

The Use of Artificial Intelligence, Tai Chi and Qigong to Treat Post Traumatic Stress Disorder (PTSD)

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ARTICLE INFO

Received: 📅 July 10, 2024

Published: 📅 July 16, 2024

Citation: Robert McGee. The Use of Artificial Intelligence, Tai Chi and Qigong to Treat Post Traumatic Stress Disorder (PTSD). Biomed J Sci & Tech Res 57(4)-2024. BJSTR.MS.ID.009030.

ABSTRACT

This study illustrates how medical professionals can utilize artificial intelligence (AI) to gather basic information easily and quickly without first referring to a medical database such as PubMed. AI can be used as an efficient time-saving tool to gather information about a medical topic that might be unfamiliar. It can be the first step in a two-step process. This article also introduces the reader to the use of tai chi and qigong, two tools in the toolbox of Traditional Chinese Medicine (TCM) that are being increasingly incorporated into Western medical practices as supplements to traditional treatments for a wide variety of ailments. Microsoft Copilot gathered basic information about the use of tai chi and qigong in the treatment of post-traumatic stress disorder. Additional information was then obtained from the PubMed database and several studies were summarized. Prior studies have indicated that tai chi and qigong can be used as beneficial supplements to traditional Western medicine in the treatment of PTSD.

Keywords: Post Traumatic Stress Disorder; PTSD; Tai Chi; Qigong; Traditional Chinese Medicine; TCM

Introduction

This study examines the use of artificial intelligence (AI), tai chi and qigong [pronounced chee gong] to treat post traumatic stress disorder. As this article is being written, Microsoft Copilot [1] is one of the more popular chat bots. It can be used effectively to generate basic information about a wide range of topics and is a good first step in certain areas of medical research, especially when the researcher is unfamiliar with the topic being researched [2-28]. Such is often the case when a Western medical researcher is attempting to learn something about tai chi or qigong [29-60], which are two of the most popular tools of Traditional Chinese Medicine (TCM).

One of the main differences between TCM and Western medicine is the emphasis [31,61]. TCM focuses on prevention, whereas Western medicine focuses on cure. Qigong is much older than tai chi. It has been used for thousands of years, both as a general health practice and as a tool to treat and perhaps cure a wide range of ailments. It incorporates breathing techniques and meditation and is used to activate the body's natural healing powers. Tai chi has been in existence for a much shorter period of time, less than 1000 years, and is similar to qigong in some ways. It also incorporates breathing and meditation

techniques. However, unlike qigong, tai chi is also considered to be a martial art.

Another difference is that tai chi consists of a series of postures or moves that are arranged in a set sequence and incorporate transition moves, whereas qigong often consists of just one or a few exercises that do not necessarily have transition moves between exercises and may or may not consist of a set pattern. Another difference between the two is that qigong exercises are much easier to learn than tai chi, as a general rule. It takes years to become proficient at tai chi, whereas basic qigong moves can be learned in a single morning or afternoon. However, it is not necessary to become proficient at tai chi in order to reap health benefits. Many medical studies that incorporate tai chi have found that significant improvements in health can occur in a matter of weeks or months. This paper summarizes the results of some studies that have incorporated tai chi or qigong in the treatment of PTSD.

The Study

A good first step in finding relevant articles and studies on the application of tai chi and qigong to treat PTSD would be to use Microsoft Copilot [1], an artificial intelligence (AI) chat bot. Using Copilot

or other AI chat bot as a first step has at least two advantages over going right to the PubMed [62] or other medical database. First, Copilot usually does a good job of finding relevant studies and other literature that it would take longer to find using a medical database. Second, the publications it finds might provide useful information that could not easily be found in a medical database because it often finds articles written to be read by both medical professionals and nonprofessionals alike. The search can start by providing a sufficiently detailed instruction such as the one below.

Instruction

Have any studies been done on the treatment of post-traumatic stress disorder (PTSD) using tai chi or qigong? If so, write an essay summarizing the studies and provide citations.

Reply

Title: Mind-Body Practices for Post-Traumatic Stress Disorder (PTSD):

Introduction: Post-traumatic stress disorder (PTSD) is a complex mental health condition that can significantly impact an individual's well-being. Researchers have explored various mind-body practices as potential interventions for managing PTSD symptoms. In this essay, we will focus on two specific practices: Tai Chi and Qigong.

Tai Chi and Qigong:

- Definition: Tai Chi and Qigong are mind-body practices that combine gentle movements, deep breathing, and meditation. They aim to promote physical and mental well-being.
- Research Findings:
 - o A literature review [63] analyzed 16 studies related to mind-body interventions for PTSD. Among these, Tai Chi and Qigong were investigated.
 - o Although most studies had small sample sizes, the findings suggested positive impacts on PTSD symptoms.
 - o Benefits associated with Tai Chi and Qigong included reduced anxiety, depression, and anger, increased pain tolerance, self-esteem, energy levels, and improved ability to cope with stress.
 - o These practices were found to be viable interventions for symptoms such as intrusive memories, avoidance, and emotional arousal.
- Conclusion
 - o Tai Chi and Qigong are increasingly used in PTSD treatment.
 - o Clinicians and patients can explore personalized treatment plans that incorporate mind-body practices as part of ongoing self-care.

Personal Testimonial: Tai Chi in Trauma Recovery:

- Case Study: Aurora Theater Shooting Survivors

- o Jacqui Shumway, a Tai Chi instructor and exercise therapist, worked with individuals dealing with PTSD from the Aurora theater shooting.

- o Kim Blair Woodruff, another Tai Chi instructor and a survivor of the Columbine shooting, started a Tai Chi program at the Aurora Strong Resilience Center.

- o Their experiences highlight the potential benefits of Tai Chi in trauma recovery.

Additional Considerations:

- Yoga and PTSD:
 - o Yoga has also been studied in the context of PTSD.
 - o Self-reported PTSD symptoms significantly reduced, while perceived stress did not change significantly [64].
 - o Improvements in cognitive flexibility (set-shifting) predicted overall reduction in PTSD symptoms.

Conclusion: Mind-body practices like Tai Chi and Qigong offer promising avenues for managing PTSD symptoms. While more research is needed, integrating these practices into treatment plans may enhance overall well-being for those affected by trauma. Remember that individual responses to mind-body practices can vary, and it's essential to consult with healthcare professionals when considering any intervention for PTSD.

Author Comments

The Copilot essay provided useful information that could be understood by a nonprofessional. It provided a good starting summary as well as two useful citations to relevant studies where the reader can find more detail. Copilot also provided a link to another suggested reading [65], which provides some additional information.

Neither of the two cited articles disclosed any of the tai chi postures or qigong exercises that were used and did not provide sufficient information for a medical practitioner to replicate the study or apply the tai chi or qigong techniques to a medical practice. However, the suggested reading did provide some basic guidance and descriptions of some exercises that could be used to relieve stress, although the recommended number of repetitions and practice frequency were not given. A search of PubMed [62] would result in finding studies that might provide additional details about the techniques used, the number of repetitions and the recommended frequency of use. However, before going to the PubMed database, it might be worthwhile to ask Copilot what techniques and procedures were used in prior studies. If Copilot could provide this information and give the references, it would short-cut the search process, making it possible to find the needed information quicker. If Copilot is not able to retrieve the information needed, not much time would be lost, since one need only type out a brief instruction like the one given below and read the results, which only takes a few seconds or minutes. This methodology em-

ploy cost-benefit analysis. The cost of an unsuccessful search might be only 30-90 seconds, whereas the benefit of a successful search might be a reduction in search time of 10 minutes to two hours.

Instruction

What tai chi postures and qigong exercises have been used in prior studies to treat PTSD? Be specific. Include the number of repetitions, time commitment and duration, as well as results and citations to the relevant studies.

Reply

Certainly! Let's delve into the specific Tai Chi and Qigong exercises studied in the context of treating PTSD. While the exact details may vary across studies, here are some insights based on existing research:

Tai Chi and Qigong Exercises for Adolescents:

- o Participants: Adolescents (1,244 individuals).
- o Interventions:
 - Both Tai Chi and Qigong exercises were explored.
 - Specific postures and exercises were not explicitly mentioned in the reviewed studies.
- o Results:
 - Anxiety reduction: Adolescents practicing Tai Chi and Qigong experienced reduced anxiety (Standardized Mean Difference [SMD] = 0.386).
 - Depression reduction: Both practices led to decreased depression symptoms (SMD = 1.937).
 - Cortisol level reduction: Tai Chi and Qigong were associated with lowered cortisol levels (SMD = 0.621).
 - No significant effects were found for stress, mood, or self-esteem.
- o Citations:
 - Liu, X., Li, R., Cui, J., Liu, F., Smith, L., Chen, X., & Zhang, D. (2021). The Effects of Tai Chi and Qigong Exercise on Psychological Status in Adolescents: A Systematic Review and Meta-Analysis. *Frontiers in Psychology*, 12. [66] Read more.

Additional Considerations:

- o Taoist Tai Chi™ Practice:
 - While not directly cited in the studies, Taoist Tai Chi™ practice has been reported to help people cope with stress, reduce anxiety, and enhance emotional stability [67].
- o General Recommendations:

- Duration: Typically, sessions last 45 minutes to an hour.
- Repetitions: Vary based on individual needs and practice intensity.
- Commitment: Regular practice over weeks or months is recommended for sustained benefits.

Remember that individual responses may vary, and consulting with healthcare professionals is crucial when considering mind-body practices for PTSD.

Author Comments

Copilot was able to give more detailed information that would be relevant and useful to a medical professional. Providing the citations also made it possible to retrieve further information if needed. The first article cited could be downloaded for free in its entirety. Also, the primary author's contact information was given, which would be useful if a medical practitioner wanted to know more precisely which postures or exercises were used in the study, along with the number of repetitions or time commitment, and frequency (daily, three days a week, etc.). The second cited article was written in a style that non-professionals could easily understand. It discussed the benefits of the kind of tai chi practiced by the organization and also included testimonials of some people who found relief as a result of practicing the kind of tai chi offered by the tai chi organization, including a video of a Vietnam War veteran who discussed the benefits he had experienced practicing tai chi. From viewing the video, it appeared that he was practicing Yang style tai chi, which is one of the five main styles of tai chi and, based on the author's prior study and experience, is the style of tai chi most often used to treat a wide variety of ailments. Copilot sometimes suggests other questions that might be asked on the same topic. One of the questions it suggested was, "Are there any studies specifically on Qigong for veterans with PTSD?" I decided to ask, curious to see what Copilot would have to say.

Instruction

Are there any studies specifically on Qigong for veterans with PTSD?

Reply

While there are limited studies specifically on Qigong for veterans with post-traumatic stress disorder (PTSD), preliminary findings from case reports suggest that Qigong may reduce PTSD symptom severity in torture survivors [68]. However, no studies using Qigong have been conducted specifically on veterans or active-duty combatants diagnosed with PTSD. Further research is needed to explore the effectiveness of Qigong as an intervention for this population. If you're interested in complementary and integrative health practices, Tai Chi has been investigated and appears to be feasible and safe for veterans with PTSD symptoms, with high rates of satisfaction. It might be worth exploring as well [67].

Author Comments

The Lake [68] article gave some useful information about how meditation and yoga have reduced symptoms of PTSD. The article also included links to other studies. The other item cited had already been cited earlier by Copilot [67]. Copilot provided sufficient general information about how tai chi, qigong, yoga and meditation can be used to help patients with PTSD. I wanted to see what studies I could find on the PubMed database [62], so I went to the website and did a search for "PTSD" and "tai chi" to see what I would find. I got six hits. The first article consisted of a literature review that found 16 relevant articles that included a variety of mind-body practices, not just tai chi. Only one of those studies examined the effects of tai chi and qigong on patients who had experienced refugee trauma and torture [69]. The results seemed to indicate that tai chi and qigong could be beneficial in a number of ways, including stress reduction, psychological well-being, mental awareness, depression, anger management, life satisfaction, self-esteem, sleep, pain reduction and interpersonal communications.

The second study [70] involved 17 veterans who had four tai chi sessions. The results were positive, in the sense that the sessions had beneficial effects of concentration and managing stress. The third study [71] focused on insomnia and sleep disorders. The fourth study [72] dealt with meditation-based mind-body interventions, which included mindfulness, yoga, tai chi and qigong. The fifth study [73] integrated hypnosis with tai chi in order to enhance the beneficial effects of both techniques. The sixth study [74] was not very relevant, since it had more to do with the use of VA benefits than the effectiveness of the various treatments that were available. I decided to expand the scope of the study to include stress in general rather than just PTSD, and to include qigong as well as tai chi in the search feature, so I conducted a search using the keywords stress, tai chi and/or qigong. I got 1300 hits. One of the more interesting studies was a bibliometric analysis that included 15 diseases and conditions, not just stress. That study found qigong to be effective in 97 percent of the 886 clinical studies examined. Ba Duan Jin was the most popular set of qigong exercises used (55.5%), followed by Health Qigong (12.1%), Dao Yin Shu (9.6%), Wu Qin Xi (7.6%) and Yin Jin Jing (7.4%) [75].

Some of the other studies examined tai chi, yoga and qigong as mind-body exercises [76], tai chi and qigong for mood regulation [77], tai chi and qigong for trauma exposed populations [78], and tai chi and qigong for the treatment and prevention of mental disorders [79]. A bibliometric study that compiled statistics on the frequency with which various tai chi exercise sets were used between 1958-2013 found that 72.84 percent used Yang style, followed by Sun style (4.53%), Chen style (3.88%), Wu style (1.29%) and other styles (23.71%). The total is slightly more than 100 percent because some studies used more than one style. The Yang style was by far the most popular tai chi style used in clinical studies during this period, and the Yang-24 form was by far the most popular Yang form used, 43.1% of the total for all styles [80].

Concluding Comments

The evidence shows that many studies have examined the effectiveness of tai chi and qigong on stress reduction in general, and a few studies have focused on post-traumatic stress disorder in particular. Although more studies could be done, the evidence has become clear that tai chi and qigong can be used effectively to reduce stress.

Funding

None.

Conflict of Interest

None.

References

- (2024) Microsoft Copilot.
- M Ablameyko N Shakel (2022) Doctor-Patient-Artificial Intelligence Relations in Smart Healthcare. *Biomed J Sci & Tech Res* 44(5): 36021- 36027.
- Marcos A M Almeida, Matheus H C de Araujo (2023) The Use of Artificial Intelligence in the Classification of Medical Images of Brain Tumors. *Biomed J Sci & Tech Res* 53(4): 45067- 45079.
- Emmanuel Andrès, Nathalie Jeandidier, Noel Lorenzo Villalba, Laurent Meyer, Abrar Ahmad Zulfiqar, et al. (2020) Currents and Emerging Technologies for Diabetes Care. *Biomed J Sci & Tech Res* 25(2): 18897-18905.
- Archana P, Lala Behari S, Debabrata P, Vinita S (2019) Artificial Intelligence and Virtual Environment for Microalgal Source for Production of Nutraceuticals. *Biomed J Sci & Tech Res* 13(5): 10239-10243.
- Ahmed Asfari (2021) Artificial Intelligence Role and Clinical Decision Support System Extubation Readiness Trail and Etiometry Scoring System. *Biomed J Sci & Tech Res* 35(1).
- Ashis Kumar D, Harihar Bhattacharai, Saji Saraswathy Gopalan (2019) Determinants of Generic Drug Use Among Medicare Beneficiaries: Predictive Modelling Analysis Using Artificial Intelligence. *Biomed J Sci & Tech Res* 22(1): 16405- 16413.
- Chris Caulkins (2019) Detection of Psychological Trauma and Suicide Risk among Emergency Medical Services Personnel: An Artificial Intelligence Approach. *Biomed J Sci & Tech Res* 23(3): 17372-17376.
- Kuo Chen Chou (2020) How the Artificial Intelligence Tool iRNA-PseU is Working in Predicting the RNA Pseudouridine Sites?. *Biomed J Sci & Tech Res* 24(2).
- Philippe Funk (2023) Biomedical Computation Artificial Intelligence Challenges in Cloud Environments. *Biomed J Sci & Tech Res* 50(4): 41813-41816.
- Swati Gupta, Dheeraj Kumar Sharma, Manish Gupta K (2019) Artificial Intelligence in Diagnosis and Management of Ischemic Stroke. *Biomed J Sci & Tech Res* 13(3): 9964-9967.
- Angela Hsu, Robin Zachariah, James Han, William Karnes (2023) Artificial Intelligence for Colonoscopy: Beyond Polyp Detection – A Review of where we are Today and where AI can Take us. *Biomed J Sci & Tech Res* 49(3): 40736-40739.
- Hamid Yahya Hussain (2020) Frailty and Spousal/Partner Bereavement in Older People: A Systematic Scoping Review Protocol. *Biomed J Sci & Tech Res* 24(4): 18400-18401.
- Hergan Klaus, Zinterhof Peter, Abed Selim, Schörghofer Nikolaos,

- Knapitsch Christoph, et al. (2022) Challenges implementing and running an AI-Lab: Experience and Literature Review. *Biomed J Sci & Tech Res* 45(4): 36605- 36611.
15. Ik Whan G Kwon, Sung Ho Kim (2021) Digital Transformation in Healthcare. *Biomed J Sci & Tech Res* 34(5): 27070- 27071.
 16. Jyoti Lamba, Taniya Malhotra, Drishti Palwankar, Vrinda Vats, Akshat Sachdeva (2023) Artificial Intelligence in Dentistry: A Literature Review. *Biomed J Sci & Tech Res* 51(1): 42323- 42326.
 17. Jae Eun Lee (2018) Artificial Intelligence in the Future Biobanking: Current Issues in the Biobank and Future Possibilities of Artificial Intelligence. *Biomed J Sci & Tech Res* 7(3): 5937- 5939.
 18. Luca Marzi, Fabio Vittadello, Alessandra Andreotti, Andrea Piccin, Andrea Mega (2021) Will Artificial Intelligence Unveil Hepatocellular Carcinoma?. *Biomed J Sci & Tech Res* 35(4): 27913-27914.
 19. Rosario Megna, Alberto Cuocolo, Mario Petretta (2019) Applications of Machine Learning in Medicine. *Biomed J Sci & Tech Res* 20(5): 15350-15352.
 20. Sotiris Raptis, Christos Ilioudis, Vasiliki Softa, Kiki Theodorou (2022) Artificial Intelligence in Predicting Treatment Response in Non-Small-Cell Lung Cancer (NSCLC). *Biomed J Sci & Tech Res* 47(3): 38421- 38428.
 21. Richard M F, Matthew R F, Andrew Mc K, Tapan K C (2018) FMTVDM@*** Nuclear Imaging Artificial (AI) Intelligence but First We Need to Clarify the Use Of (1)Stress, (2) Rest, (3) Redistribution and (4) Quantification. *Biomed J Sci&Tech Res* 7(2).
 22. Omar Sayyounh (2022) Machine Learning Application to Combat Superbugs in Hospitals: A Primer to Infection Prevention Practitioners. *Biomed J Sci & Tech Res* 44(5): 35968- 35971.
 23. Shivani S, Abhishek A, Rajvardhan A (2020) Prospects of Artificial Intelligence in Ophthalmic Practice. *Biomed J Sci & Tech Res* 27(5): 21159-21166.
 24. Woo Sung Son (2018) Drug Discovery Enhanced by Artificial Intelligence. *Biomed J Sci & Tech Res* 12(1): 8936-8938.
 25. Michael L Carty, Stephane Bilodeau (2023) Artificial Intelligence and Medical Oxygen. *Biomed J Sci & Tech Res* 51(2): 42413-42421.
 26. Benjamin Wu, Yucheng Liu, Meng Jou Wu, Hiram Shaish, Hong Yun Ma (2024) Usage of Artificial Intelligence in Gallbladder Segmentation to Diagnose Acute Cholecystitis. A Case Report. *Biomed J Sci & Tech Res* 55(2): 46766- 46770.
 27. Min Wu (2019) Modeling of an Intelligent Electronic Medical Records System. *Biomed J Sci & Tech Res* 19(4): 14441- 14442.
 28. Mingbo Zhang, HuiPu Han, Zhili Xu, Ming Chu (2019) Applications of Machine Learning in Drug Discovery. *Biomed J Sci & Tech Res* 23(1): 17050-17052.
 29. McGee Robert W (2020) Qigong: A Bibliography of Books and Other Materials, Fayetteville State University, Broadwell College of Business and Economics, Studies in the Economics of Qigong No 1.
 30. McGee Robert W (2020) A Bibliography of Recent Medical Research on Qigong, Fayetteville State University, Broadwell College of Business and Economics, Studies in the Economics of Qigong No 2.
 31. McGee Robert W (2020) Ba Duan Jin as a Treatment for Physical Ailments: A Bibliography of Recent Medical Research, Fayetteville State University, Broadwell College of Business and Economics, Studies in the Economics of Qigong No 3.
 32. McGee Robert W (2020) Wu Qin Xi as a Treatment for Physical Ailments: A Bibliography of Recent Medical Research, Fayetteville State University, Broadwell College of Business and Economics, Studies in the Economics of Qigong No 4.
 33. McGee Robert W (2020) The Use of Yi Jin Jing to Treat Illness: A Summary of Three Studies, Fayetteville State University, Broadwell College of Business and Economics, Studies in the Economics of Qigong No 5.
 34. McGee Robert W (2020) Qigong and the Treatment and Prevention of COVID-19, Fayetteville State University, Broadwell College of Business and Economics, Studies in the Economics of Qigong No 6.
 35. McGee Robert W (2020) Qigong and the Treatment and Prevention of Cancer, Fayetteville State University, Broadwell College of Business and Economics, Studies in the Economics of Qigong No 7.
 36. McGee Robert W (2021) Tai Chi, Qigong and Transgender Health. Fayetteville State University, Broadwell College of Business and Economics, Studies in the Economics of Tai Chi and Qigong No 8.
 37. McGee Robert W (2021) The Use of Yi Jin Jing to Treat Illness: A Summary of Three Studies. *Academia Letters*, Article 547.
 38. McGee Robert W (2021) Tai Chi, Qigong and the Treatment of Disease. *Biomedical Journal of Scientific & Technical Research* 34(2): 26627-26633.
 39. McGee Robert W (2021) Tai Chi, Qigong and the Treatment of Cancer. *Biomedical Journal of Scientific & Technical Research* 34(5): 27173-27182.
 40. McGee Robert W (2021) Tai Chi, Qigong and the Treatment of Depression and Anxiety. *Biomedical Journal of Scientific & Technical Research* 36(2): 28350-28354.
 41. McGee Robert W (2021) Tai Chi, Qigong and the Treatment of Arthritis. *Biomedical Journal of Scientific & Technical Research* 37(5): 29724-29734.
 42. McGee Robert W (2021) Tai Chi, Qigong and the Treatment of Hypertension. *Biomedical Journal of Scientific & Technical Research* 39(1): 31055-31062.
 43. McGee Robert W (2021) Ba Duan Jin and the Treatment of Illness in General, and Cognitive Impairment in Particular. *Biomedical Journal of Scientific & Technical Research* 40(2): 32058-32065.
 44. McGee Robert W (2022) Qigong and the Treatment of Illness: Recent Case Studies. *Biomedical Journal of Scientific & Technical Research*, 43(1): 34250-35253.
 45. McGee Robert W (2022) A Suggestion for Treating Amyotrophic Lateral Sclerosis (ALS), *Biomedical Journal of Scientific & Technical Research* 44(4): 35627-35631.
 46. McGee Robert W (2022) Using Tai Chi and Qigong to Treat Cancer Symptoms. *Biomedical Journal of Scientific & Technical Research* 45(2): 36333-36336.
 47. McGee Robert W (2022) Traditional Chinese Medicine and the Treatment of Cancer, *Biomedical Journal of Scientific & Technical Research* 47(4): 38636-38639.
 48. McGee Robert W (2023). Recent Studies in Traditional Chinese Medicine (TCM), *Biomedical Journal of Scientific & Technical Research* 50(4): 41817-41820.
 49. McGee Robert W (2023) Some Beneficial Health Effects of Tai Chi and Qigong. *Biomedical Journal of Scientific & Technical Research*, 52(3): 43813-43817.
 50. McGee Robert W (2023) Tai Chi, Qigong and the Treatment of Dementia, *Biomedical Journal of Scientific & Technical Research*, 53(5): 45080-45085.
 51. McGee Robert W (2024) Tai Chi, Qigong and the Treatment of Breast Can-

- cer, Biomedical Journal of Scientific & Technical Research 54(3): 46024-46027.
52. McGee Robert W (2024) Using Artificial Intelligence to Conduct Research on the Health Benefits of Tai Chi: A Pilot Study. Biomedical Journal of Scientific & Technical Research 55(2): 46838-46841.
 53. McGee Robert W (2024) Tai Chi, Qigong and the Treatment of Lung Cancer: A Study in Artificial Intelligence, Biomedical Journal of Scientific & Technical Research 55(4): 47220-47225.
 54. McGee Robert W (2024) Incorporating Qigong into a Western Medical Practice: A Study in Artificial Intelligence, Biomedical Journal of Scientific & Technical Research 55(5): 47401-47405.
 55. McGee Robert W (2024) Incorporating Baduanjin into a Western Medical Practice: A Study in Artificial Intelligence and Traditional Chinese Medicine (TCM). Biomedical Journal of Scientific & Technical Research 56(1): 47739-47744.
 56. McGee Robert W (2024) Incorporating Artificial Intelligence and Traditional Chinese Medicine (TCM) into a Western Medical Practice: A Case Study. Biomedical Journal of Scientific & Technical Research 56(3): 48149-48154.
 57. McGee Robert W (2024) Using Chinese Herbal Medicine to Treat Cancer Patients: A Study Incorporating Artificial Intelligence. Biomedical Journal of Scientific & Technical Research 56(5): 48647-48655.
 58. McGee Robert W (2024) Using Tai Chi, Qigong and Chinese Herbs to Reduce Cholesterol: A Study Incorporating Artificial Intelligence. Biomedical Journal of Scientific & Technical Research 57(1): 48776-48784.
 59. McGee Robert W (2024) Incorporating Tai Chi and Artificial Intelligence into a Medical Practice to Treat Dizziness and Vertigo. Biomedical Journal of Scientific & Technical Research 57(1): 48939-48944.
 60. McGee Robert W (2024) Incorporating Artificial Intelligence, Tai Chi and Qigong into a Gynecology & Obstetrics Practice: Some Recent Case Studies. Herculean Research 4(1): 81-83.
 61. Allen K (2017) The Qigong Bible: The Definitive Guide to Energy Cultivation Exercise. UK: Godsfield.
 62. (2024) PubMed.
 63. Brady Joe (2019) Mind-body practices for post traumatic stress disorder. Barefoot Doctor's Journal.
 64. (2024) Library of Research Articles on Veterans and Integrative Health Therapies and Chiropractic Care. February Edition. U.S. Department of Veterans Affairs.
 65. How Tai Chi can help ease PTSD symptoms. PTSD UK Blog. (n.d.).
 66. Liu X, Li R, Cui J, Liu F, Smith L, et al. (2021) The Effects of Tai Chi and Qigong Exercise on Psychological Status in Adolescents: A Systematic Review and Meta-Analysis. *Frontiers in Psychology* 12.
 67. Post Traumatic Stress Disorder (PTSD) and Taoist Tai Chi arts. Fung Loy Kok Taoist Tai Chi. (n.d.).
 68. Lake James (2019) Meditation and Yoga Can Reduce Symptoms of PTSD. *Psychology Today*. April 5.
 69. Grodin MA, Piwowarczyk L, Fulker D, Bazazi AR, Saper RB (2008) Treating survivors of torture and refugee trauma: a preliminary case series using qigong and t'ai chi. *J Altern Complement Med* 14(7): 801-806.
 70. Niles BL, Mori DL, Polizzi CP, Pless Kaiser A, Ledoux AM, et al. (2016) Feasibility, qualitative findings and satisfaction of a brief Tai Chi mind-body programme for veterans with post-traumatic stress symptoms. *BMJ Open* 6(11): e012464.
 71. Staples JK, Gibson C, Uddo M (2023) Complementary and Integrative Health Interventions for Insomnia in Veterans and Military Populations. *Psychol Rep* 126(1): 52-65.
 72. Vancampfort D, Stubbs B, Van Damme T, Smith L, Hallgren M, et al. (2021) The efficacy of meditation-based mind-body interventions for mental disorders: A meta-review of 17 meta-analyses of randomized controlled trials. *J Psychiatr Res* 134: 181-191.
 73. Eads B, Wark DM (2018) Alert Hypnosis With Tai Chi Movement for Trauma Resolution. *Am J Clin Hypn* 61(2): 173-184.
 74. Taylor SL, Gelman HM, DeFaccio R, Douglas J, Hawrilenko MJ, et al. (2023) We Built it, But Did They Come: Veterans' Use of VA Healthcare System-Provided Complementary and Integrative Health Approaches. *J Gen Intern Med* 38(4): 905-912.
 75. Zhang YP, Hu RX, Han M, Lai BY, Liang SB, et al. (2020) Evidence Base of Clinical Studies on Qi Gong: A Bibliometric Analysis. *Complement Ther Med* 50: 102392.
 76. Wang YT, Huang G, Duke G, Yang Y (2017) Tai Chi, Yoga, and Qigong as Mind-Body Exercises. *Evid Based Complement Alternat Med* 2017: 8763915.
 77. Yeung A, Chan JSM, Cheung JC, Zou L (2018) Qigong and Tai-Chi for Mood Regulation. *Focus (Am Psychiatr Publ)* 16(1): 40-47.
 78. Niles BL, Reid KF, Whitworth JW, Alligood E, Williston SK, et al. (2022) Tai Chi and Qigong for trauma exposed populations: A systematic review. *Ment Health Phys Act*.
 79. Abbott R, Lavretsky H (2013) Tai Chi and Qigong for the treatment and prevention of mental disorders. *Psychiatr Clin North Am* 36(1): 109-119.
 80. Yang GY, Wang LQ, Ren J, Zhang Y, Li ML, et al. (2015) Evidence base of clinical studies on Tai Chi: a bibliometric analysis. *PLoS One* 10(3): e0120655.

ISSN: 2574-1241

DOI: 10.26717/BJSTR.2024.57.009030

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