

ORIGINAL RESEARCH

Effects of Traditional Thai Yoga Exercise Therapy as a Complementary Therapy to Conventional Medicine in Alleviating Depressive Symptoms in Depression

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ABSTRACT

Introduction • Traditional Thai Yoga exercise (Ruesi Dadton) is a therapeutic practice that integrates mild self-stretching, deep breathing, and self-massage to enhance physical and mental well-being. However, there is a lack of empirical evidence to support the beneficial effects of Ruesi Dadton in the treatment of depression. This study aimed to assess the effects of Ruesi Dadton on alleviating depressive symptoms in patients with depression.

Methods • A pre-post research design was conducted to evaluate the effects of Ruesi Dadton therapy on two university students diagnosed with depression. The Ruesi Dadton therapy sessions were conducted thrice weekly for a duration of eight weeks, with each session lasting 50 minutes. The outcomes, including the Patient Health Questionnaire-9

(PHQ-9) and the Pittsburgh Sleep Quality Index (PSQI), were evaluated at baseline and after 8 weeks of treatment.

Results • Both participants completed the pre- and post-treatment evaluations. The severity of negative symptoms, assessed using PHQ-9 and PSQI, exhibited a noticeable reduction after the eight-week treatment period.

Conclusion • The findings demonstrated that Ruesi Dadton therapy, particularly combined with contemporary medication, has an advantageous effect in alleviating depressive disorder. (*Adv Mind Body Med.* 2026;40(4):38-41)

Keywords • Ruesi Dadton, Thai yoga, Patient Health Questionnaire-9 (PHQ-9), Pittsburgh Sleep Quality Index (PSQI), depression, university students

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INTRODUCTION

Depressive disorders are highly prevalent and burdensome mental health conditions, affecting approximately 4% of the global population.^{1,2} Depression is characterized by prolonged periods of sadness or diminished interest in activities, resulting from the interaction of social, psychological, and biological factors. Individuals who have endured abuse, substantial loss, or other traumatic experiences are at a higher risk of developing depression. Challenges in both academic and professional environments may also trigger depressive symptoms.^{1,3} In the management of depression, traditional antidepressant medications may have adverse effects such as weight gain,

sleep difficulties, and reproductive abnormalities.^{3,4} Consequently, physical exercise interventions are being increasingly advocated as an alternative therapy for depression.³

Many research studies increasingly emphasize the advantageous effects of yoga on patients with depression, particularly in alleviating depressive symptoms and improving physiological performance. Yoga has been recognized as a beneficial intervention, whether as a standalone therapy or adjunctive therapy with pharmaceutical treatments.⁵⁻⁹ Ruesi Dadton is a traditional Thai yoga exercise that integrates slow, self-stretching postures, deep respiration, and self-massage to enhance physical and mental well-being. Ruesi Dadton, derived from ancient hermetic traditions, yoga, and meditation techniques, is frequently employed to alleviate joint stiffness, boost circulation, mitigate muscle discomfort, and improve cognitive function in the elderly.¹⁰⁻¹² However, there is a lack of empirical evidence supporting the beneficial effects of Ruesi Dadton in treating depression. This study aimed to assess the effects of Ruesi Dadton on alleviating depressive symptoms in patients with depression.

MATERIALS AND METHODS

Study Design

A research study was conducted over a period of eight weeks. Participant visits occurred at baseline and after eight

weeks. The research was conducted in compliance with ethical principles for clinical studies and the Declaration of Helsinki. The study protocol was approved by the Ethics Committee of the Faculty of Traditional Thai Medicine, Prince of Songkla University (reference number: EC.66/TTM.01-008). Informed written consent for participation in this study was obtained from each patient before their enrollment.

Study Population

Study participants comprised students experiencing mild to moderate depression, recruited from Prince of Songkla University between December 2023 and March 2024.

Inclusion and Exclusion Criteria

The inclusion criteria were: (1) participants aged 18 years or older; (2) mild to moderate depression, indicated by total Patient Health Questionnaire-9 (PHQ-9) scores ranging from 7 to 18 points, and (3) consent to participate in the study.

The exclusion criteria comprised: (1) participants having fever, severe hepatic, renal, cardiovascular, and metabolic abnormalities, and (2) participants who are pregnant or lactating.

Ruesi Dadton Therapy

A Ruesi Dadton program was designed based on the 15 postures described in the previous study.¹¹ The Ruesi Dadton group therapy sessions were conducted thrice weekly for a duration of eight weeks, with each session lasting 50 minutes.

Selection methodologies aimed at alleviating mental and physical exhaustion, augmenting bodily awareness, and refining concentration. Breathing and relaxation practices facilitate emotional management and enhance cognitive clarity. Each activity was chosen for its mental and physical benefits, as well as its simple-to-moderate difficulty level, which was deemed most suitable for the participants.

The fifteen postures obtained from the Thai Ministry of Public Health, include: 1) facial massage; 2) wrist discomfort; 3) abdominal pain and headache; 4) headache and visual disturbances; 5) upper limb discomfort; 6) lower limb massage; 7) chronic muscular pain; 8) upper limb troubles; 9) longevity practices; 10) trunk, knee, and leg troubles; 11) chest pain; 12) hand and foot numbness; 13) lower back and leg pain; 14) chest and body discomfort; and 15) hand and foot weakness.¹¹ Each pose was repeated five times. The participants were urged to engage in slow, deep inhalations and exhalations during the program.

Outcome Measurements

Outcomes were assessed at baseline and after therapy (8 weeks). The principal outcome was assessed based on depression severity using PHQ-9.¹³ The secondary outcome encompassed sleep quality, evaluated via the Pittsburgh Sleep Quality Index (PSQI).¹⁴

The PHQ-9 served as a self-administered tool for assessing the severity of depressive symptoms.¹² It consists of 9 items focusing on the Diagnostic and Statistical Manual of Mental Disorders. The questionnaire assesses the frequency of

disturbances experienced by subjects from any of the 9 items in the preceding 2 weeks. Each item of the PHQ-9 was assessed on a scale from 0 to 3 (0 = not at all; 1 = several days; 2 = more than a week; 3 = nearly every day). The total score spans from 0 to 27, with scores below 7 indicating no or minimal depression, scores between 7 and 12 denoting mild depression, scores from 13 to 18 reflecting moderate depression, and scores of 19 or more signifying severe depression.¹³

Similarly, the PSQI is a self-administered questionnaire consisting of 19 items, focusing on 7 domains: sleep latency, subjective sleep quality, sleep consistency, sleep efficiency habits, sleep disruptions, medication use, and daytime dysfunction. The PSQI was assessed on a four-point scale, where a score of 0 indicates very good sleep quality, 1 signifies fairly good, 2 denotes fairly bad, and 3 represents extremely bad sleep quality. A PSQI score below 5 signifies good sleep quality, while a score above 5 indicates poor sleep quality.¹⁴

RESULTS AND DISCUSSION

This clinical study included two university students diagnosed with depression. Both participants completed the pre- and post-treatment evaluations. The therapeutic effects of Ruesi Dadton on depression are illustrated in Figures 1 and 2. The severity of negative symptoms, evaluated using

Figure 1. Improvements in Patient Health Questionnaire-9 (PHQ-9) Scores After Traditional Thai Exercise

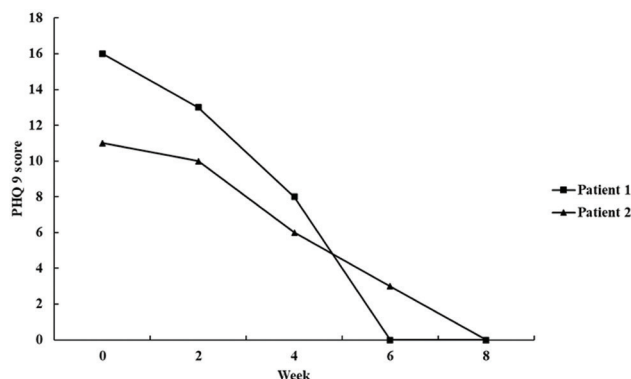
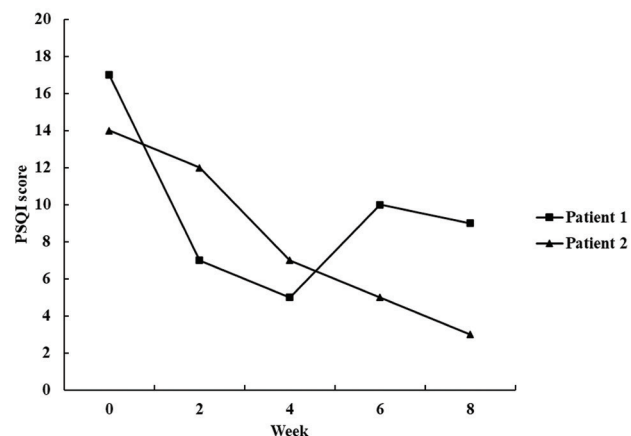


Figure 2. Improvements in Pittsburgh Sleep Quality Index (PSQI) Scores After Traditional Thai Exercise



PHQ-9 and PSQI, reduced noticeably after the eight-week treatment period compared to baseline. This case study demonstrated the potential success of Ruesi Dadton therapy, in combination with contemporary medication, in alleviating depressive disorder.

These findings corroborate recent research that endorses the beneficial effects of yoga on depressed symptoms in depressive disorder. A previous prospective, randomized, controlled pilot study on yoga for major depression indicated that an 8-week hatha yoga intervention in individuals with mild-to-moderate major depression resulted in statistically and clinically significant decreases in depression severity.⁵ Additionally, numerous previous systematic reviews and meta-analyses of yoga interventions for depressive disorders have demonstrated the effectiveness of yoga in preventing and managing depression, improving mental health, with prospects as a non-pharmacological complement to medical treatment.⁶⁻⁹

Traditional Thai yoga exercise therapy can be delineated into several therapeutic components, including the fundamental physical activity involved in yoga postures, the mindful engagement in exercises characterized by a non-judgmental observation of personal limitations, the regulation of breath through specific patterns to foster alert calmness, and the profound relaxation and detachment from mental and physical exertion during the concluding resting pose. Each of these yoga components may have an “active ingredient” with distinct antidepressant mechanisms that elicit mood benefits which could be additive or potentially synergistic with the effects of another active ingredient. The combined practice of various yoga elements may yield greater mood enhancement than the practice of any single element in isolation. This hypothesis was supported by a meta-analysis investigating randomized controlled trials of yoga for prenatal depression; “integrated yoga” interventions, which combined yoga poses with breathing exercises, meditation, or relaxation, demonstrated greater efficacy in alleviating depression severity compared to yoga poses alone.¹⁵

Several theoretical, biological, and psychological processes have been proposed to elucidate the antidepressant effects of yoga practices. Biological mechanisms may include the downregulation of the hypothalamic-pituitary-adrenal axis and sympathetic nervous system, enhancement of vagal tone via parasympathetic nervous system activation, elevation of central nervous system neurotransmitters such as serotonin and gamma-aminobutyric acid (GABA), augmentation of brain-derived neurotrophic factor (BDNF), facilitation of cerebral alpha wave activity, and stimulation of telomerase activity to mitigate depression-related cellular degeneration.¹⁶⁻²³ In terms of psychological mechanisms, yoga may enhance feelings of mastery and self-acceptance, increasing self-efficacy and self-esteem, which may assist in depression recovery.²⁴⁻²⁶ The mindfulness aspects of yoga may reduce negative ruminations in depression, leading to diminished feelings of misery.^{27,28} Furthermore, the decision to engage in yoga may facilitate behavioral activation, a psychological mechanism that encourages lifestyle changes

disrupting depressive patterns and enhancing social connectivity or rewarding experiences, thereby receiving positive reinforcement and promoting further adaptive behaviors and mood enhancement.²⁹⁻³¹

Future studies need to incorporate larger sample sizes and randomized controlled trials to corroborate these findings and evaluate the effectiveness of traditional Thai yoga exercise therapy for patients with major depressive disorders.

CONCLUSIONS

The findings indicated that Ruesi Dadton therapy can reduce the severity of depression and improve sleep quality in students experiencing mild to moderate depression. Consequently, Ruesi Dadton therapy may be considered as an adjunctive therapy for depression.

ETHICAL APPROVAL FOR THE STUDY

Ethical approval for the clinical study was obtained from the Human Research Ethics Committee of the Faculty of Traditional Thai Medicine, Prince of Songkla University (reference number: EC.66/TTM.01-008). The participant who agreed to participate signed a written informed consent at the beginning of the study and was enrolled for eight weeks.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

TS and VK contributed to the research conception and design. Material preparation and collection of data were performed by TS, SS and KC. Data analysis was performed by TS, KM, SS and KC. The first draft of the manuscript was written by TS and all authors read and approved the final manuscript.

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