



# Effect Of Multimedia Package On Yoga Practice In Enhancing Mental Health Of Higher Secondary Students

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## ARTICLE INFO

## ABSTRACT

Mental health is a state of mental wellbeing, it includes emotional, psychological, and social wellbeing. It helps to improve the mental worries from unnecessary activities. For that yoga practice (physical and mental exercises) is essential to reduce mental stress and depression and also it helps to improve mental health. This paper aims to assess the effect of multimedia packages on yoga practice in enhancing the mental health of higher secondary students. The study adopted the quasi-experimental design and the sample of 100 higher secondary students was selected by convenience sampling technique from a government-aided higher secondary school, in Salem district, Tamilnadu. The data were analyzed by descriptive analysis (Mean and SD) and inferential analysis ('t' and 'F' tests). The finding of the results revealed that there is a significant difference in pre-test scores and post-test scores in the mental health of higher secondary students through multimedia packages on yoga practice. In addition, there is no significant difference in the mental health of higher secondary students through multimedia packages on yoga practice to their gender and stream of study.

**Keywords:** Multimedia package, Yoga Practices, Mental Health, Higher Secondary Students, Academic Success.

## 1. Introduction

Mental health is very essential among human beings, especially students and teachers. Modern society contains numerous innovative courses, learning strategies, and techniques as like as a variety of instructional methods and innovative teaching materials in digital resources. Whereas the students' society learning current knowledge in their day-to-day life activities is based on their improvement of academic performance. When the students strain to achieve good achievement in their learning activities, they are going to search for many learning resources. Therefore, the students face various constraints in their learning and it leads to mental stress or mental distress.

The American College Health Association (ACHA-2018) reported that 60 percent of college students suffered overwhelming anxiety. Also, Rishita Chandra (2020) noted that undergraduate students face mental illness based on the pressure of academic work and conflict with peers or friends. The yoga practice is enhancing the mental health of students and it is reducing the mental stress and academic anxiety among students. For that investigator to implement a multimedia package for yoga practice to enhance mental health among higher secondary students.

### 1.1 Yoga Practice

Yoga practice effectively works on uniting the body and mind as one unit. It alleviates many physical and mental ailments among students and people. Therefore, the researchers introduced some simple yoga practices through multimedia to reduce stress and enhance mental health. Simplified Kundalini Yoga (SKY) practice contains the following practices they are Initial prayer, Sun Salutation (Surya Namaskar), Yoga Physical Exercise, Pranayama techniques, Meditation Practices, Kayakalpa Yoga, and Introspection (Suganthi et al., 2023).

According to Annapurna Medical College (2018) conducted a study on yoga practices. The study found and suggested that medical students who practiced yoga have improved attention, concentration, and memory. In addition, the yoga practice impacts physical exercise to help reduce academic anxiety among secondary school

students in the Vijayapuri district of Karnataka, India. The study stated that yoga practice improves positive abilities and emotional competence and reduces stress safety and negative thoughts among students. Yogendra (2011) studied the effects of yoga and its ability to increase quality of life. He said yoga practice improves physical, mental, intellectual, and spiritual health. Yoga practice offers an effective method of managing and reducing stress and depression and also mental-related disorders.

In addition, Chang et al. (2022) evaluated the effect of brief online isha upa yoga modules on undergraduates' mental health and well-being. Online isha upa yoga showed promise for mitigating the pandemic's negative impact on undergraduate students' mental health and improving their well-being. Furthermore, Clerk and Mayer (2023) studied that interactive learning tools and multimedia e-content have been increasingly recognized for students' potential to enhance their educational experiences. Also, they suggested that integrating multimedia elements into yoga practices could improve students' ability to learn and apply these techniques.

## 2. Review of Related Literature

**Nallathambi et al. (2024)** investigated the effects of simplified Kundalini yoga practices on certain biochemical indicators in older and more hypertensive women. Research has demonstrated that the implementation of streamlined Kundalini Yoga practices has resulted in notable alterations to several biochemical markers when compared to the control group of older women with hypertension. Specifically, HDL has increased greatly and LDL has decreased dramatically. As a result, the hypothesis was accepted with a 0.05 degree of confidence. It has been shown that a simpler form of Kundalini Yoga is beneficial for elderly women with hypertension.

**Suganthi et al. (2023)** examined the impact of kundalini yoga practices, which were simplified, on hormonal and hematological variables in medical students. In the yoga group, 53.33% (n=32) of the study participants were female, while in the control group, 55% (n=33) were female. 20–21-year-olds made up 73.33% (n=44) of the yoga group members, whereas 68.33% of the control group participants fell into the same age range. According to the study's findings, students with and without medical backgrounds may find that a streamlined kundalini yoga practice is a practical and agreeable way to maintain general health.

**Periasamy et al. (2022)** examined the Knowledge, Attitude, and Practices Regarding Simplified Kundalini Yoga Among College Students in Tamilnadu. During their undergraduate studies, college students frequently experience stress. Yoga has been shown to help students feel less stressed in the short term. This study set out to assess the knowledge, attitudes, and practice of (KAP) Simplified Kundalini Yoga among college students. Students studying medicine, paramedicine, and non-medicine participated in a cross-sectional web-based online survey. Generally speaking, just 6.5% of them have sufficient knowledge scores, 26% have strong attitude scores, and 8.7% have good practice scores. Over 80–90% of pupils do not practice, understand, or have the right attitude toward SKY. The primary excuses given for not taking up yoga were laziness, lack of interest, and ineffective time management. The survey found that although students are pleased with simplified Kundalini yoga, they still want encouragement.

## 3. Statement of the Problem

Today, the world is changing at a rapid pace, and the education sector plays an important role in the development of a country. The development of a country depends on science and technology. The present scenario is technology in education or technology of education in school and higher educational systems have been running through online (Internet) or multimedia-oriented classes. Multimedia is moving along these lines as one of the best tools for educational development. Education should be a major concern of the stakeholders because of the ways and benefits of promoting the best academic performance among learners. Therefore, the use of multimedia can play a decisive role in the teaching and learning process. Hence the investigator to apply the multimedia package for practice to enhance mental health among higher secondary students. The statement of the problem is "Effect of Multimedia Package on Yoga Practice in Enhancing Mental Health of Higher Secondary Students".

### Objectives

- To find out the significant difference between pretest score and posttest score in mental health of higher secondary students through a multimedia package on yoga practice.
- To find out the significant difference in mental health of higher secondary students through multimedia package on yoga practice to their gender.
- To find out the significant difference in mental health of higher secondary students through multimedia package on yoga practice to their stream of study.

### Hypotheses

- There is no significant difference between pretest score and posttest score in mental health of higher secondary students through a multimedia package on yoga practice.
- There is no significant difference in mental health of higher secondary students through multimedia packages on yoga practice to their gender.
- There is no significant difference in mental health of higher secondary students through multimedia packages on yoga practice to their stream of study.

#### 4. Methodology

For the study, the investigator applied the quasi-experimental design to assess the impact of multimedia packages on mental health of higher secondary students.

##### 4.1 Participants

In the study, the investigator selected the higher secondary students (grade 11) from Government-Aided Higher Secondary School, Omalur, Salem district, Tamil Nadu. The 100 participants were recruited through a convenience sampling technique.

##### 4.2 Intervention

The content of the multimedia package was developed by the researcher with the guidance of the research supervisor. The intervention program was conducted among single group pretest and posttest design. The multimedia package consists of the instructional video, audio, text, content, and picture interactive elements (Simplified Physical exercises, Meditation Practices, Kaya Kalpa Yoga, Introspection, and Surya Namaskar) designed to teach and facilitate the practice of yoga techniques.

##### 4.3 Data Collection

The pre-test data was collected by using the mental health assessment tool. The tool was prepared by the investigator with 53 statements. The tool consists of the following dimensions such as self-evaluation, perception of reality, integration of personality, self-confidence, group-oriented attitude, and environmental competence. The reliability has been worked out through the split-half method the reliability value was 0.72 and face validity was established. The assessment process was administered one week before the implementation of the multimedia package.

##### 4.4 Intervention Programme

The investigator introduced the multimedia package to the students through educational institutions, and they are encouraged to use the multimedia package as a self-paced learning resource. The intervention period lasts eight weeks, during which students are encouraged to yoga practice and yoga techniques based on the package content.

##### 4.5 Post-Intervention Test

The post-test has been conducted to assess the mental health of higher secondary students. The post-test tool has 53 statements and it consists of the following dimensions such as self-evaluation, perception of reality, integration of personality, self-confidence, group-oriented attitudes, and environmental competence. The multimedia package applied to eight weeks for teaching yoga online to assess the mental health among higher secondary students.

##### 4.6 Data Collection and Analysis

The data were collected from higher secondary students through both pretest scores and posttest scores for data analyses. For those analyses, the researcher applied the descriptive analysis (Mean and S.D) and inferential analysis ('t' test and 'F' test) and the research used the SPSS package.

#### 5. Data Analysis and Interpretation

##### Null Hypotheses:1

There is no significant difference between pretest score and post-test score in mental health of higher secondary students through multimedia packages on yoga practice.

**Table-1 Significance difference between pre and post-intervention test scores in mental health of higher secondary students through multimedia package on yoga practice**

Variable	Intervention Program	Sample	Mean	S. D	't'-test	'p'- value
Mental Health	Pretest	100	57.29	12.722	3.58	0.001
	Posttest		62.43	7.548		

Table (1) inferred that the calculated 't' value is 3.58 greater than the tabulated value of 1.98 at a 0.05 level of significance. Consequently, the null hypothesis is not accepted. The result of the study showed that the posttest score (62.43) was better than the pretest score (57.29) in the mental of higher secondary students through a multimedia package on yoga practice. Therefore, the result concluded that there is a significant difference between pretest score and post-test score in mental health of higher secondary students through multimedia packages on yoga practice.

### Null Hypotheses:2

There is no significant difference in the mental health of higher secondary students through multimedia packages on yoga practice to their gender.

**Table-2 Significance difference in mean value of impact of multimedia package on mental health to their gender**

Variable	Intervention	Gender	Sample	Mean	S. D	't'-test	p-value
Mental Health	Pretest	Male	32	54.28	15.04	1.48	0.15
		Female	68	58.71	11.32		
	Posttest	Male	32	63.69	8.17	1.09	0.28
		Female	68	61.84	7.23		

Table (2) inferred that the calculated 't' values are 1.48 (pre-test) and 1.09 (post-test) are less than the tablet value of 1.98 at a 0.05 level of significance. Consequently, the null hypothesis is accepted. The results of the study showed that the posttest score of males (63.69) is better than the pretest score of males (54.28). As like as the posttest score of females (61.84) is greater than the pretest score of females (58.71) in the mental of higher secondary students through a multimedia package on yoga practice to their gender. The result concluded that there is no significant difference in the mental health of higher secondary students through multimedia packages on yoga practice to their gender.

### Null Hypotheses:3

There is no significant difference in mental health of higher secondary students through multimedia packages on yoga practice to their stream of study.

**Table-3 A significant difference in mean value of impact of multimedia packages on mental health to their stream of study.**

Variable	Intervention	Stream of Study	Sample	Mean	S. D	'F' Value	p-Value
Mental Health	Pretest	Maths & Biology	16	54.38	12.27	1.86	0.12
		Maths & Computer	25	58.76	10.71		
		Pure Science	19	62.84	8.97		
		Arts	21	56.81	12.46		
		Vocational & Commerce	19	52.79	17.15		
	Posttest	Maths & Biology	16	63.44	7.00	0.31	0.87
		Maths & Computer	25	61.92	8.61		
		Pure Science	19	63.21	6.02		
		Arts	21	61.14	8.78		
		Vocational & Commerce	19	62.89	6.91		

Table (3) inferred that the calculated 'F' values are 1.86 (pre-test) and 0.31 (post-test) are less than the tablet value of 1.98 at 0.05 level of significance. Consequently, the null hypothesis is accepted. The results of the study showed that the posttest score of Maths & Biology (63.44) is better than the pretest score of Maths & Biology (54.38). As like as the posttest score of Maths & Computer (61.92) is greater than the pretest score of Maths & Computer (58.76). As like as the posttest score of Pure Science (63.21) is greater than the pretest score of Pure Science (62.84). As like as the posttest score of Arts (61.14) is greater than the pretest score of Arts (56.81). As like as the posttest score of Vocational & Commerce (62.89) is greater than the pretest score of Vocational & Commerce (52.79) in the mental of higher secondary students through a multimedia package on yoga practice to their stream of study. The result concluded that there is no significant difference in the mental health of higher secondary students through multimedia packages on yoga practice to their stream of study.

## 6. Discussion

The results of this study interpreted the context of the impact of multimedia packages on the mental health of higher secondary students. This study revealed the potential of a multimedia package as a promising tool for enhancing mental health among higher secondary students through yoga practices. The integration of interactive multimedia elements into yoga instruction appears to have a positive impact on reducing stress and anxiety while promoting a sense of well-being. These results align with previous research on the benefits of yoga for mental health (Pascoe et al., 2017; Thirthalli et al., 2013). The decrease in anxiety levels among participants is noteworthy. Anxiety can significantly affect students' academic performance, and the ability of multimedia packages to alleviate anxiety suggests its potential for improving academic success (Eisenberg et al., 2009). Furthermore, this study also aligns with the broader educational literature that emphasizes the benefits of interactive multimedia e-content modules for effective learning (Clark & Mayer, 2016). Combining traditional yoga practices with modern e-learning technology offers a promising approach to engage students and enhance their well-being. It was established that the use of multimedia can improve the learning of yoga to a certain level. The experimental group mean was higher than the control, but the difference was not significant. Also, there was no significant difference in achievement using multimedia materials based on gender, but males had higher mean scores than females. In conclusion, multimedia techniques increased the academic success of students in yoga to a certain level (Akinoso, 2018). E-content development has great potential and can be used in various learning scenarios. While it initially gained popularity in higher education, it has since been applied to many other sectors, including healthcare. It allows educators to create highly engaging learning experiences that are accessible to all students. Challenges in e-content development include the availability of the internet, creating content that is engaging and relevant to a wide range of learners, and access. Still, it is expected that the use of e-content in yoga teaching will continue to increase in the future. The future of e-content development in yoga teaching is likely to see continued growth and innovation as technology advances and more educators and learners recognize the benefits of online and digital resources (Bankar et al., 2023). This research methodology outlines the approach taken to investigate the effects of multimedia e-content module on mental health of higher secondary students and to provide a comprehensive analysis of the study's findings.

## 7. Conclusion

This study demonstrates the impact of multimedia packages on enhancing the mental health of higher secondary students through yoga practices. The intervention significantly improved the following dimensions such as self-evaluation, perception of reality, integration of personality, self-confidence, group-oriented attitudes, and environmental competence. Given the challenges faced by students in this age group, the results of these findings are promising to help improve their mental well-being.

This research highlights the potential of multimedia packages as a practical and accessible means of introducing yoga practices into the lives of higher secondary students. The study contributes to the understanding of the role that technology-enhanced learning can play in addressing mental health challenges in educational settings.

While this research provides valuable insights, it is important to recognize its limitations. The study employed a convenience sample and had a relatively eight-week period. Further research with larger and more diverse samples, as well as longer intervention durations, is recommended to enhance the generalizability of these findings.

In summary, the integration of multimedia packages for yoga practices has the potential to not only enhance students' mental health but also indirectly improve their academic performance. The conclusion of the study is to explore innovative ways to support the well-being of higher secondary students, this study offers a significant contribution to the ongoing dialogue on holistic approaches to education and mental health.

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