

**EFFECT OF VIDEO-ASSISTED HEALTH TEACHING ON KNOWLEDGE
REGARDING TAI-CHI EXERCISE FOR STRESS MANAGEMENT.**

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Abstract

Stress has become a major issue in today's society, with many individuals facing rising levels of stress due to various obligations, such as work responsibilities, academic pressures, and family duties. College students, in particular, are highly susceptible to stress and frequently experience its negative effects. Research by Brougham et al. highlights that factors like daily challenges, financial concerns, and academic expectations significantly contribute to elevated stress levels among this group. The simultaneous presence of multiple stressors can increase the likelihood of stress-related symptoms, ultimately affecting students' well-being and academic success. Tai Chi is a form of exercise that involves gentle, flowing movements, controlled breathing, and mindfulness. Its slow and graceful motions make it suitable for people of all ages and fitness levels. This accessible practice promotes relaxation, reduces stress, and supports overall physical and mental well-being.

Objectives of the study: 1) To identify the knowledge regarding TAI CHI exercises for stress management among junior college students.

2) To measure the effect of health teaching on knowledge regarding TAI CHI exercises for stress management.

3) To find the association of the effect of knowledge regarding TAI CHI exercises for stress management with selected demographic variables.

The method of study was an evaluative study. 60 samples were selected for the study by a non-probability purposive sampling technique. Data collection was done by using questionnaires. Pre-test was conducted, after the pretest, intervention was given to the samples, and post-test was conducted after the health education. The data was analyzed by descriptive and inferential statistics. The reliability was assessed using the test and retest method. Pearson's correlation coefficient was found to be 0.86. Hence, the tool of the study was found to be reliable. Result shows that descriptive and inferential statistics are used in analysis. The researchers applied a paired t-test to assess the effect of health teaching on knowledge regarding TAI CHI exercises for stress management. The average knowledge score in the pretest was 6.5, which increased to 15.1 in the posttest. T-value for this test was 20.6 with 59 degrees of freedom. The corresponding p-value was small (less than 0.05), and the null hypothesis was

rejected. It is evident that the knowledge regarding TAI CHI exercises for stress management among junior college students improved significantly after health teaching.

Conclusion was to assess the effect of health teaching on knowledge regarding TAI CHI exercises for stress management was shown to be effective. Hence, the corresponding p-value was small (less than 0.05), and the null hypothesis is rejected. It is evident that the average knowledge score in the post-test is significantly higher than the pre-test.

Keywords: TAI CHI exercises, Stress management, knowledge, junior college students, Video-assisted health teaching

Introduction

Stress is a considerable problem in the modern society. People often experience high stress levels due to being overwhelmed with a wide range of duties, such as work, studying, family duties, etc. In particular, college students are one group that is rather susceptible to stress and can feel the adverse consequences of it very often. There are several causes of stress among college students, according to Brougham et al., some of these causes include daily hassles, financial factors, and academic factors. Students who are challenged with a large number of such stressors at the same time are more likely to develop a larger number of symptoms of stress, which hurt these students' ability to function effectively.¹

Recent research indicates that stress has a curvilinear relationship with performance (Westman & Eden, 2007). This means that moderate levels of stress can improve learning and cognitive abilities. However, prolonged or excessive stress has detrimental effects, such as weakening the immune system and impairing normal bodily functions. Studies show that six out of ten college students report experiencing "overwhelming anxiety," and over 40% struggle with severe depression. Between 2009 and 2015, the number of students seeking help from campus counseling centers in the United States increased by 30%, while overall college enrollment only grew by 5% during the same period.²

As stress is a serious problem affecting students' physical and psychological health. The WHO states that psychological issues, such as stress, will probably become the second most common disability in the upcoming years. Through different surveys, it has been found that three in four college students self-reported feeling stressed. Studies show that stress experienced in college may cause many mental health disorders, including depression, anxiety, and substance abuse disorder, during this period. TAI CHI can be recommended as a stress management technique.³

TAI CHI, also called Taiji or TAI CHI CHUAN, is a centuries-old Chinese martial art and holistic practice integrating movement, breath, and mindfulness. Characterized by slow, intentional motions, it encourages relaxation, balance, and overall health. Rooted in Chinese philosophical traditions, TAI CHI draws from Taoist and Confucian principles, emphasizing harmony, inner balance, and the cultivation of qi, or life energy, throughout the body.⁴

Objectives

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- 2) To measure the effect of health teaching on knowledge regarding TAI CHI exercises for stress management.
- 3) To find the association of the effect of knowledge regarding TAI CHI exercises for stress management with selected demographic variables.

Methodology

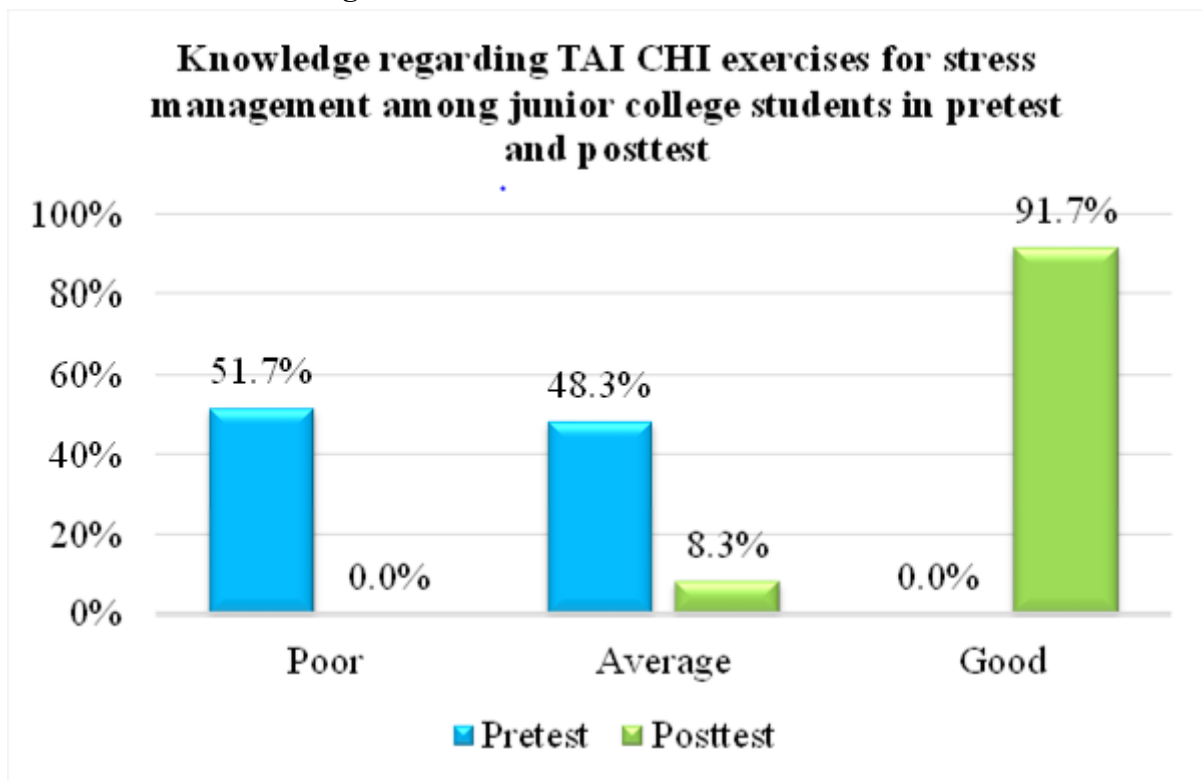
An evaluative study with a pre-experimental one-group pre-test-post-test design was used to assess the effect of health teaching on knowledge regarding TAI CHI exercises for stress management. 60 samples were taken using a non-probability purposive sampling technique from selected junior college. Validity was done by the 16 experts in research The Test - Retest method was used for reliability with a 0.86 score. A Pilot study was conducted among 6 students. Official permission was taken for data collection and data was collected. Before data collection, informed consent was obtained from the sample, and the participants were assured that their identity would not be revealed. The data was collected using self-structured demographic data and a knowledge questionnaire.

Result:

Description of samples (junior college students) based on their personal characteristics

All of the junior college students were in the age group of 16-20 years. 45% of them were males and 55% of them were females. 45% of them were of nuclear family, 53.3% of them were of joint family and 1.7% of them had extended family. 96.7% of them were science stream and 3.3% of them from Arts. 21.7% of them were monthly family income up to Rs. 20000, 31.7% of them monthly family income Rs. 20001-40000, 35% of them monthly family income Rs. 40001-60000 and 11.7% was having monthly family income above Rs. 60000. 5% of them had information about TAI CHI Exercises.

Analysis of data related to the effect of health teaching on knowledge regarding TAI CHI exercises for stress management

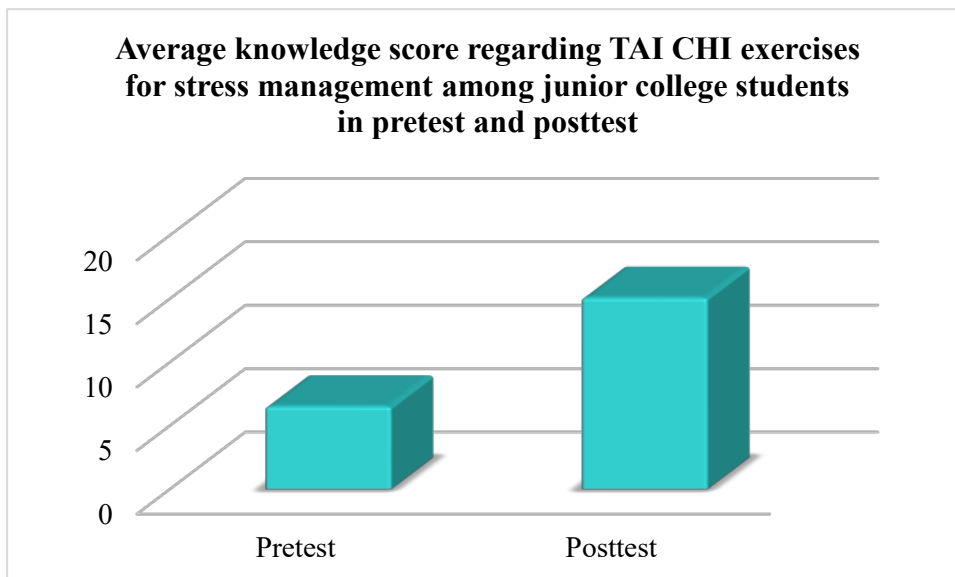


Effect of health teaching on knowledge regarding TAI CHI exercises for stress management

In the pretest, 51.7% of the junior college students had poor knowledge and 48.3% of them had average knowledge regarding TAI CHI exercises for stress management. In the posttest, 8.3% of them had average knowledge and 91.7% of them had good knowledge regarding TAI CHI exercises for stress management. This indicates that there is a remarkable improvement in the knowledge among junior college students regarding TAI CHI exercises for stress management.

Table 1: Effect of health teaching on knowledge regarding TAI CHI exercises for stress management

The researcher applied a paired t-test for the effect of health teaching on knowledge regarding TAI CHI exercises for stress management. The average knowledge score in the pretest was 6.5, which increased to 15.1 in the posttest. T-value for this test was 20.6 with 59 degrees of freedom. The corresponding p-value was small (less than 0.05), and the null hypothesis is rejected. It is evident that the knowledge regarding TAI CHI exercises for stress management among junior college students improved significantly after health teaching.



Analysis of data related to the association of the knowledge regarding TAI CHI exercises for stress management with selected demographic variables

Fisher's exact test for the association of the knowledge regarding TAI CHI exercises for stress management with selected demographic variables

Since all the p-values are large (greater than 0.05), none of the demographic variables was found to have a significant association with the knowledge regarding TAI CHI exercises for stress management among junior college students.

Discussion

The study aimed to assess the effectiveness of TAI-CHI exercises in reducing stress levels among students facing exam preparation stress. Conducted at Dr. D.Y. Patil Arts, Commerce, and Science Junior College in Pimpri, Pune, the quasi-experimental research involved 60 students selected through purposive sampling. The experimental group practiced TAI-CHI exercises once a day, while stress levels were measured before and after the intervention using a self-structured checklist. The results revealed a significant reduction in stress levels in the

experimental group compared to the control group. The post-intervention scores demonstrated that TAI-CHI exercises were effective in managing stress, indicating their potential as a non-pharmacological method for stress relief.

The data analysis, conducted using descriptive and inferential statistics, confirmed the reliability of the tool with a Pearson correlation coefficient of 0.86. The sample comprised 55% girls and 45% boys, with 90% of the participants aged between 16 and 18 years. The findings showed that 80% of the students initially experienced stress, but the implementation of TAI-CHI exercises significantly reduced their stress levels. The study concludes that TAI-CHI is an effective and safe intervention for stress management in students, making it a valuable practice for promoting mental well-being in educational settings.

The study can be discussed with a similar descriptive study done by Qi F, Soh KG, Mohd Nasiruddin NJ, Mai Y, in September 2022 on the Effects of TAI-CHI on physical and psychological health of college students: A systematic review. The findings of this study align with prior research indicating that Taichi offers significant physical and psychological health benefits for college students. The systematic review analyzing 22 studies reported improvements in balance, leg strength, flexibility, cardiopulmonary function, and reductions in stress, anxiety, and depression, particularly among participants. However, the review also highlighted inconsistencies in areas such as upper body strength, mood, and psychoticism, where evidence remains limited. Compared to other modalities such as Pilates, Yoga, and Mindfulness courses, Taichi appeared to have relatively weaker outcomes. Furthermore, the review identified a key challenge for college students—particularly beginners—in engaging with the complex mind-body coordination required in Taichi practice. It was suggested that instructional methods rooted in relaxation theory, which are more consistent with traditional Chinese Taichi principles, may be more effective for this demographic than those based on coordination theory.

COCLUSION

Based on this study, students had benefited after the application of health teaching on knowledge regarding TAI-CHI exercise, as it improve the knowledge of TAI-CHI exercise regarding stress management. This study is significantly effective in improve the knowledge among student's of who has faced the exam stress. Future studies can be done by large samples with multi-interventions to reduce exam stress.

LIMITATION

- This study was limited to only one setting, which may limit the generalized of the finding to other populations and setting.
- This study was limited to only junior collage students who were studying in Dr. D.Y. PATIL college of arts, Commerce and Science
- This study was limited to only assessing the immediate impact of health teaching without evaluating the long-term effect.
- This study was only limited to participants who understood English, Marathi, and Hindi.

RECOMMENDATION

The following study can be in relation to the present study;

- A similar study may be undertaken replicable in the large samples, thereby finding can be generalized.
- The study can be undertaken in different setting and different targets of 60 students, such as college students following stress,
- A comparative study can be done to assess the effect of TAI-CHI exercise versus normal techniques for reducing stress.
- A study can be done to assess the importance of TAI-CHI exercise for stress management among students.

REFERNCES

1. Chen, K. M., & Tseng, W. S. (2012). Pilot study on the effectiveness of Tai Chi exercise on stress reduction in college students. *Journal of Psychosomatic Research*, 73(5), 427-433. <https://doi.org/10.1016/j.jpsychores.2012.08.001>
2. Wang, C., Bannuru, R., Ramel, J., Kupelnick, B., Scott, T., & Schmid, C. H. (2010). Tai Chi on psychological well-being: Systematic review and meta-analysis. *BMC Complementary and Alternative Medicine*, 10, 23.
3. Reddy K. J, Menon K. R, Thattil A. Academic Stress and its Sources Among University Students. *Biomed Pharmacol J* 2018.
4. Emma Kerr and Cole Claybourn-Stress in College Students: What to Know Aug. 14, 2023 <https://www.usnews.com/education/best-colleges/articles/stress-in-college-students-what-to-know>.
5. Chen, K. W., & Liu, T. (2008). Effects of Tai Chi exercise on physical and psychological health: A review. *Journal of the American Medical Directors Association*, 9(9), 635–641