

EVALUATING THE EFFICACY OF HATHA YOGA AS A STRESS REDUCTION TECHNIQUE IN POSTGRADUATE NURSING EDUCATION IN KERALA

SARATH CHANDRA PRASAD

Research Scholar
Nursing
Shri JJT University
Rajasthan

Dr. VIDYA VIJAY THOKAL

Professor
Nursing
Shri JJT University
Rajasthan

ABSTRACT

This study aims to assess the effectiveness of Hathayoga in reducing academic stress among postgraduate nursing students in selected nursing colleges in Kerala. A quasi-experimental pre-test post-test control group design was employed. A quantitative approach was used with true experimental design. Simple random sampling via lottery method was adopted in this study. The tool consisted of Perceived Stress Scale and Study Skill Inventory. A total of postgraduate nursing students was selected through purposive sampling and divided into experimental and control groups. The experimental group practiced Hathayoga, while the control group followed their routine activities. The Academic Stress Scale was used to measure stress levels before and after the intervention. The therapeutic benefits of yoga are well-documented, yet the specific effects of different yoga practices on stress reduction in healthy populations remain underexplored. This systematic review aims to assess the impact of various yoga types on stress levels in non-clinical populations and evaluate the evidence systematically. Yoga therapy was administered to experimental group for a period of 30 days while the control group was set free to adopt their original life style. It also stated that there was no association between stress and concentration with the selected demographic variables. Yoga therapy was an effective intervention for improving concentration and reducing stress of students of any age group.

Keywords: Hathayoga, Yoga therapy, quantitative, Academic Stress Scale, Perceived Stress Scale and Study Skill Inventory,

INTRODUCTION

Meditative practices and the physical asanas and breathing techniques of Hatha

yoga are the mainstays of Western yoga. Hatha yoga encourages full range of motion in the body via the practice of controlled breathing techniques and a variety of physical postures and movements called asanas. Regulated deep intake and exhalation are the fundamental principles of Hatha yoga's breathing techniques. A more balanced energy system and the elimination of energy blockages may be attained by practitioners by concentration on the breath, the body, and the movements. There are a lot of different types of yoga studied, but the Iyengar Hatha style is the most common. With the use of the yoga props included in the book, readers may better comprehend the poses and find the most effective ways to modify them to alleviate a wide range of ailments and stresses. Numerous scientific investigations have shown that yoga's psycho-physiological benefits extend to the cardiovascular and skeletal systems. Alterations in chemoreceptive sensitivity and improved deep breathing techniques are two of the many benefits of regular yoga practice. It seems that metabolic processes decrease down in otherwise healthy individuals as well. While breathing exercises like pranayama may increase metabolic rate, meditation causes a hypometabolic state. Flexibility, mental clarity, and physical

performance are all enhanced by yoga. Many illnesses, particularly those associated with lifestyle factors, are currently being investigated and treated using the therapeutic potential. Lifestyle choices are the leading cause of many chronic diseases, the most common of which are obesity, high blood pressure, high blood sugar, and high cholesterol. Lowering these levels might be possible with the help of a yoga intervention. Yoga is one of the widely accepted and structured lifestyle practices which promote the integration of the mind, body and soul. This practice is known as an effective and safe intervention for individuals with depression or anxiety.

LITERATURE REVIEW

Chaoya Li (2024) To ensure the future success of the nursing profession, it is crucial for an increased number of students to enroll in vocational nursing programs. Enhancing self-awareness as a nurse can result in increased commitment to the profession, improved proficiency in the role, elevated professional self-esteem, and innovative methods for instructing nurses on the essential "four qualities" crucial for the well-being of our nation and its citizens. Studies indicate that vocational nursing students exhibit a significant level of occupational connectedness, even in the absence of a clearly defined professional identity. Disparities are evident across various factors, such as parental education levels, academic performance, the presence of an only child, and participation in extracurricular activities, irrespective of gender differences. Encouraging the development of vocational nursing students in three critical areas—self-awareness, self-identification, and practical experience—

offers significant benefits. The goal is to enhance the development of nursing proficiency.

Diana Cecilia Tapia-Pancardo (2023)

Nursing practitioners' skill sets might be greatly improved by clinical mentorship programs. Students are better prepared for graduate school under the guidance of experienced professors when they use the program to do self-evaluations and identify their strengths and areas for improvement. To be successful in their responsibilities as educators and role models, clinical mentors need to have nine different types of qualities. The teaching approaches used by clinical mentors are the subject of six of these studies, while the interpersonal dynamics that develop between them are the subject of three. From the viewpoint of the mentor, the cross-functional competences necessary for a successful clinical mentor in UPNS may be outlined in eight subcategories. Competencies in this context emphasize teaching methodologies and interpersonal communication, while also identifying essential characteristics across various domains.

Aiping Gong (2023) Integrating theoretical understanding with hands-on experience in clinical settings, "Basic Nursing Skills Practice" is a cornerstone of nursing curricula. The instructional quality of the practical course was enhanced because nursing students were able to engage in a fair and equitable evaluation framework via the implementation of an assessment reform for the 'Basic Nursing Skills Practice' course. Individual skill execution, virtual simulation, and comprehensive team-based skill assessments comprised the "Basic Nursing Skills Practice" course evaluation. Due to a change in the

assessment ratio, both the final exam and the midterm now contribute equally to the overall evaluation. Midway through the semester, students will take an individual skills exam; during the term, they will be evaluated continuously via virtual simulations; and finally, at the end of the semester, they will be evaluated as a team. This system has replaced the old one, which just evaluated skills at the end of the semester.

Amira Alshowkan (2022) There is a correlation between stress levels and different stages of life. A student's academic journey is greatly impacted by the transformation that occurs throughout college. There is a heavy expectation that nursing students will be able to competently engage with real people. Raised stress levels are associated with a decline in academic performance and a host of other negative health outcomes. The goal is to learn everything there is to know about the clinical issues that Saudi nursing students encounter. Data for this study came from nursing students via in-person, semi-structured interviews, which are a kind of qualitative research. We used content analysis on the data. The data analysis revealed that there are three distinct types of clinical training stressors: the hospital environment, student motivation to learn, and communication strategies for instruction. This study aimed to help nursing schools and clinical settings overcome the challenges that nursing students encounter in the clinical setting.

Sayuri Kaneko (2021) The goals of this study are threefold: first, to determine what causes stress among pediatric nursing students; second, to examine how these causes interact with the coping mechanisms

that students use; and third, to design a workable training framework that improves students' capacity to learn. The anonymous poll was filled out by 110 nursing and vocational students from schools in the Kanto, Koshinetsu, and Tokai areas. Clinical rotations focused on pediatric nursing will be available to students during the 2019–2020 school year. After that, we looked at how each stressor was correlated with the students' behaviors and techniques for managing stress. Providing independent care to pediatric patients and their families, as well as coordinating practical training with ward nurses, are two factors that are associated with an increased feeling of purpose and, by extension, an improvement in students' abilities to handle stress. In comparison to the other two stresses, these two stood out.

Complete Yog asana Instructional Guide

- Here we may see the conventional approaches to Hatha Yoga.
- Before you perform any asanas, it's a good idea to drink some water.
- Maintaining an empty stomach is critical. The best times to conduct asanas are eight hours after eating, two hours after drinking milk, and one hour after eating fruit.
- Always start your day with a series of asanas. If the first option isn't feasible, then the second-best time is in the evening at blackout.
- Stay away from food that is too heavy, too dry, leftover, too hot, or too much.

- It is essential to refrain from using any kind of pressure or force while doing asanas.
- Going outdoors in the cold just after completing asanas is not a good idea.
- With the lifted heels in particular, slowly bring the head and other body parts down.
- Breathing should be regulated and done only via the nose. Combining pranayama with asanas greatly enhances the benefits of both practices.
- When you feel the tension building up in your body, take a deep breath and relax into Shavasana.

Leading classes in more advanced yoga methods

The lack of a codified method for practicing yoga was caused by the abundance of literature on the subject and the fact that knowledge was customarily passed down from gurus to their students. Although some may claim that yoga exemplifies a singular tradition, the truth is that many different schools and lineages of yoga exist. Techniques vary, but they all lead to the same goal: to get rid of duality and show us the ultimate truth that isn't based on reality. Within the vast field of yoga practice, the two primary disciplines are Bhavana yoga and Prana Samyama. Among the many branches of yoga, Bhavana yoga stands out as a specific practice that focusses on developing a healthy mind. The first path is karma yoga, which represents doing what is right; the second is bhakti yoga, which means devotion; and the third is jnana yoga, which means seeking knowledge. These

three methods of yoga are described in the Bhagavad Gita. Samyama Prana Practicing a series of yoga postures and breathing exercises will help you gain command over your brain's processes. Mild, moderate, severe, and most extreme are the four levels of yoga practiced according to the Shiva Samhita. The practice of mantra yoga, which entails reciting a set of predetermined sounds or syllables, aims to be accessible to people of all abilities.

Pathology, oxygen consumption, and stress

Oxygen intake is mostly constant when at rest but increases in response to increased exertion. The increased oxygen use is a result of the interplay between increased mental and physical activity, as well as factors like stress, illness, and ageing. Mental arithmetic, playing video games, psychological pain, and anxiety are all associated with increased oxygen consumption, according to the research. Some medical disorders are associated with increased oxygen consumption, according to recent studies. A few examples of these disorders include difficulty moving around, heart problems, HIV, COPD, and insomnia. Metabolic syndrome, which includes conditions such as obesity, type 2 diabetes, and hypertension, is characterized by an elevated oxygen demand.

Practicing haṭha yoga often

It is recommended that those who practice Haṭha yoga have the Haṭhayoga pradīpikā. Svātmārāma painstakingly compiled earlier Haṭha yoga methods into a substantial text in the 15th century CE. The non-duality ideas found in the Haṭha Yoga Pradīpika and the non-duality attitude held by the Shaiva school are in harmony with one another. Mallinson claims that the prevalent

belief in non-duality in religious discussions about redemption contributed to Hatha yoga's surge in popularity in mediaeval India. Along with Adi Natha, Matsyendranath, and Gorakshanath, the Vedas list 35 more revered yoga siddhas. The Hindu god Shiva is linked with Adi Natha. Among the several subjects addressed in this comprehensive yoga handbook are pranayama (breath control) and kumbhaka (breath retention). Full coverage is given to related concepts such as chakras, kundalini, meditation, nadanusandhana, shatkarma, mudras, and internal energy activities. An analysis of the Amritasiddhi's depiction of Bindu freedom and the Kubjikamatatantra's Kundalini release is presented in this study.

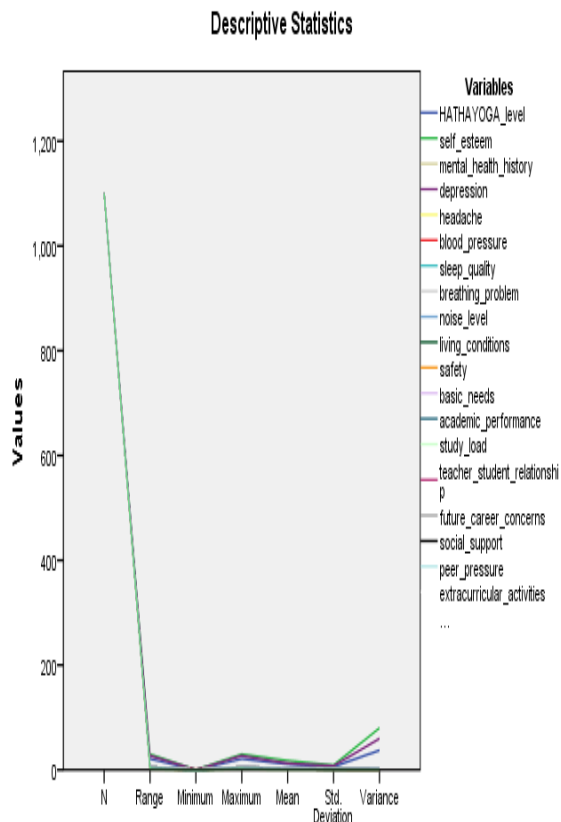
RESEARCH METHODOLOGY

Hatha yoga prioritizes deep breathing methods and stretching movements, successfully facilitating stress release while simultaneously offering the advantages of strength training. Research demonstrates that auditory interaction with music has advantageous effects on both physiological and cognitive processes. The yoga tradition of India is distinguished as one of its most significant cultural legacies. The prevalent fascination with yoga as a remedy for many issues is justifiable, given the practice's recognized advantages for people and society at large. Practicing Hatha yoga with music improves agility and flexibility while fostering tranquilly in the mind and body. This technique efficiently utilizes untapped resources. Participate in deep investigation and introspection under tranquil acoustic settings. By aligning their mental and physical states, students may use hatha yoga in conjunction with music to augment relaxation and refine their meditative

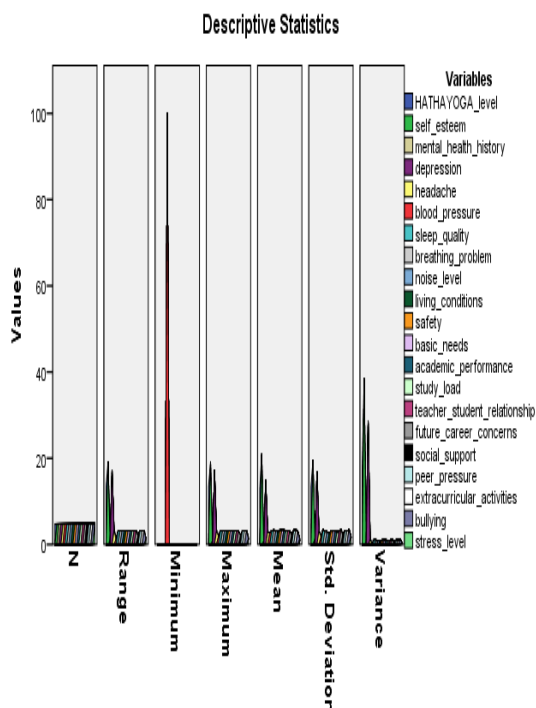
processes. The academic motivation of teenagers increases, while stress-related psychosomatic health issues are alleviated or cured, leading to improved general well-being. Stress can have an impact on learning there by the scores in exams can be reduced. Stress experiences vary based on the stimuli present in the college. The common stimuli may be partiality among students, comparing the student scores these factors can lead to aggression, sadness and nervousness.

RESULTS AND DISCUSSIONS

The data collected from Kerala postgraduate nursing students about the effect of Hatha Yoga on academic stress is comprehensively summarised using descriptive statistics. It summarises the most important features of the dataset. Measures of data distribution, dispersion, and central tendency are common components of such statistics.

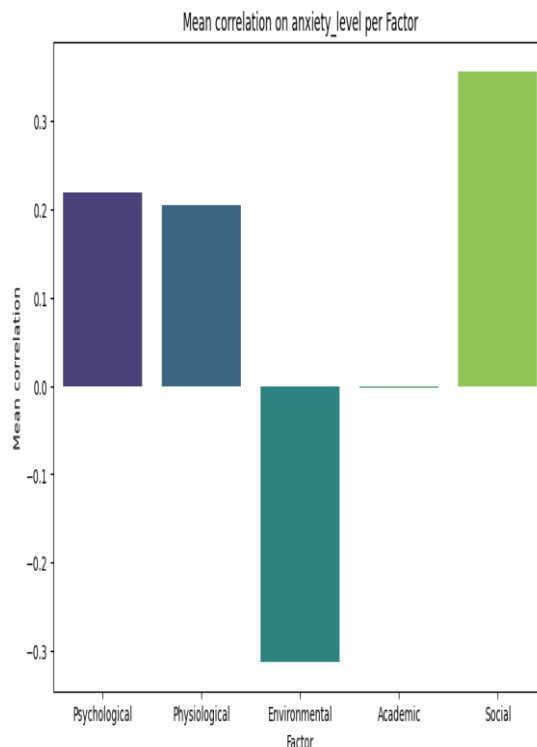


Statistics



Statistics

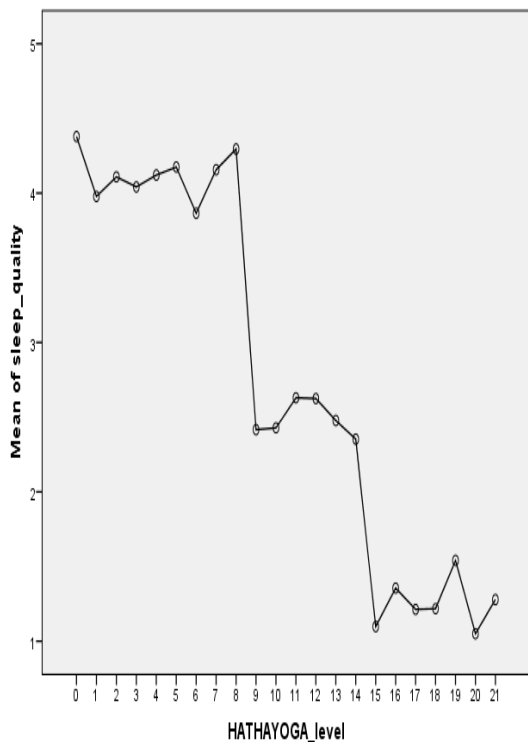
irrelevant. Instead, it suggests that the academic component is highly polarised, with certain elements having very negative values and others having quite positive ones.



To assess the impact of each component and feature, you may use the sklearn library and its feature_importances function.

One model will include the significance of each feature inside each component, while the other will only provide the overall importance without taking the aspects into consideration.

It is important to note that a mean academic component of 0 does not mean it is



The stress scores of students in Kerala were shown to interact non-significantly with respect to gender and age. There was no statistically significant interaction between the 2 and 594 degrees of freedom ($F=0.265$, $p=.768$). That is to say, regardless of gender, the pattern of sadness was consistent across age groups of Kerala students.

CONCLUSIONS

This investigation assesses the impact of Hathayoga on alleviating academic stress in postgraduate nursing students at specific nursing colleges in Kerala. The study utilised a pre-test and post-test design to evaluate stress levels prior to and following the intervention, employing standardised stress assessment scales. Individuals took part in a systematic Hathayoga program over a designated timeframe, with their stress levels assessed at various points in time. The study's findings revealed a notable decrease in academic stress for students who engaged in regular Hathayoga practice. Participants provided qualitative

feedback that underscored enhancements in emotional stability, mental clarity, and coping mechanisms for academic challenges. Despite the fact that mental health disorders affecting students are very frequent, there is still a paucity of knowledge regarding these problems. It is astonishing how little scholarly research has been done on anxiety, dejection, and stress. Most studies on teenage anxiety and depression have focused on the mental health conditions that may precede these conditions. The findings suggest that in order to effectively manage the long-term impacts of depression and anxiety, we need to focus more on the underlying processes. Instead than concentrating on identifying reasons, research on adolescent stress, depression, and anxiety should examine potential processes including demoralisation. More epidemiological research is required to advance our understanding in this field, especially to identify a common cause that might lead to more effective preventative and intervention programs for Iranian youth.

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