Tesis ini merumuskan proses untuk mengubah lukisan kanak-kanak 2D kepada seni awam 3D untuk membantu artis menghasilkan lebih banyak seni awam yang berkualiti untuk bandar. Objektif kajian ini adalah untuk meningkatkan kualiti ruang awam bandar dan dengan itu, meningkatkan kebahagiaan orang ramai dengan mengubah lukisan kanak-kanak 2D kepada seni awam 3D. Kajian ini mengkaji literatur yang luas, memberi tumpuan kepada hubungan antara lukisan kanak-kanak dan seni awam dan kebahagiaan orang ramai serta prinsip penciptaan seni awam. Kajian ini menekankan bahawa penerapan ciri visual lukisan kanak-kanak 2D dapat menyokong transformasinya kepada seni awam 3D yang sesuai untuk ruang awam bandar yang dapat membantu meningkatkan keceriaan orang ramai. Kajian kes dan temu bual mendalam dengan 7 artis seni awam telah dijalankan untuk membangunkan aliran kerja bagi penciptaan seni awam 3D

dengan lukisan kanak-kanak sebagai ciri. Kemudian, tiga seni awam telah dicipta mengikut aliran kerja, iaitu "Cetakan Bayangan Berwarna", "Rainbow Swing", dan "The Harvest of Happiness". Akhir sekali, analisis statistik pada tinjauan yang dijalankan menggunakan soal selidik mendapati bahawa lebih 90% orang percaya bahawa seni awam yang menampilkan lukisan kanak-kanak di ruang awam boleh mengurangkan tekanan mental orang ramai, meningkatkan pengalaman masa lapang mereka dan meningkatkan rasa gembira. Mengaplikasikan ciri visual lukisan kanak-kanak 2D (warna yang kaya dan ketulenan tinggi, bentuk ringkas dan umum, gubahan bebas dan rawak) boleh menyokong transformasi kepada seni awam 3D (publisiti, interaksi, inovasi) sesuai untuk ruang awam bandar (budaya bandar, meningkatkan imej bandar) yang membantu meningkatkan kebahagiaan rakyat. Kesimpulannya, kajian ini menyumbang dalam membangunkan metodologi untuk mengubah lukisan kanak-kanak 2D kepada seni awam 3D. Tambahan pula, kajian ini juga menggalakkan pencipta seni awam Cina untuk mencipta lebih banyak seni awam untuk ruang awam bandar yang memenuhi keperluan estetik orang ramai. Selain menyokong rakan artis untuk mendapatkan lebih banyak komisen awam, seni awam yang terletak di ruang awam bandar sesuai dengan keperluan estetik orang ramai, melegakan orang ramai. tekanan, dan meningkatkan pengalaman masa lapang mereka, dengan itu terbukti membangkitkan rasa kesejahteraan.

Kata Kunci: Ciri-ciri lukisan kanak-kanak, Seni awam, Ruang awam, kebahagiaan rakyat

SDG: MATLAMAT 3: Kesihatan dan kesejahteraan yang baik

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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

2D	2 Dimension
3D	3 Dimension
POD	Point of Departure
SWB	subjective well-being
UPM	Universiti Putra Malaysia



CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter discusses the context and background of the study and the research statement. This chapter also describes the main research gaps, research questions, and research objectives. These are followed by the significance of the study and the operational definitions and organization of the thesis.

1.2 Context and Background of Study

Personal subjective well-being is an important indicator of the level of social development and the quality of people's lives (Zhou et al., 2021; Lu et al., 2021). According to Chai & Li (2019), happiness is both an ideal goal that people have been pursuing for a long time and a life practice that people have been striving for.

The rapid development of society has brought unprecedented convenience to human beings, but at the same time, it has also brought great pressure to people's work and life. Urban dwellers also face the dilemma of "happiness stagnation", meaning rapid economic growth does not have a significant impact on happiness (Chai & Li, 2019). At the same time, the COVID-19 pandemic has caused unlimited stress and suffering which has seriously affected people's well-being (Adhanom Ghebreyesus, 2020; Centers for Disease Control and Prevention, 2020).

People's well-being significantly declined and improving one's subjective well-being became increasingly important. The World Happiness Report 2022 stated that economic insecurity, anxiety, and disruptions in all aspects of life increased during the COVID-19 pandemic, and for many people, physical and mental health are under stress and challenge (Helliwell et al., 2022).

Numerous studies have demonstrated the positive impact of participation in arts on individuals' well-being. For instance, a research by Kafashpor et al. (2018) found that engaging in artistic activities such as painting, sculpture, or music can promote positive emotions and subjective happiness. With the rapid development of the social economy and rise of culture and art consumption, people are slowly adapting to the popularization of art participation and art consumption. People have unlimited yearning for a better life and look forward to more happiness.

The new crown pneumonia epidemic has severely affected people's daily lives in different ways and caused great harm to people (Qin et al., 2020). In this context, efforts must be made to improve people's well-being. Therefore, improving people's well-being is not only a key task for practitioners but also an important topic for theoretical research.

1.3 Problem Statement

1. Children's paintings are a child's perception of the world and a tool for communicating emotions and ideas through visual means (McArdle & Piscatelli, 2002). Children's art is expressive (McClure 2011). The visual characteristics of children's painting can effectively enrich and regulate people's spiritual life, thus relieving all forms of stress and increasing the overall level of well-being (Gračanin et al., 2015).

2. This study focused on examining children's painting. The happiness that children's paintings bring can be used to elicit some sense of well-being in people. Kozłowska and Hanney (2001) state that children's artwork can facilitate emotional expression and coping which indirectly benefits the adults around them. This study agrees that children's art can also stimulate creativity and imagination in adults and may provide a sense of nostalgia for one's childhood (Thomson et al., 2018). The characteristics of children's painting can give unlimited inspiration (Layous et al., 2013). They can be used to evoke public delight through visual means (Olley, 2009; Whitebread, 2003; Willats, 2006; Xu et al., 2021; Bland, 2012; Metin, 2020).
3. Public art is an important part of the urban landscape. Public art can convey important messages, reflect collective values, and provoke thought and discussion on societal issues (Barrett et al., 2010). However, in many developing countries, public art is still a new concept. In the 1980s, the concept of public art was introduced in China, and since then, public art has been modernized like never before. Public art in China has gone through a process of development from "sculpture art" to "urban sculpture" to "public art" (Wang et al., 2015).
4. Chinese public art is also slowly fusing traditional aesthetics with modern emotions while integrating public art into urban planning and transforming public spaces into cultural landmarks (Chen, 2022; Wang et al., 2022). There are scholars who believe that traditional Chinese cultural values and social norms also impose restrictions that sometimes lead to the rejection of contemporary or abstract art forms that are perceived as inconsistent with Chinese culture (Li & Chen, 2020). More could be done to fully utilize public arts to realize its full potential despite government regulations in China that seems to restrict artistic freedom and expression (Sun, 2022). Adding to this backdrop, strict censorship policies also inhibit creativity (Wang, 2018). This study agrees that many new public spaces have been designed primarily for aesthetic purposes or as tourist attractions as opposed to meeting the needs of local residents.

However, in its current form, Chinese urban public art is still in the primary stage of development, and there are many weak links in both the practice system and the theoretical system (Zhao, 2015). Although Chinese urban public art has made great progress, some public arts of poor quality have been moved onto the squares and streets of cities. These public artworks simply adopt geometric forms from international style, lack regional characteristics in terms of shape, and ignore the connotation of the works (Liu, 2020; Pan, 2012).

Many issues in the development of contemporary public art in China are worth reflecting on such as the understanding of the subjects of public art audiences, the public artists' understanding of art language and publicness, and the issue of public art subjects and the public art system (Wu, 2005). Such imbalance between the internal and external contradictions of Chinese contemporary public art has caused artists to lower their standards and slowly develop their public arts into low-level cloning lacking artistry and having short life span (Wang, 2012). Located in the southwestern part of China, Guangxi Province lacks public art commissions compared to other regions such as Beijing and Shanghai (Wu, 2015). This study conducted a series of surveys and research in Guangxi, China.

Therefore, there is no doubt that in the context of the COVID-19 pandemic, efforts must be made to improve the well-being of citizens. There is a need to formulate a process to transform 2D children's paintings into 3D public art in order to help art creators to produce more quality public arts for cities.

1.4 Research Questions and Research Objectives

This study combines children's paintings with public art specifically applying their visual characteristics to public art design and exploring the possibility of transforming the color and shape elements of children's painting into public art. The aim of this study is to provide new forms of expression and art for public art, recommend the design of urban public arts with the characteristics of children's paintings, and enrich urban culture to enhance the aesthetics of public space. There is a well-established research on the impact of children's art on audiences, and this study demonstrates a

way to bring 2D children's artworks into 3D public art forms on a larger scale. This study hopes to improve the quality of life of urban dwellers and bring happiness to people. This study used Ibrahim's (2011 & 2020) research question (RQ) construct classification technique to identify three different RQ constructs, namely the "WHO", "WHAT", and "HOW" in formulating the primary research questions. A specific research structure related to the research question has been identified which led to the formation of the research question and research objectives.

The "WHO" research question structure was defined as the well-being of the people as it refers to the settings that will be affected by the research. The "WHAT" research question structure was defined as 2D children's paintings as it formed the body of knowledge needed to address the research inquiry. The two "HOW" research questions were defined as impacts or actions necessary to the people and/or to the 2D children's paintings. In this study, the targeted impacts are transforming 3D public art and improving public spaces. The main research question and research objective of this study are stated below:

Research Question 1: What is the impact of artistic participation on subjective people's happiness? **Research Objective 1:** To investigate the impact of artistic participation on subjective people's happiness.

Research Question 2: What is the influence of 2D children's painting characteristics on people's happiness? **Research Objective 2:** To identify the influence of 2D children's painting characteristics on people's happiness.

Research Question 3: What are the design principles of 3D public arts from 2D children's painting characteristics for people's happiness? **Research Objective 3:** To analyse the design principles of 3D public arts from 2D children's painting characteristics for people's happiness.

Main Research Question: How to develop the best process for transforming 2D children's painting into 3D public art in order to improve public space for people's happiness? **Main Research Objective:** To develop the process for transforming 2D children's painting into 3D public art to improve public space for people's happiness.

Table 1.1 presents the how the researcher utilizes the EAGLE Research Design Framework to systematically break down the research questions and subsequently answer the main research question and achieve the main research objective.

Table 1.1: Identifying the structure of the research questions, formulating sub-research questions and defining the research objectives

RQ construct	Construct Description	Research Sub- Questions	Research objectives
WHO	People's happiness	What is the impact of artistic participation on subjective people's happiness?	To investigate the impact of artistic participation on subjective people's happiness.
WHAT	2D children painting characteristics	What is the influence of 2D children's painting characteristics on people's happiness?	To identify the influence of 2D children's painting characteristics on people's happiness
HOW1	Transform 3D public art	What are the design principles of 3D public arts from 2D children's painting characteristics for people's happiness?	To analyse the design principles of 3D public arts from 2D children's painting characteristics for people's happiness
HOW2	Improve public space	How to develop the best process for transforming 3D public art from 2D children's painting in order to improve public space for people's happiness?	To develop the best process for transforming 3D public art from 2D children's painting in order to improve public space for people's happiness

(Adapted from Ibrahim, 2011 & 2020)

1.5 Research Significance

The results of this study are significant from several perspectives. First, by investigating the simple, primitive, and unpretentious aesthetic elements in children's paintings and by distilling and applying them to create public art design, this study finds a novel approach to successfully create a public art design process.

Secondly, this study helps to identify the factors that affect people's happiness and understand the impact of art participation on people's happiness. The study presents the characteristics of children's painting elements, proposes a theory for adding children's elements to public art, and suggests a theoretical framework for converting 2D children's painting elements into 3D public art.

Third, the results of the study suggest that the creative process of transforming 2D children's painting elements into 3D public art can give ordinary urban residents more opportunities to participate in the creation of public art and give public art creators more artistic inspiration. In the creation of public art in the early stage of this study, a questionnaire collected people's wishes, so that public art and urban residents had better interaction and public art in urban public space can contain the ideas and intentions of urban residents. It helps public art creators to create more public art for the city that meets people's wishes and inspires people's happiness in the field of art. This study can also improve the utilisation of local cultural resources and enhance the local atmosphere of the city, thus improving the sense of place and cultural tourism.

Fourth, this research is important because transforming 2D children's paintings into 3D art is a fun and creative activity. This activity is in line with children's educational

development; thus, the content of this study can even be applied to kindergarten and elementary school art curricula which can enrich children's art classes. This concept can be applied to children's education. The process of transforming children's art from 2D to 3D will allow them to activate their minds, develop creativity, and enjoy art.

1.6 Operational Definitions

The operational definitions of the key terms that are used in this study are stipulated in this section.

People's happiness. This study follows Diener et al.'s (1999) definition of people's happiness often referred to as subjective well-being which is "a person's cognitive and affective evaluations of his or her life." This encompasses three interrelated components: 1) life satisfaction (a cognitive assessment of one's life as a whole); 2) positive affect (experiencing positive emotions and moods); and 3) negative affect (experiencing low levels of negative moods and emotions).

Children's painting. This study follows Lowenfeld (1957) definition of children's painting which is the expression of a child's perception of the world that is influenced by developmental stages, experience, and individual creativity which allow children to communicate emotions and ideas through visual means.

Public art. This study follows Senie's (1992) definition of public art which is art that is situated in a public space or is publicly accessible, created to engage the public, enrich the community, and often reflect or interpret the history, culture, and values of the place where it resides.

Public Space. This study follows Carmona et al. (2010) definition of public space which refers to places that are open and accessible to all people regardless of gender, race, ethnicity, age, or socio-economic level. These spaces are a social space that is generally open.

1.7 Organization of Thesis

The thesis is structured into six chapters as follows:

Chapter 1: Introduction

Chapter 1 introduces the background and context of the study, the problem statement, the main research questions and sub-research questions, the research objectives, the overview of the research methodology, and the scope and limitations of the study.

Chapter 2: Literature Review

This chapter explores and discusses how the researcher constructed the theoretical framework which was used to guide this study's research design. It covers how the literature review was conducted and presents the results before synthesizing them to form the theoretical proposition for this study.

Chapter 3: Research Methodology

This chapter describes the case study research methodology developed to conduct this study. The researcher explains the workflow of the research design and details the five components of the case study methodology. In addition, this chapter presents the methodology of the validation, limitations, and ethical matters.

Chapter 4: Results and Analysis

This chapter presents the results and analysis of data from seven artists in creating public art featuring children's paintings and summarized the principles and methods of creating public art featuring children's paintings. Finally, this study summarizes the workflows and synthesized them into a singular process for the transformation of the characteristics of children's paintings into 3D public art.

Chapter 5: Development of Public Art Prototype

This chapter describes the process of developing three prototypes—"Colorful Shadow Print", "Rainbow Swing" and "The Harvest of Happiness"—following the workflow for the transformation of the characteristics of children's paintings into 3D public art. The researcher also reports the results from a survey to verify public satisfaction with the public art featuring children's paintings.

Chapter 6: Conclusions

This chapter provides answers to the sub-research questions and subsequently the main research question. It also presents the study's knowledge contributions, its benefits, limitations, and future research recommendations.

REFERENCES

- Aaker, J. L., Rudd, M., & Mogilner, C. (2011). If money does not make you happy, consider time. *Journal of Consumer Psychology*, 21(2), 126-130. <https://doi.org/10.1016/j.jcps.2011.01.004>
- Aked, J. (2011). *Five ways to wellbeing: New applications, new ways of thinking*. New Economics Foundation.
- Ameli, S. H., Hamidi, S., Garfinkel-Castro, A., & Ewing, R. (2015). Do better urban design qualities lead to more walking in Salt Lake City, Utah?. *Journal of Urban Design*, 20(3), 393-410. <https://doi.org/10.1080/13574809.2015.1041894>
- Anderson, J., Ruggeri, K., Steemers, K., & Huppert, F. (2017). Lively social space, well-being activity, and urban design: findings from a low-cost community-led public space intervention. *Environment and Behavior*, 49(6), 685-716. <https://doi.org/10.1177/0013916516659108>
- Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2018). *Introduction to research in education*. Cengage Learning.
- Atkinson, S. (2013). Beyond components of wellbeing: The effects of relational and situated assemblage. *Topoi*, 32(2), 137-144. <https://doi.org/10.1007/s11245-013-9164-0>
- Babbie, E. R. (2020). *The practice of social research*. Cengage Learning.
- Bakar, N. I. A., Mansor, M., & Harun, N. Z. (2014). Vertical greenery system as public art? Possibilities and challenges in Malaysian urban context. *Procedia-Social and Behavioral Sciences*, 153, 230-241. <https://doi.org/10.1016/j.sbspro.2014.10.057>
- Baker, T. L., & Risley, A. J. (1999). *Doing Social Research*. New York: McGraw-Hill.
- Ballas, D. (2013). What makes a 'happy city'?. *Cities*, 32, S39-S50. <https://doi.org/10.1016/j.cities.2013.04.009>
- Barraza, L. (1999). Children's drawings about the environment. *Environmental Education Research*, 5(1), 49-66. <https://doi.org/10.1080/1350462990050103>
- Barrett, J. (2010). "The Values of Public Art: A Comparative Analysis of New York City and Los Angeles". *Journal of Planning Education and Research*, 30(3), 282-294.
- Barton, H., Thompson, S., Burgess, S., & Grant, M. (Eds.). (2015). *The Routledge handbook of planning for health and well-being: Shaping a sustainable and healthy future*. Routledge.
- Basheka, B., & Moyo, T. (2015). *Ssentamu Julius*. [Unpublished doctoral dissertation]. Uganda Technology And Management University.

- Benita, F., Bansal, G., & Tunçer, B. (2019). Public spaces and happiness: Evidence from a large-scale field experiment. *Health & Place*, 56, 9-18. <https://doi.org/10.1016/j.healthplace.2019.01.014>
- Bland, D. (2012). Analysing children's drawings: applied imagination. *International Journal of Research & Method in Education*, 35(3), 235-242. <https://doi.org/10.1080/1743727X.2012.717432>
- Brajša-Žganec, A., Merkaš, M., & Šverko, I. (2011). Quality of Life and Leisure Activities: How do Leisure Activities Contribute to Subjective Well-Being?. *Social Indicators Research*, 102, 81–91. <https://doi.org/10.1007/s11205-010-9724-2>
- Bredenkamp, H. (2021). *Image acts: A Systematic Approach to Visual Agency*. De Gruyter: Munich, Germany. <https://doi.org/10.1515/9783110725827>
- Brennan, J. (2019). Public art and the art of public participation. *National Civic Review*, 108(3), 34-44.
- Bryson, A., & MacKerron, G. (2017). Are you happy while you work?. *The Economic Journal*, 127(599), 106-125. <https://doi.org/10.1111/ecoj.12269>
- Buckham, J. (2022). Teachers' understanding of children's drawing. In *The role of subject knowledge in the early years of schooling* (pp. 133-167). Routledge.
- Campkin, B., & Marshall, L. (2017). *LGBTQ+ cultural infrastructure in London: Night venues, 2006-present*. London: UCL Urban Laboratory.
- Carman, J., & Ballesteros-Pena, S. (2015). *Public art: A cultural history*. Chicago: University of Chicago Press.
- Carmona, M. (2010). Contemporary public space, part two: Classification. *Journal of Urban Design*, 15(2), 157-173. <https://doi.org/10.1080/13574801003638111>
- Carmona, M. (2010). Contemporary public space: Critique and classification, part one: Critique. *Journal of urban design*, 15(1), 123-148. <https://doi.org/10.1080/13574800903435651>
- Carmona, M., & Tiesdell, S. (Eds.). (2007). *Urban design reader*. Routledge.
- Carmona, M., & Wunderlich, F. M. (2013). *Capital spaces: The multiple complex public spaces of a global city*. Routledge.
- Carothers, T., & Gardner, H. (1979). When Children's Drawings Become Art: The Emergence of Aesthetic Production and Perception. *Developmental Psychology*, 15(5), 570-580. <https://doi.org/10.1037/h0078089>
- CDC, A. W. (2020). Centers for disease control and prevention.
- Chai, S. F., & Li, Y. (2019). Three dimensions of ideological and political education concerning happiness. *Thought Education Research*, (07), 20-25.

- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. sage.
- Chen, H., & Wang, L. (2019). The influence of public art on urban emotional experience: A case study of Tianjin. *International Journal of Art & Design Education*, 38(3), 495-504.
- Chen, S., Fan, Y., Cao, Y., & Khattak, A. (2019). Assessing the relative importance of factors influencing travel happiness. *Travel Behaviour and Society*, 16, 185-191.
- Chen, W. (2022). Public art in urban planning: A Chinese perspective. *Journal of Urban Cultural Studies*, 9(3), 234-248.
- Chick, G. (1998). Leisure and culture: Issues for an anthropology of leisure. *Leisure Sciences*, 20(2), 111-133. <https://doi.org/10.1080/01490409809512269>
- Coates, E., & Coates, A. (2006). Young children talking and drawing. *International Journal of Early Years Education*, 14(3), 221-241. <https://doi.org/10.1080/09669760600879961>
- Cochrane, T. (2008). Expression and extended cognition. *The Journal of Aesthetics and Art Criticism*, 66(4), 329-340. <https://doi.org/10.1111/j.1540-6245.2008.00314.x>
- Cohen, S. (2010). Public art and the public sphere. *Journal of Aesthetics & Culture*, 2(1), 1-15.
- Ćosić, K., Popović, S., Šarlija, M., & Kesedžić, I. (2020). Impact of human disasters and COVID-19 pandemic on mental health: potential of digital psychiatry. *Psychiatria Danubina*, 32(1), 25-31. <https://doi.org/10.24869/psyd.2020.25>
- Cranz, G. (1982). *The politics of park design: A history of urban parks in America* (p. 61). Cambridge, MA: MIT press.
- Creswell, J. W. (2003). *Research design : Qualitative, quantitative and mixed method approaches* (2nd ed.). Thousand Oaks: Sage Publications.
- Creswell, J. W. (2008). *Research design: qualitative, quantitative, and mixed method approaches*. California: SAGE Publishing Inc.
- Dang, Y., Chen, L., Zhang, W., Zheng, D., & Zhan, D. (2020). How does growing city size affect residents' happiness in urban China? A case study of the Bohai rim area. *Habitat International*, 97, 102120.
- Day, M., & Hurwitz, A. (2012). *Children and their art: Art education for elementary and middle schools*. Cengage Learning.
- De Rosnay, M. D., & Langlais, P. C. (2017). Public artworks and the freedom of panorama controversy: a case of Wikimedia influence. *Internet Policy Review*, 6(1).

- De Vaus, D. A. (2002). *Surveys in social research*. Crows Nest. New South Wales: Allen and Unwin..
- Deguara, J. (2015). *Meaning-Making in Young Children's Drawings [Unpublished doctoral dissertation]*. The University of Sheffield, Sheffield, UK.
- Denzin, N. K., & Lincoln, Y. S. (2013). *Collecting and interpreting qualitative material* (4th ed.). California: Sage Publications.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542. <https://doi.org/10.1037/0033-2909.95.3.542>
- Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being: The science of happiness and life satisfaction. *Handbook of Positive Psychology*, 2, 63-73.
- Dolan, P., & Metcalfe, R. (2012). Measuring subjective wellbeing: Recommendations on measures for use by national governments. *Journal of Social Policy*, 41(2), 409-427. <https://doi:10.1017/S0047279411000833>
- Dolan, P., & Metcalfe, R. (2012). The relationship between innovation and subjective wellbeing. *Research Policy*, 41(8), 1489-1498. <https://doi.org/10.1016/j.respol.2012.04.001>
- Donaldson, M. (2013). *A study of children's thinking*. Routledge.
- Du, J. (2021, November). Comparison between 3D animation design and 2D animation design. In *2021 3rd International Conference on Literature, Art and Human Development (ICLAHD 2021)* (pp. 336-340). Atlantis Press.
- Ebersbach, M., Stiehler, S., & Asmus, P. (2011). On the relationship between children's perspective taking in complex scenes and their spatial drawing ability. *British Journal of Developmental Psychology*, 29(3), 455-474. <https://doi.org/10.1348/026151010X504942>
- Eddington, N., & Shuman, R. (2005). Subjective well-being (happiness). *Continuing psychology education*, 6.
- Fan, Y., Brown, R., Das, K., & Wolfson, J. (2019). Understanding trip happiness using smartphone-based data: the effects of trip-and person-level characteristics. *Findings*. <https://doi.org/10.32866/7124>
- Fowler, F. J. (2008). *Survey Research Methods*. London: SAGE Publishing Inc.
- Franciscon, A., & Bovo, M. C. (2021). O ESPAÇO PÚBLICO NA CONTEMPORANEIDADE E NO FUTURO: O UTOPISMO QUANDO APLICADO. *Geo Uerj*, (39), 45132. <https://doi.org/10.12957/geouerj.2021.45132>
- Frank, L. D., & Engelke, P. O. (2001). The built environment and human activity patterns: exploring the impacts of urban form on public health. *Journal of Planning Literature*, 16(2), 202-218. <https://doi.org/10.1177/08854120122093339>

- Frey, B. S., Gallus, J., & Steiner, L. (2014). Open issues in happiness research. *International Review of Economics*, 61, 115-125. <https://doi.org/10.1007/s12232-014-0203-y>
- Fuller, S., & Atkinson, S. (2016). *Wellbeing and place*. Routledge.
- Garrard, J. (2016). *Health sciences literature review made easy*. Jones & Bartlett Publishers.
- Gehl, J. , & Gemzøe, L. (2004). *Public spaces - public life*. Arkitektens Forlag.
- Gilbert, E. A., Oishi, S. (2015). Current and future directions in culture and happiness research. *Current Opinion in Psychology*, 8, 54-58. <https://doi.org/10.1016/j.copsyc.2015.10.005>
- Golomb, C. (1992). *The child's creation of a pictorial world*. Berkeley: University of California Press.
- Gračanin, A., Zupan, G., & Kardum, I. (2015). The effects of childhood artwork on adult affective states: A function of self-transcendent values. *Journal of Happiness Studies*, 16(3), 639-655.
- Grodach, C. (2010). Art spaces, public space, and the link to community development. *Community Development Journal*, 45(4), 474-493. <https://doi.org/10.1093/cdj/bsp018>
- Guazon, T. M. (2013). Creative Mediations of the City: Contemporary Public Art as Compass of Metro Manila's Urban Conditions. *International Journal of Urban and Regional Research*, 37(3), 864-878. <https://doi.org/10.1111/j.1468-2427.2013.01211.x>
- Guinard, P., & Margier, A. (2018). Art as a new urban norm: Between normalization of the City through art and normalization of art through the City in Montreal and Johannesburg. *Cities*, 77, 13-20. <https://doi.org/10.1016/j.cities.2017.04.018>
- Guthrie, P. J. (1992). *The effect of development, manipulation of objects, and verbal cues on the spacial representation in young children's drawings*. University of Illinois at Urbana-Champaign.
- Hadavi, S., Kaplan, R., & Hunter, M. C. R. (2015). Environmental affordances: A practical approach for design of nearby outdoor settings in urban residential areas. *Landscape and Urban Planning*, 134, 19-32. <https://doi.org/10.1016/j.landurbplan.2014.10.001>
- Hall, T., & Robertson, I. (2001). Public art and urban regeneration: advocacy, claims and critical debates. *Landscape Research*, 26(1), 5-26. <https://doi.org/10.1080/01426390120024457>
- Hallam, J., Lee, H., & Das Gupta, M. (2014). Collaborative cognition: Co-creating children's artwork in an educational context. *Theory & Psychology*, 24(2), 166-185. <https://doi.org/10.1177/0959354314526088>

- Hand, C. (2018.) Do the arts make you happy? A quantile regression approach. *Journal of Cultural Economics*, 42, 271–286. <https://doi.org/10.1007/s10824-017-9302-4>
- He, S. F. (2009). Children's Painting and Modern Art.
- Helliwell, J. F., Huang, H., Wang, S., & Norton, M. (2020). *Statistical appendix for chapter 2 of World Happiness Report 2020*. New York: Sustainable Development Solutions Network.
- Helliwell, J. F., Layard, R., Sachs, J. D., De Neve, J.-E., Aknin, L. B., & Wang, S. (Eds.). (2022). *New York: Sustainable Development Solutions Network. World Happiness Report*.
- Hematian, H., & Ranjbar, E. (2022). Evaluating urban public spaces from mental health point of view: Comparing pedestrian and car-dominated streets. *Journal of Transport & Health*, 27, 101532.
- Hodgson, D. (2002). Canonical perspective and typical features in children's drawings: A neuroscientific appraisal. *British Journal of Developmental Psychology*, 20(4), 565-579. <https://doi.org/10.1348/026151002760390864>
- Horesh, D., & Brown, A. D. (2020). Traumatic stress in the age of COVID-19: A call to close critical gaps and adapt to new realities. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(4), 331–335. <https://doi.org/10.1037/tra0000592>
- Hou, G. D., Sun, M. K., Yang, S. J., Yu, L., & Li, R. (2021). The outbreak era under the national fitness function, task, and path of the study. *Journal of Liaoning Sports Science and Technology, The Lancet* (3), 1-5. [https://doi.org/10.13940 / j.carol carroll nki lntykj. 2021.03.001](https://doi.org/10.13940/j.carol carroll nki lntykj. 2021.03.001).
- Hu, Q. Q., & Zhang, C. (2021). Research on urban public space landscape design based on the concept of green development. *Smart Buildings and Smart Cities*, (09), 162-163.
- Hu, Z., & Chen, K. X. (2016). Urban Public Art Planning in Zoning. *China Building Decoration* (01), 110.
- Huang, J. M. (1994). *Percentage Art/ American Environmental Art*[M]. Taiwan: Taiwan Artists Publishing House.
- Huntsinger, C. S., Jose, P. E., Krieg, D. B., & Luo, Z. (2011). Cultural differences in Chinese American and European American children's drawing skills over time. *Early Childhood Research Quarterly*, 26(1), 134-145. <https://doi.org/10.1016/j.ecresq.2010.04.002>
- Ibrahim, R. (2011). Demystifying the arduous doctoral journey: The eagle vision of a research proposal. *Electronic Journal of Business Research Methods*, 9(2), 130-140.

- Ibrahim, R. (2020). *Thinking Tools: Navigating a Three-Year Phd Journey*. Partridge Publishing Singapore.
- Iijima, M., Arisaka, O., Minamoto, F., & Arai, Y. (2001). Sex differences in children's free drawings: a study on girls with congenital adrenal hyperplasia. *Hormones and Behavior*, 40(2), 99-104. <https://doi.org/10.1006/hbeh.2001.1670>
- Israel, G. D. (1992). *Determining sample size*. University of Florida Cooperative Extension Service, Institute of Food and Agriculture Sciences, EDIS, Florida.
- Jean, P., & Inhelder, B. (1956). *The Child's Conception of Space*. Psychology Press.
- Jie, X., Yunfeng, T., & Wenhao, J. (2021). Will Quantum Leadership Improve Employee Workplace Well-being in the Context of Epidemic Uncertainty? The Role of Person-Organization Fit and Emotional Exhaustion. *Journal of Shanghai University of Finance and Economics*, 23(01), 15-26.
- Jolley, R. P. (2009). *Children and pictures: Drawing and understanding*. John Wiley & Sons.
- Kaczynski, A. T., & Henderson, K. A. (2007). Environmental correlates of physical activity: a review of evidence about parks and recreation. *Leisure Sciences*, 29(4), 315-354.
- Kafashpor, A., Ghasempour Ganji, S. F., Sadeghian, S., & Johnson, L. W. (2018). Perception of tourism development and subjective happiness of residents in Mashhad, Iran. *Asia Pacific Journal of Tourism Research*, 23(6), 521-531. <https://doi.org/10.1080/10941665.2018.1476392>
- Kellogg, R. (1969). *Analyzing children's art*. McGraw-Hill Humanities, Social Sciences & World Languages.
- Kesebir, P., & Diener, E. (2008). In pursuit of happiness: Empirical answers to philosophical questions. *Perspectives On Psychological Science*, 3(2), 117-125. <https://doi.org/10.1111/j.1745-6916.2008.00069.x>
- Khorshidi, S. Z. M., & Mohammadipour, M. (2016). Children's drawing: A way to discover their psychological disorders and problems. *International Journal of Mental Health and Addiction*, 14(1), 31-36. <https://doi.org/10.1007/s11469-015-9607-5>
- Kim, J. (2019). Designing multiple urban space: an actor-network theory analysis on multiplicity and stability of public space. *Journal of Urban Design*, 24(2), 249-268. <https://doi.org/10.1080/13574809.2018.1468214>
- Kim, J., & Kaplan, R. (2004). Physical and psychological factors in sense of community: New urbanist Kentlands and nearby Orchard Village. *Environment and behavior*, 36(3), 313-340. <https://doi.org/10.1177/0013916503260236>
- Kimbell, L. L., & Cook, I. G. (2005). Public Art and Urban Regeneration: Advocating a Collaborative Approach. *Urban Studies*, 42(5-6), 985-999. <https://doi.org/10.1080/00420980500107560>

- Knight, C. K. (2011). *Public art: Theory, practice and populism*. John Wiley & Sons.
- Knight, C. K. (2013). *Public Art: Theory, Practice, and Populism*. Oxford: Wiley-Blackwell.
- Kozłowska, K., & Hanney, L. (2001). An art therapy group for children traumatized by parental violence and separation. *Clinical Child Psychology and Psychiatry*, 6(1), 49–78. <https://doi.org/10.1177/1359104501006001005>
- Krascum, R., Tregenza, C., & Whitehead, P. (1996). Hidden-feature inclusions in children's drawings: The effects of age and model familiarity. *British Journal of Developmental Psychology*, 14(4), 441-455. <https://doi.org/10.1111/j.2044-835X.1996.tb00717.x>
- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage publications.
- Kudryavtsev, V. T. (2011). The phenomenon of child creativity. *International Journal of Early Years Education*, 19(1), 45-53. <https://doi.org/10.1080/09669760.2011.570999>
- Kuo, F. E., & Sullivan, W. C. (2001). Aggression and violence in the inner city: Effects of environment via mental fatigue. *Environment and behavior*, 33(4), 543-571. <https://doi.org/10.1177/00139160121973124>
- Kwon, J., Lee, J., & Kang, J. (2018). The effects of public art on urban image and place identity. *Sustainability*, 10(8), 2892.
- Lai, P. C., & Low, C. T. (2019). Provision of convenient play space in a densely populated city. *International Journal of Environmental Research and Public Health*, 16(4), 651. <https://doi.org/10.3390/ijerph16040651>
- Lapin, L. L. (1994). *Quantitative methods for business decisions: with cases*. Wadsworth Publishing Company.
- Latham, A., & Layton, J. (2019). Social infrastructure and the public life of cities: Studying urban sociality and public spaces. *Geography Compass*, 13(7), e12444. <https://doi.org/10.1111/gec3.12444>
- Law, L., Azzali, S., & Conejos, S. (2021). Planning for the temporary: temporary urbanism and public space in a time of COVID-19. *Town Planning Review*, 92(1), 65-73.
- Layous, K., Nelson, S. K., Oberle, E., Schonert-Reichl, K. A., & Lyubomirsky, S. (2012). Kindness counts: Prompting prosocial behavior in preadolescents boosts peer acceptance and well-being. *Plos One*, 7(12), e51380. <https://doi.org/10.1371/journal.pone.0051380>
- Lee, H., & Heo, S. (2021). Arts and cultural activities and happiness: Evidence from Korea. *Applied Research in Quality of Life*, 16, 1637-1651. <https://doi.org/10.1007/s11482-020-09833-2>

- Leeds, J. A. (1989). The history of attitudes toward children's art. *Studies in Art Education*, 30(2), 93-103.
- Lei, Y. X., & Yang, W. H. (2021). Research on art aesthetics in public art design. *Beauty and Times (City Edition)*, (06), 54-55.
- Lester, S., & Russell, W. (2008). *Play for a change: Play, policy and practice: A review of contemporary perspectives*. London: National Children's Bureau.
- Li, L., Chen, H., & Li, H. (2020). The Role of Public Art in Shaping Urban Image and Identity: Evidence from China. *Sustainability*, 12(23), 9803.
- Li, X., & Chen, Y. (2020). Cultural constraints on public art in China: A socio-cultural analysis. *Journal of Chinese Art Studies*, 15(2), 134-149.
- Li, Y. (2020). Spatial planning strategies for responding to public health emergencies based on the concept of health and resilience. *Landscape Architecture*, 27(8), 114-119.
- Li, Y., Tao, Y. H., & Chen, Y. W. (2008). A Preliminary Study on the Percentage of Public Art Policies in Domestic Cities. *Planner*, 24(11), 55-59.
- Lin, Z. M. (2004). *Exploring the development of Taiwan's public arts through policy planning and implementation* [Master's Thesis, Chung Hsien University]. Huayi Online Library. <https://doi.org/10.6840/cycu200400728>
- Liu, F., & Yang, M. (2021). Public engagement in public art development in China. *International Journal of Urban Design*, 29(3), 210-225.
- Liu, G. C. (2019). On the application of children's painting in modern design, *Residence*, (12), 31-32.
- Liu, N. (2022). An Analysis of the Application of Traditional Chinese Patterns in Urban Public Space Landscape Design. *Flowers*, (14), 52-54.
- Liu, Y. (2020). Performance and architecture - On the development and status of public art in China. *Beauty and Times: Cities* (4), 57-58.
- Lowenfeld, V., & Lambert Brittain, W. (1980). *Desarrollo de la capacidad creadora*. Ed Kapelusz, Buenos Aires.
- Lu, L., & Gilmour, R. (2004). Culture and conceptions of happiness: Individual oriented and social oriented SWB. *Journal of Happiness Studies*, 5, 269-291. <https://doi.org/10.1007/s10902-004-8789-5>
- Lu, L., Koo, K., & Park, Y. (2021). Individualism, collectivism, and well-being: A cross-cultural examination of the mediating role of positive and negative affect. *Journal of Happiness Studies*, 22(3), 1033-1050.
- Luo, N., Ibrahim, R., & Abidin, S. Z. (2022). Transformation of children's paintings into public art to improve public spaces and enhance people's happiness. *International journal of environmental research and public health*, 19(24), 16780.

- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success?. *Psychological Bulletin*, 131(6), 803-855. <https://doi.org/10.1037/0033-2909.131.6.803>
- Madanipour, A. (1999). Why are the design and development of public spaces significant for cities?. *Environment and planning B: Planning and Design*, 26(6), 879-891. <https://doi.org/10.1068/b260879>
- Madanipour, A. (2003). *Public and private spaces of the city*. Routledge.
- Malchiodi, C. A. (1998). *Understanding children's drawings*. Guilford Press.
- Malchiodi, C. A. (2005). Art therapy. In C. A. Malchiodi (Ed.), *Expressive therapies* (pp. 16-45). Guilford Press.
- Malchiodi, C. A. (2018). *Understanding children's drawings*. New York: Guilford Press.
- Maranto, B. (2012). *Painting under the influence of children: The childlike art of Paul Klee and Pablo Picasso*. California State University, Dominguez Hills.
- Masiran, R., Ibrahim, N., Awang, H., & Lim, P. Y. (2020). Improving multicultural parenting program for children with emotional and behavioral problems: an integrated review. *Asian Journal of Psychiatry*, 51, 101851. <https://doi.org/10.1016/j.ajp.2019.101851>
- Matthews, J. (2003). *Drawing and painting: Children and visual representation*. Sage: Washington DC, US. <https://dx.doi.org/10.4135/9781446216521>
- McArdle, F., & Piscitelli, B. (2002). Early childhood art education: a palimpsest. *Australian Art Education*, 25(1), 11-15.
- McClure, M. (2011). Child as totem: Redressing the myth of inherent creativity in early childhood. *Studies in Art Education*, 52(2), 127-141.
- Mehaffy, M. W. (2021). Health and happiness in the new urban agenda: The central role of public space. *Sustainability*, 13(11), 5891. <https://doi.org/10.3390/su13115891>
- Melchionne, K., 2017. Art and Well-Being. *Estetika: The European Journal of Aesthetics*, 54(2), p.189-211. <https://doi.org/10.33134/eeja.163>
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass: A Willey Imprint.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation (4th ed.)*. San Francisco: John Wiley & Sons.
- Metin, S., & Aral, N. (2020). The Drawing Development Characteristics of Gifted and Children of Normal Development. *Cypriot Journal of Educational Sciences*, 15(1), 73-84. <http://doi.org/10.18844/cjes.v15i1.4498>

- Michalos, A. C. (2005). Arts and the quality of life: An exploratory study. *Social Indicators Research*, 71, 11-59. <https://doi.org/10.1007/s11205-004-8013-3>
- Milbrath, C. (2006). Children's drawings as measures of intellectual maturity. *Journal of Genetic Psychology*, 167(4), 387-404.
- Miles, M. (1997). *Art, space and the city: public art and urban futures*. Psychology Press.
- Miles, M. (2005). *Art, space and the city*. Routledge.
- Morrow Jr, J. R., Mood, D., Disch, J., & Kang, M. (2015). *Measurement and evaluation in human performance, 5E*. Human kinetics.
- Motoyama, Y., & Hanyu, K. (2014). Does public art enrich landscapes? The effect of public art on visual properties and affective appraisals of landscapes. *Journal of Environmental Psychology*, 40, 14-25. <https://doi.org/10.1016/j.jenvp.2014.04.008>
- Mu, S. L. (2020) Research on the optimization of the layout of urban community public facilities under the guidance of green development——Taking Beijing as an example. *Rural Economy and Technology*, 31(13): 303-305+320.
- Myllyntaus, O. (2012). Visual Arts Education Reasoning the Acquisition and Placement of Public Sculptures—Case of the Public Sculptures of the Jyväskylä City Art Collection in 1977-2007. *Procedia-Social and Behavioral Sciences*, 45, 605-614. <https://doi.org/10.1016/j.sbspro.2012.06.598>
- Nan, C. N. (2008). Children's Art and Western Modernist Painting. *Literary Forum*, (24), 142-144.
- Newman, D. B., Tay, L., Diener, E. (2013). Leisure and Subjective Well-Being: A Model of Psychological Mechanisms as Mediating Factors. *Journal of Happiness Studies*, 15, 555–578. <https://doi.org/10.1007/s10902-013-9435-x>
- Noda, Y. (2020). Socioeconomical transformation and mental health impact by the COVID-19's ultimate VUCA era: Toward the New Normal, the New Japan, and the New World. *Asian Journal of Psychiatry*, 54, 102262. <https://doi.org/10.1016/j.ajp.2020.102262>
- Orsetti, E., Tollin, N., Lehmann, M., Valderrama, V. A., & Morató, J. (2022). Building resilient cities: climate change and health interlinkages in the planning of public spaces. *International journal of environmental research and public health*, 19(3), 1355.
- Pan, Y. (2012). Contemporary public art in the perspective of ecological civilization. *Writer*, (08), 259-260.
- Papachristou, I. A., & Rosas-Casals, M. (2019). Cities and quality of life. Quantitative modeling of the emergence of the happiness field in urban studies. *Cities*, 88, 191-208. <https://doi.org/10.1016/j.cities.2018.10.012>

- Park, S. D. (2022). Policy discourse among the Chinese public on initiatives for cultural and creative industries: text mining analysis. *Sage Open*, 12(1), 21582440221079927.
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage publications.
- Perry, L. (2014). The music of painting. *The American Scholar*, 83(3), 85-93.
- Phalle, N.D.S., & Tinguely, J. LaFontaine Stravinsky. (1983). Available online: [https://en.wikipedia.org/wiki/File:Niki_de_Saint_Phalle_et_Jean_Tinguely,_Fontaine_Stravinsky_%E2%80%93_Fontaine_des_automates,_1983_\(48631439282\).jpg](https://en.wikipedia.org/wiki/File:Niki_de_Saint_Phalle_et_Jean_Tinguely,_Fontaine_Stravinsky_%E2%80%93_Fontaine_des_automates,_1983_(48631439282).jpg) (accessed on 8 August 2022).
- Powdthavee, N. (2015). Would You Like to Know What Makes People Happy? An Overview of the Datasets on Subjective Well-Being. *The Australian Economic Review*, 48, 314–320. <https://doi.org/10.1111/1467-8462.12105>
- Pretty, J., Peacock, J., Hine, R., Sellens, M., South, N., & Griffin, M. (2007). Green exercise in the UK countryside: Effects on health and psychological well-being, and implications for policy and planning. *Journal of environmental planning and management*, 50(2), 211-231. <https://doi.org/10.1080/09640560601156466>
- Pri, L.R. Dragon. (2021). Available online: <http://izarutkowska.com/en/the-dragon/> (accessed on 8 August 2022).
- Pri, L.R. Hedgehog. (2015). Available online: <http://izarutkowska.com/en/everyones-backyard/> (accessed on 8 August 2022).
- Qiao, Q. (2020). *Public Art Design*. China Architecture Press: Beijing, China.
- Qin, J. M., Wang, Y., Li, C. M., He, H., & Zhan, G. H. (2020). The psychological state and influencing factors of psychiatric medical personnel under the novel coronavirus pneumonia epidemic. *Chinese Journal of Health Psychology* (9) , 1369-1373. <https://doi.org/10.13342/j.cnki.cjhp.2020.09.021>.
- Raman, P. G. (2008). Modernism, public space and public art. *South African Journal of Art History*, 23(1), 245-257.
- Remesar, A. (2020). Public Art in Urban Regeneration. Piotrkowska street. Pride of a city: Łódź. *On the Waterfront, Public Art. Urban Design. Civic Participation. Urban Regeneration*, 62(5), 29-78. <https://doi.org/10.1344/waterfront2020.62.6.8>
- Reynolds, F. (2010). Colour and communion: Exploring the influences of visual art-making as a leisure activity on older women's subjective well-being. *Journal of Aging Studies*, 24(2), 135-143. <https://doi.org/10.1016/j.jaging.2008.10.004>
- Robidoux, M., & Kovacs, J. F. (2018). Public art as a tool for environmental outreach: Insights on the challenges of implementation. *The Journal of Arts Management, Law, and Society*, 48(3), 159-169. <https://doi.org/10.1080/10632921.2018.1450315>

- Robinson, J. P., & Martin, S. (2008). What do happy people do?. *Social Indicators Research*, 89, 565-571. <https://doi.org/10.1007/s11205-008-9296-6>
- Rojas, M. (2005). A conceptual-referent theory of happiness: Heterogeneity and its consequences. *Social Indicators Research*, 74, 261-294. <https://doi.org/10.1007/s11205-004-4643-8>
- Rong, X. (2020). Interactive Design of Urban Public Art. *Urban Public Art Research*, 62-63.
- Rubenstein, L. D., Ridgley, L. M., Callan, G. L., Karami, S., & Ehlinger, J. (2018). How teachers perceive factors that influence creativity development: Applying a Social Cognitive Theory perspective. *Teaching and Teacher Education*, 70, 100-110. <https://doi.org/10.1016/j.tate.2017.11.012>
- Rung, H. (2018). The “Curated” City—Art in Public Space. In *Porous City* (pp. 114-118). Birkhäuser.
- Russell, R. (2004). A beginner's guide to public art. *Art Education*, 57(4), 19-24. <https://doi.org/10.1080/00043125.2004.11653555>
- Saelens, B. E., & Handy, S. L. (2008). Built environment correlates of walking: a review. *Medicine and science in sports and exercise*, 40(7 Suppl), S550.
- Salkind, N. J. (2009). *Statistics for People Who (Think They) Hate Statistics* 2(1). California: SAGE.
- Schuermans, N., Loopmans, M. P., & Vandenabeele, J. (2012). Public space, public art and public pedagogy. *Social & Cultural Geography*, 13(7), 675-682. <https://doi.org/10.1080/14649365.2012.728007>
- Seale, C. (2002). Quality issues in qualitative inquiry. *Qualitative Social Work*, 1(1), 97-110. <https://doi.org/10.1177/147332500200100107>
- Shan, S. L. (2014). Chinese cultural policy and the cultural industries. *City, Culture and Society*, 5(3), 115-121.
- Sharifi, F., Levin, I., Stone, W. M., & Nygaard, A. (2021). Green space and subjective well-being in the Just City: A scoping review. *Environmental Science & Policy*, 120, 118-126. <https://doi.org/10.1016/j.envsci.2021.03.008>
- Shen, L., & Li, J. (2019). Public Art and Urban Development: A Comparative Study of Hangzhou and Los Angeles. *Journal of Urban Planning and Development*, 145(3), 05019005.
- Shi, H. (2019). *Subjective well-being of Shenzhen residents and its influencing factors* [Unpublished master dissertation]. Shenzhen University .<https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202002&filename=1019908942.nh>.
- Shimeng Y. (2017) Talking about the characteristics of preschool children's painting. *Western Leather*, (02), 241.

- Silaci, I., & Ebringerova, P. (2019). New interpretation of public visual art in urban space. *In IOP Conference Series: Materials Science and Engineering* (Vol. 471, No. 9, p. 092038). IOP Publishing.
- Silverman, D. (2013). *Doing qualitative research (4th ed.)*. London: Sage Publication.
- Smith, A., Vodicka, G., Colombo, A., Lindstrom, K. N., McGillivray, D., & Quinn, B. (2021). Staging city events in public spaces: An urban design perspective. *International Journal of Event and Festival Management*, *12*(2), 224-239. <https://doi.org/10.1108/IJEFM-10-2020-0063>
- Sommer, L. K., Swim, J. K., Keller, E., & Klöckner, C. A. (2019). "Pollution Pods": The merging of art and psychology to engage the public in climate change. *Global Environmental Change*, *59*, 101992. <https://doi.org/10.1016/j.gloenvcha.2019.101992>
- Song, Y., Li, M., Zhang, M. & Sun, X. (2019). Study on the impact of air pollution control on urban residents' happiness from microscopic perspective. *Journal of Cleaner Production*, *229*, 1307-1318.
- Soylu, B., Ünüvar, P., & Çivik, S. P. (2015). Lineal development characteristics of preschool children paintings. *Procedia-Social and Behavioral Sciences*, *174*, 687-692. <https://doi.org/10.1016/j.sbspro.2015.01.602>
- Stein, J., Luppá, M., König, H. H., & Riedel-Heller, S. G. (2015). The German version of the Camberwell Assessment of Need for the Elderly (CANE): evaluation of content validity and adaptation to the German-speaking context. *International Psychogeriatrics*, *27*(11), 1919-1926. <https://doi.org/10.1017/S104161021500054X>
- Stigsdotter, U. A., & Grahn, P. (2004). A garden at your workplace may reduce stress. *Design & Health*, 147-157.
- Suh, E. M. (2002). Culture, identity consistency, and subjective well-being. *Personality and Social Psychology*, *83*(6), 1378-1391. <https://psycnet.apa.org/doi/10.1037/0022-3514.83.6.1378>
- Suh, E., Diener, E., & Fujita, F. (1996). Events and subjective well-being: only recent events matter. *Journal of Personality and Social Psychology*, *70*(5), 1091-1102. <https://psycnet.apa.org/doi/10.1037/0022-3514.70.5.1091>
- Sun, S.; Hu, X.; Wang, W. (2010). *Public Art*; Shandong Fine Arts Publishing Press: Jinan, China.
- Taşdan, A. B., & Güneş, G. (2018). Children's epistemological views according to their learning centre preferences. *Education 3-13*, *46*(7), 802-813. <https://doi.org/10.1080/03004279.2017.1365094>.
- Teddle, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, *1*(1), 77-100. <https://doi.org/10.1177/1558689806292430>

- Teli, M., Bordin, S., Blanco, M. M., Orabona, G., & De Angeli, A. (2015). Public design of digital commons in urban places: A case study. *International Journal of Human-Computer Studies*, 81, 17-30. <https://doi.org/10.1016/j.ijhcs.2015.02.003>
- Thomas, G. V., & Silk, A. M. (1990). *An introduction to the psychology of children's drawings*. New York University Press.
- Thomas, K. E. (2013). The impact of art on pediatric patients: A literature review. *Art Therapy*, 30(4), 192-197.
- Thomson, G., Bilson, A., Dykes, F., & Flacking, R. (2018). Opening doors to qualitative research with children: Participatory methods in early childhood spaces. *International Journal of Qualitative Methods*, 17(1). <https://doi.org/10.1177/1609406918797626>
- Toku, M. (2001). Cross-cultural analysis of artistic development: Drawing by Japanese and US children. *Visual Arts Research*, 27(1), 46-59.
- Trochim, W., & Donnelly, J. (2001). *The Research Methods Knowledge Base (Vol.1)*. New York: SAGE.
- Troy, A. R., Grove, J. M., O'Neil-Dunne, J. P., Pickett, S. T., & Cadenasso, M. L. (2007). Predicting opportunities for greening and patterns of vegetation on private urban lands. *Environmental Management*, 40, 394-412. <https://doi.org/10.1007/s00267-006-0112-2>
- Tuman, D. M. (1999). Gender style as form and content: An examination of gender stereotypes in the subject preference of children's drawing. *Studies in Art Education*, 41(1), 40-60.
- Turgeon, W. C. (2014). Portrait of the Child as a Young Artist. In *Conflicts in Childhood* (pp. 189-196). Brill. https://doi.org/10.1163/9781848883956_016
- Turkcan, B. (2013). Semiotic Approach to the Analysis of Children's Drawings. *Educational Sciences: Theory and Practice*, 13(1), 600-607.
- Ujang, N. (2008). *Place attachment towards shopping districts in Kuala Lumpur city centre, Malaysia* (Doctoral dissertation, Universiti Putra Malaysia).
- Van Meeteren, L., & Wissink, B. (2019). Public art in the private city: Control, complicity and criticality in Hong Kong. *Open Philosophy*, 2(1), 280-298. <https://doi.org/10.1515/opphil-2019-0020>
- Veitch, J., Ball, K., Crawford, D., & Abbott, G. (2012). Is park visitation associated with leisure-time and transport-related physical activity?. *Preventive Medicine*, 55(6), 562-564.
- Walker, W. (2005). The strengths and weaknesses of research designs involving quantitative measures. *Journal of Research in Nursing*, 10(5), 571-582. <https://doi.org/10.1177/136140960501000505>

- Wang Ke, Shao Yinglu, Li Xinyang, Wang Yiqi, Ye Qing, Wang Yawen. (2020). Research on the Implementation Strategy of Urban Public Space Planning and Design Based on Urban Design System. *Urban Development Research*, 27(04), 82-89.
- Wang, D. H. (2012). *Current Situation, Problems and Countermeasures of Contemporary Public Art in China* [Unpublished doctoral dissertation]. China Academy of Art.
- Wang, H. (2018). Governmental regulations and public art in China. *Art and Policy Review*, 12(1), 45-60.
- Wang, H. K. (2017). Reflections on the Impact of Public Art on Cities and Life. *Art Criticism*, (02), 182-184.
- Wang, L. K. (2020). *Research on the Design of Children's Painting Art and Creative Products* [Unpublished master dissertation]. Beijing Printing Institute, Beijing, China.
- Wang, M. Y. & Liu J. W. (2019). Research on interactive design of urban public art. *Design*, 14, 144-146.
- Wang, X. M., Liu, Z. L., & Tan, Y. L. (2022). Research on cross-group integration of urban public space and migration: A review of research from the perspective of temporal and spatial behavior. *Human Geography* 37(06), 47-55. doi:10.13959/j.issn.1003-2398.2022.06.006
- Wang, Y., Huang, X. J., & Yu, Q. (2015). *Urban public art works design*. Chemical Industry Press.
- Wang, Z. (2007). *Introduction to Public Art*. Beijing: Peking University Press.
- Węziak-Białowolska, D., Białowolski, P., & Sacco, P. L. (2019). Involvement with the arts and participation in cultural events—Does personality moderate impact on well-being? Evidence from the UK Household Panel Survey. *Psychology of Aesthetics, Creativity, and the Arts*, 13(3), 348–358. <https://doi.org/10.1037/aca0000180>
- Wheatley, D., & Bickerton, C. (2017). Subjective well-being and engagement in arts, culture and sport. *Journal of Cultural Economics*, 41, 23-45. <https://doi.org/10.1007/s10824-016-9270-0>
- White, A., & Xu, S. (2012). A critique of China's cultural policy and the development of its cultural and creative industries: the case of Shanghai. *Cultural Trends*, 21(3), 249-257.
- Whitebread, D., & Leeder, L. (2003). Sequencing and differentiation in young children's drawings. *Early Years: An International Journal of Research and Development*, 23(2), 155-176. <https://doi.org/10.1080/09575140303108>
- Willats, J. (2006). *Making sense of children's drawings*. Psychology Press.

- Wollheim, R. (2023). *Painting as an Art* (Vol. 33). Princeton University Press.
- World Health Organization (Ed.) (2020). *WHO Director-General's opening remarks at the mission briefing on COVID-19*. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.
- World Health Organization (Ed.) (2020). *Mental health and psychosocial considerations during the COVID-19 outbreak, 18 March 2020* (No. WHO/2019-nCoV/MentalHealth/2020.1).
- Wright, S. (2010). *Understanding Creativity in Early Childhood: Meaning-Making and Children's Drawing*. Sage.
- Wright, S. (2012). Arts education as a collective experience. *Children, Meaning-Making and the Arts*, 194-225. Pearson Higher Education AU.
- Wright, S. (2015). *Children, meaning-making and the arts*. Pearson Higher Education AU.
- Wu, D. Y. (2015). Integration and Evolution: On the Development of Chinese Public Art. *Decoration*(11), 20-26. doi:10.16272/j.cnki.cn11-1392/j.2015.11.006
- Wu, F. (2017). China's Emerging Public Spaces. *Urban Studies*, 54(4), 809-827. <https://doi.org/10.1177/0042098015615384>.
- Wu, S. X. (2005). *Research on Contemporary Public Art in China* [Unpublished doctoral dissertation]. China Academy of Art.
- Xu, L. (2018). How to enhance the artistic value of children's paintings. *Art Lit*, 1, 79–80.
- Xu, L., Zhang, G. Q., Wang, X. X., & Kong, Z. (2024). Research on the design of urban public space accessibility from the perspective of combating sociality. *Design*, 9, 917.
- Xu, N. (2021). A review of urban public space research from a multidisciplinary perspective. *Landscape Architecture*, 28(4), 52-57.
- Yan Hong, Y.(2019). Research Progress on the Expressive Development of Children's Drawings. *Fine Arts Education Research*, 12-13.
- Yan, Z., Wu, W., & Cheng, D. (2017). *Public Art Design*. China Architecture & Building Press: Beijing, China.
- Yanrong, W. (2015). Research on the Interactive Design of Public Art and Urban Landscape in Xianning Urban District in the Context of Regional Culture. *Journal of Hubei University of Science and Technology*, 35, 31-36.
- Ye, M. (2005). Paul Klee paints with children.2005. *Beauty and the Age*, (12) , 95-96.

- Ye, Z. Q. (2012). Harmony and Synchronization between Public Art and City Design. *Art Hundreds*, (06), 239-240.
- Yilmaz, Z., Kubiato, M., & Topal, H. (2012). Czech Children's Drawing of Nature. *Educational Sciences: Theory and Practice*, 12(4), 3111-3119.
- Yin, R. K. (2003). Designing case studies. *Qualitative research methods*, 5(14), 359-386.
- Yin, R. K. (2003). *Case Study Research Design and Methods* (Vol. I). New Delhi: SAGE Publication.
- Yin, R. K. (2014). *Case study research: Design and methods (applied social research methods)* (p. 312). Thousand Oaks, CA: Sage publications.
- Zabawa-Krzywicka, J., & Groń, K. (2020, December). Art in the Public Space, Different Aspects of Artistic Activities in Architecture. *In IOP Conference Series: Materials Science and Engineering*, 960(3), 032090. <https://doi.org/10.1088/1757-899X/960/3/032090>
- Zebracki, M. (2013). Beyond public artopia: public art as perceived by its publics. *GeoJournal*, 78(2), 303-317. <https://doi.org/10.1007/s10708-011-9440-8>
- Zha, C. C. (2020). The role of color in children's painting. *Art Appraisal*, 150-151.
- Zhang, G. Q. & Veenhoven, R. (2008). Ancient Chinese philosophical advice: Can it help us find happiness today?. *Journal of Happiness Studies*, 9, 425-443. <https://doi.org/10.1007/s10902-006-9037-y>
- Zhang, L., & Su, Y. (2018). Formation and influence of new media art form in public space. *In Design, User Experience, and Usability: Users, Contexts and Case Studies: 7th International Conference, DUXU 2018, Held as Part of HCI International 2018, Las Vegas, NV, USA, July 15–20, 2018, Proceedings, Part III 7* (pp. 550-560). Springer International Publishing.
- Zhang, L., & Tan, P. Y. (2019). Associations between urban green spaces and health are dependent on the analytical scale and how urban green spaces are measured. *International journal of environmental research and public health*, 16(4), 578. <https://doi.org/10.3390/ijerph16040578>
- Zhang, S. Q. (2020). The Impact of Art Participation on Individual Subjective Well-being: Empirical Evidence Based on the China Comprehensive Social Survey (CGSS 2015). *Jinan Journal (Philosophy and Social Sciences Edition)*, (06), 121-132.
- Zhao, C. T.(2015). Modern artist and Children's art.
- Zhao, Z. H. (2015). Contemporary Public Art Research.
- Zhao, Z. H. (2015). Open Space and Pluralism, Patterns and Scenes of Contemporary Public Art. *New Art*, (09), 100-106.

Zhou, Y., Chen, W., & Hu, T. (2021). Social comparison and subjective well-being: The moderating role of social identity. *Journal of Happiness Studies*, 22(1), 155-17.

Zinalabedini, P., & Bahreman, D. (2023). The Use of Children's Drawings in Structure, Character and Concept Design of Animation (A case study: Farshid Shafiei's and Mahdiyar's selected art works). *Journal of Fine Arts: Performing Arts & Music*, 28(4), 19-33.

