

Zentangle Art to Improving Mental Health: A Scoping Review

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ABSTRACT

Background: Due to its increasing incidence, mental health has become a global concern in recent years. Therefore, academics, practitioners, and researchers have been searching for the best approach to mental well-being that will affect mental health. Art therapy has long been used as a tool to improve mental health. However, not all forms of art therapy are suitable for everyone. Zentangle, a method of drawing repetitive patterns, has attracted attention as one form of art therapy that is easy to learn and practice.

Objectives: To explore the effectiveness of Zentangle in improving mental health.

Methods: This review uses a Scoping Review using 3 databases: ProQuest, PubMed and ScienceDirect. The exclusion criteria are systematic review, scoping review and literature review. Of the 15 articles found, 6 were included in the inclusion criteria, which were then used as material for discussion in this article. **Discussion:** Findings from 6 articles show that Zentangle therapy can improve cognitive focus and emotional well-being, effectively alleviate Stress and lessen feelings of frustration, reduce symptoms of depression, foster compassion and encourage positive emotions. **Conclusions:** Zentangle therapy can foster positive emotions such as gratitude and self-achievement, improving physical, mental and spiritual well-being and thus positively affecting mental health.

Keywords: Health and Well-Being, Mental Health, SDGs, Zentangle

INTRODUCTION

Mental health has increasingly emerged as a critical global concern in recent decades (Limenih et al., 2024; Nochaiwong et al., 2021). According to a WHO report, over 264 million people worldwide suffer from depression (WHO, 2017). Researchers and health practitioners continually seek effective, accessible, sustainable alternative solutions to enhance mental health (Greene et al., 2021; Nejade et al., 2022).

Mental health is one of the important aspects in achieving everyone's well-being (Bodeker et al., 2020). Therefore, health promotion activities are important in preventing mental disorders in the community. Health promotion is a process to increase a person's control, and improve their health to achieve physical, mental and social well-being (Ottawa Charter for Health Promotion, 1986). Health promotion can be achieved by enhancing individual skills, which is

essential for maintaining mental well-being as a preventive measure against mental disorders (Ottawa Charter for Health Promotion, 1986). This can be supported by providing mental health information, educating the public about mental health, and developing life skills.

One alternative method to enhance individual skills for mental health prevention is practicing Zentangle. Zentangle is a simple, repetitive drawing technique with the potential to offer therapeutic effects (Chung et al., 2022; Hsu et al., 2021). Zentangle was developed by Maria Thomas and Rick Roberts in 2003 to provide a relaxing experience through the stress-free repetition of patterns (Hsu et al., 2021). Zentangle requires no special artistic skills, making it accessible to anyone as a form of self-expression that promotes mental well-being. By blending mindfulness and art, Zentangle is known to help reduce Stress, enhance focus, and cultivate a sense of accomplishment and

calm (Sit et al., 2022; Usman & Lin, 2023).



Figure 1. Example of a zentangle by Sue Jacobs (McNeill & Shepard, 2021)

While evidence suggests the effectiveness of Zentangle, there are few systematic studies that synthesize existing Research to comprehensively assess its impact on mental health. Therefore, this study aims to investigate the effectiveness of Zentangle in improving mental health, particularly in reducing Stress and anxiety. This study hopes to position Zentangle as a valuable method within a holistic approach to mental health enhancement by gaining a deeper understanding of its potential.

METHODS

The scoping review method was used in this review to map and provide a broad overview. This review was conducted by searching ProQuest, Pubmed and ScienceDirect databases. The main search keys were 'Zentangle' and 'Mental health'. The articles used were articles from the last 5 years with full-text articles. The exclusion criteria were systematic review, scoping review and literature review.

The search results from 3 databases produced 21 articles, of which the title and abstract were read as selection material. Then, 15 articles were excluded, so 6 articles were filtered. All articles were read to be discussed in this article.

RESULTS AND DISCUSSION

The findings from six journals on the effectiveness of Zentangle in enhancing mental health demonstrate that Zentangle is beneficial in reducing and alleviating Stress, increasing self-efficacy, improving cognitive focus, facilitating emotional expression, fostering gratitude, and enhancing overall mental well-being (Table 1).

Table 1. Results of Scoping Review

No.	Article Title, Author, Year	Research Purposes	Material and Method	Grand Theory, Result	Conclusion
1.	The effect of Zentangle on cognitive focus, emotional well-being, and stress levels: A neural perspective Muhammad Usman, Tzzy-Ping Jung, Ding-Yun Hsin, Chun-Ling Lin 2024	This study assessed how a Zentangle intervention influences cognitive focus, emotional well-being, stress levels, and neural activity patterns across brain regions and frequency bands.	A cohort of 30 healthy adults, all without prior Zentangle experience, participated in this study. Electroencephalography (EEG) was used to measure their activity, and self-reported data were collected through questionnaires to subjects' concentration levels, emotional calm, and Stress and anxiety.	Participants reported enhanced cognitive focus and emotional well-being, evidenced by increased self-reported concentration and emotional calmness and reduced Stress and anxiety levels during the intervention. EEG analyses revealed notable changes in neural activity patterns, including	This study provides compelling evidence of Zentangle's impact on EEG data, aligning it with equanimity and tranquility consistent with previous mindfulness research. These findings underscore Zentangle as an effective mindfulness practice, potentially enhancing cognitive focus and emotional well-being and

			decreased delta power and increased theta, alpha, beta, and gamma bands. Functional connectivity analysis also highlighted alterations in the brain's functional connectivity, suggesting potential effects for neural communication and information processing.	emerging as a valuable intervention for improving mental health and overall well-being.	
2.	Effects of Zentangle art workplace health promotion activities on rural healthcare workers	This study sought to improve rural healthcare workers' physical and mental well-being through an intervention utilizing Zentangle.	This was a quasi-experimental pilot study. A Zentangle art workshop was held from November 2019 to July 2020, and 40 healthcare workers were recruited to participate. Participants provided baseline data, and the Brief Symptom Rating Scale, a self-assessment scale for work stress management effectiveness, the General Self-Efficacy Scale, and the Workplace Spirituality Scale were administered both before and after the workshop. Data analysis was conducted using SPSS 22.0 statistical software.	The median age of participants was 32.00 years (interquartile range [IQR]: 23.00-41.75 years). The Wilcoxon signed-rank test indicated that the median (IQR) post-intervention score was lower than the pre-intervention score (P = 0.004). Similarly, the post-intervention score for the work stress management effectiveness self-rating scale was 36.5 (31.0-40.0), also lower than the pre-intervention score (P = 0.009). Higher scores on the GSES or WSS reflected improvements in stress management and self-efficacy.	The study shows that painting therapy can effectively reduce Stress, diminish workplace tension and frustration, boost self-efficacy, and strengthen work commitment among healthcare workers, thereby improving their physical, mental, and spiritual well-being.
	M.f. Hsu, C. Wang, S.J. Tzou, T.C. Pan, P.L. Tang 2021				

<p>3. Mixed-mode Zentangle and Pastel Nagomi artwork for improving mental well-being in university students during COVID-19 pandemic - a randomized controlled feasibility trial</p> <p>Cheung. K, et al 2023</p>	<p>To fill the research gap by assessing the feasibility and estimating the initial effects of Zentangle and Pastel Nagomi's impact on the mental well-being of undergraduate students during the COVID-19 pandemic.</p>	<p>This three-arm randomized controlled trial included 33 undergraduate students divided into two 8-week art groups and a control group. Data were collected at baseline and weeks 4, 6, 8, and 12. Focus group interviews were held during the 12-week follow-up.</p>	<p>The Pastel Nagomi art group showed a significant improvement in sustaining positive feelings by weeks 6 and 12, while the Zentangle group saw a significant reduction in depression by week 8. Qualitative results revealed that participants found joy in the art-making process and felt a sense of pride in their creations and personal growth.</p>	<p>The study indicates that both art forms effectively enhance undergraduates' mental well-being.</p>
<p>4. Effects of the original zentangle method on older adults with depressive symptoms a randomized waitlist-controlled trial</p> <p>Henri Chun-Yiu Chan, Herman Hay-Ming Lo 2023</p>	<p>This study aims to evaluate the impact of Zentangle on older adults residing in the community.</p>	<p>A randomized waitlist-controlled trial was carried out to assess the effects of Zentangle. Forty-six older adults living in the community experiencing mild to moderate depression were recruited and randomly assigned to either a six-session Zentangle group or a waitlist control group. Outcomes were measured by comparing the participants who completed the six-week Zentangle intervention with those in the waitlist group.</p>	<p>A repeated measures ANOVA showed significant Time x Group interactions for both depression ($F(2, 88) = 21.29, p < .001$) and self-compassion ($F(2, 88) = 18.50, p < .001$), with a large effect size. The improvements were maintained at the six-week follow-up.</p>	<p>The Zentangle method aids in reducing depressive symptoms and fostering self-compassion.</p>
<p>5. A nursing intervention based on the Zentangle method: Experiences of patients diagnosed with borderline personality disorder</p> <p>Ana Morales-Alonso, Angela Iglesias-de-la-Iglesia,</p>	<p>This study aimed to examine the experience of practising Zentangle in individuals with BPD.</p>	<p>Employing a phenomenological interpretative approach, this qualitative study carried out semi-structured interviews with fifteen Patients over six sessions over six months in a Personality Disorders Unit. Data analysis was conducted using the Smith, Flowers, and Larkin method.</p>	<p>Our findings identified three main categories: "As you sow, so shall you reap", "Many hands make light work", and "Drawing your own path."</p>	<p>By practising Zentangle, patients cultivate behavioural responses such as flexibility and adaptability, which lead to enhanced emotional well-being through anxiety management, impulse control, problem-solving, and</p>

6.	<p>Miriam Alonso-Maza 2024</p> <p>Exploring Zentangle as a virtual mindfulness-based art intervention for people with serious mental illness</p> <p>Stojcevski M et al 2023</p>	<p>To explore the use of Zentangle as a possible adjunct treatment for individuals with serious mental illness.</p>	<p>Six individuals with serious mental illness participated in an eight-week Zentangle program. Psychiatric outcomes were evaluated using the Brief Psychiatric Rating Scale, Perceived Stress Scale, Mindful Attention Awareness Scale, and the Quality of Life Enjoyment and Satisfaction Scale.</p>	<p>A notable decrease in psychiatric symptoms was observed, as shown by the total score on the BPRS from baseline to five weeks post-intervention (40.7 ± 9.1 vs. 33.7 ± 8.9, mean \pm SD, $p = 0.02$). Four themes emerged from the focus group: engaging with mindfulness through Zentangle, the impact of simple art creation, acknowledging the significance of recognition of self-worth, and cultivating a supportive environment.</p>	<p>improved self-esteem and concentration. Our initial data indicate that Zentangle may positively influence overall psychiatric symptoms and mindfulness in participants with serious mental illness.</p>
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Reduce and Relieve Stress or frustration.

Stress is a person's response to a stressor, an environment or event that threatens or challenges the individual and strains their coping capacity (Savira et al., 2021). Some factors that can cause Stress include noise, conflict, and age (Yulia Handayani et al., 2022). In a study by Hsu et al. (2021), a self-assessment scale was used to measure the effectiveness of work stress management, revealing that psychological distress and work-related Stress were reduced (Savira et al., 2021). This aligns with Henri Chun's Research; This indicates that Zentangle is a viable alternative treatment for older adults experiencing mild to moderate depression (Chan & Lo, 2024).

Enhance self-efficacy

Self-efficacy is a person's confidence in their capability to tackle or accomplish a task (Mawaddah, 2021). High self-anxiety can result from low self-efficacy; studies indicate a relationship

between self-efficacy and anxiety levels, particularly in thesis preparation. Students with high self-efficacy tend to experience lower anxiety and vice versa (Saraswati et al., 2021). According to the study by Hsu et al. (2021), Zentangle therapy can significantly boost healthcare professionals' self-efficacy and dedication to work, ultimately enhancing their physical, mental, and spiritual well-being (Hsu et al., 2021). However, these findings contrast with another study that suggests self-efficacy is not related to student stress levels (Andi Pramesti Ningsih, 2024).

Improving Cognitive Focus

Cognition refers to intellectual potential, encompassing stages such as knowledge, understanding, application, analysis, synthesis, and evaluation. The cognitive domain involves mental activities (Zega & Suprihati, 2021). Research has shown that Zentangle effectively enhances cognitive focus (Usman et al., 2024). Additionally, other

studies indicate that practising Zentangle can improve concentration (Morales-Alonso et al., 2024).

Expressing Emotions

Emotions are the internal responses we experience in reaction to life events. Like family members, emotions are an intrinsic part of us that cannot be denied or ignored (Zulfikar, 2020). Humans convey emotions through various means, including facial expressions, vocal tones, physiological changes, body movements, gestures, and emotional actions (Oktavilia & Marahayu, 2023). According to Hsu et al. (2021), Zentangle art offers employees various ways to express their emotions, enhancing their physical and mental well-being (Hsu et al., 2021). This aligns with Research suggesting that healthy self-expression and emotional articulation are vital for maintaining good mental health (Sub'haan et al., 2023).

Encouraging Gratitude

Gratitude is a moral influence that can inspire behaviours that care for the welfare of others, and it fosters optimism, enhances the quality of life, and helps build better friendships (Hardianti et al., 2021a). The study results indicate that The Zentangle Method fosters positive emotions, like gratitude and a sense of accomplishment, to help alleviate participants' negative emotions of self-criticism and a sense of failure (Hardianti et al., 2021a). This aligns with Research demonstrating a significant positive relationship between gratitude and mental health in adolescents at SMAN 8 Pekanbaru (Hardianti et al., 2021b). Furthermore, Research examining the connection between gratitude and adolescent mental health in Banjarbaru shows a significant positive correlation (Rahma & Cahyani, 2023). Adolescents with high levels of gratitude tend to experience greater happiness, lower stress levels, and better emotional management skills.

Mental Well-Being

Mental well-being is a fundamental health aspect affecting individuals, families, and society (Putra, 2023). Studies indicate that practising Zentangle helps participants develop behavioural responses like flexibility and adaptability, which contribute to better emotional

well-being by improving anxiety management, problem-solving abilities, impulse control, and boosting self-esteem and concentration (Morales-Alonso et al., 2024). Additionally, studies indicate that both Pastel Nagomi and Zentangle art iseffectively enhance undergraduate students' mental well-being, suggesting that future large-scale research could be beneficial (Cheung et al., 2023).

CONCLUSION

Zentangle can effectively reduce and alleviate Stress or frustration, enhance self-efficacy, improve cognitive focus, facilitate emotional expression, foster gratitude, and promote mental well-being. These benefits contribute to overall physical, mental, and spiritual well-being, positively impacting mental health. It is hoped that Zentangle will be integrated into a holistic approach to improving mental health and that further research will explore its benefits in greater depth.

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