

## **A REVIEW ON THE BENEFITS OF YOGA IN CHILDREN**

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### **ABSTRACT**

*In Malaysia, the number of youngsters suffering from stress and anxiety is increasing. Mind–body treatments such as mindfulness therapy, meditation, and yoga have been used to decrease and/or manage the psychological consequences of stress and anxiety in many different nations, according to evidence. The intervention of yoga as a meditative movement practice in helping schoolchildren manage stress and anxiety is examined in this review study. A variety of databases, including PubMed/MEDLINE and PsycINFO, were used to find articles. This review includes both peer-reviewed and non-peer-reviewed papers published in English. All of the research looked at included some kind of contemplative movement practice. The yoga pathways of asanas (postures), pranayama (expansion of life force), dharana (concentration), and dhyana (meditation) were all included in the intervention. A total of eight papers were evaluated after meeting the inclusion criteria. The results of this study show that yoga may help with stress management and anxiety reduction, among other things. Despite the variability and sample size constraints in most, if not all, of the research examined, yoga seems to be an effective technique for helping children deal with stress and anxiety. It seems that including yoga into the physical education curriculum in Malaysian schools will be beneficial to pupils.*

**KEYWORDS:** Anxiety, Child, Physiology, Stress, Yoga.

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### **1. INTRODUCTION**

Children are frequently exposed to cutting-edge technology, which has exploded in popularity over the last decade. Despite the fact that media technologies such as computers and cell phones are knowledge resources for all, their widespread use has become concerning; there appears to be a decline in physical activity among these users, and this lack of mobility has been linked to a variety of health problems, including obesity and physical and mental health problems.

Furthermore, learning and teaching do not take place only during school hours. It continues after school when students are forced to use the internet to research current material for their homework. Parents may put pressure on their children to do well in school at home. When children do not do well, their confidence is impacted, which contributes to student worry. Meanwhile, parents and instructors may opt to overlook symptoms of mental stress in their children in order to keep them competitive.

Mental health issues are on the increase among Malaysian students, according to the Malaysian Health Ministry. In 2011, one out of every 10 people had a mental health problem, but by 2016, that figure had increased to one out of every five people, the same as in the United States. Anxiety and sadness have been identified as the most common mental health issues among students. Anxiety disorders were identified in 31.9 percent of 10,123 teenagers aged 13–18 years in a study conducted in the United States. Anxiety is present in all children to different degrees, but in some

instances it may become excessive and lead to an anxiety disorder. Anxiety is defined as an unfounded dread or uneasiness in response to actual or imagined situations. There are numerous symptoms that influence physical and mental health, and they may differ from person to person. Excess release of adrenaline, noradrenaline, and cortisol causes symptoms such as increased heart rate, excessive sweating, and nausea. According to some sources, anxiety in youngsters causes stomachaches, headaches, and dizziness[1], [2].

Anxiety has a variety of mental consequences. Others may feel confusion or mental foggy, while others may experience anxiety and anguish in the absence of actual threat or an inability to relax. High levels of worry are harmful because they may impair attention and memory, both of which are essential for academic performance.

While there have been many studies on the benefits of mindfulness and meditation on different mental health problems and overall well-being in children, there has been very little study on the effects of classical yoga, as a meditative movement, on mental health concerns in children. The existing research on the influence of yoga on children, which is over a decade old, has revealed that this mind–body exercise has beneficial benefits in the management of anger, sadness, stress, body dissatisfaction, anxiety, and increasing positive mood.

A “child” is defined as a person under the age of 18 under the Convention on the Rights of the Child. All of the children who took part in the research examined in this article were between the ages of 7 and 18. Eating disorders, dissociative disorders (problems that alter a person's memory), psychosis, obsessive–compulsive disorder, autism, attention deficit hyperactivity disorder, anxiety, depression, and post-traumatic stress disorder are all examples of mental health disorders. Only studies that have used therapeutic yoga in children suffering from stress and anxiety have been included in this evaluation. Studies from the previous seven years have been collected and examined. If the results of this study shed light on the therapeutic benefits of yoga on children, the next step would be to submit a hatha yoga curriculum to the Malaysian Education Ministry, which would either complement or replace existing physical education courses in schools[3]–[5].

### *1.1. Yoga as meditative movement:*

Yoga is one of the most popular mind–body practices today, and it is practiced all over the globe. Yoga, while being an old discipline, is pragmatic in its approach. Classical yoga, as defined by Patanjali, the creator of yoga, began in India in the 6th century and consists of eight streams. These include yama (universal ethics), niyama (individual ethics), asanas (postures), pranayama (life force expansion), prathyhara (senses withdrawal), dharana (concentration), dhyana (meditation), and samadhi (meditation) (blissful state). Yoga is so adaptable that it enables people to focus on the pathways that are most helpful to them while paying less attention to the others.

Yoga has been extensively researched in adults as a supplementary treatment for a variety of physiological and psychological problems. Nonetheless, there haven't been as many research on the therapeutic value of yoga in children as there have been in adults. Yoga, according to existing studies, may improve flexibility, promote weight reduction, and improve mental and psychological health, among other things.

Given the fact that mental health is becoming more of an issue in schools and other learning institutions, there is a push to equip children with the skills they need to deal with the behavioral demands that are put on them. At school, children encounter not just academic difficulties, but also interpersonal pressures that may require highly developed self-regulation abilities like mindfulness, resilience, and anger management. Stress reactivity in youngsters has also been linked to blood pressure readings, obesity levels, and bad behaviors, according to research. Children who were subjected to high levels of psychological stress had more overall adiposity than those who were not. Similarly, children who exhibited higher heart rate reactivity in response to

interpersonal stress had a higher percentage of body fat and a higher BMI percentile. If left untreated, increases in total adiposity and heart rate may lead to type 2 diabetes, hypertension, and cardiovascular disease as early as infancy[6], [7].

While there may be alternative options, yoga is one way to build skills (such as mindfulness, resilience, and anger management) to treat underlying stress. Through the down-regulation of the hypothalamo–pituitary–adrenal axis and the sympathetic nervous system, research shows that a variety of yoga methods may have a beneficial impact on an individual's physiological and mental health. Yoga has also been shown to improve students' mind–body awareness, self-regulation, and physical fitness, which may improve behavior, as well as their mental, physical, and emotional health. Ross and Thomas looked at 81 research that included not just a range of trial designs, but also a variety of sub-populations (college students, adults and senior citizens). Even though all of the research included a yoga intervention, the organization of the yoga session, the kind of yoga, and the frequency of yoga classes differed from one study to the next.

There are other instances of young people nowadays who have more serious views than previous generations. For example, in Norway, as in several other European nations, young people take less drugs than earlier generations, do better academically, and are more involved in society and elections. Furthermore, kids are more devout and less criminal, and they study harder in school. Children and teenagers also share more values with their parents than previous generations, and although young people "hang out" online, many parents do as well. This resemblance may be one of the explanations for the drop in drug use and norm-breaking. However, this pleasant conduct comes at a cost; new study suggests that today's youth are more concerned than previous generations (op. cit.). In addition, a growing number of young people are being diagnosed with illnesses including attention deficit hyperactivity disorder (ADHD) (ADHD). They are also under more pressure to achieve in school today than in past years. It may be difficult to put such a strong focus on education and self-discipline. As a result, young people have greater psychological issues; many worry excessively, have sleep difficulties, and feel gloomy and stressed[8]–[10].

Mental health issues are prevalent among children and adolescents in the West, as well as in other areas of the globe. According to the 2012 European Union (EU) Youth Report, about 10%–20% of young people in Europe suffer from mental disorders, and one out of every five has emotional or behavioral issues. According to some statistics, although the majority of teenagers in the globe are healthy, 20% of them have mental health problems. Similarly, according to a recent study, 15–20 percent of Norwegian children aged 3–18 years have impaired functional skills as a result of mental illnesses such as anxiety, depression, and behavioral disorders. Due to psychological and biological changes, psychological difficulties tend to increase during puberty. Children endure demands from their families, schools, and other social settings to perform well and adapt to society's constantly changing rate of growth.

The present situation makes it difficult for instructors and parents, as well as children, to promote good mental health. The shift from infancy to adolescence and adulthood may be challenging in and of itself. Children must also establish their own identity, gain autonomy from their parents, and cope with shifting peer relationships while coping with bodily changes. Academic, commercial/marketing, and relationship problems, as well as excelling in school, being popular, having a fit or slender physique, wearing the correct brands of clothing, and possessing the newest technical devices, are all sources of pressure for young people. This set of expectations causes stress, which has a negative effect on children's mental health and well-being, as well as their academic achievement.

Bullying (at school and online), behavioral difficulties, attention and self-regulation problems [such as ADHD and attention deficit disorder (ADD)], sleep disorders, obesity, internet addiction, drug misuse, and a lack of school motivation may all contribute to dropouts in children. Despite

many years of political importance and targeted actions in both the EU and the US, recent high school dropout rates are close to 30%. (US). Additionally, schools confront the problem of pupils (particularly males) being more interested in the Internet, social media, and gaming than in the school curriculum.

### *1.2. Children and Young People's Media Use and Health Challenges*

Current civilization also provides a plethora of unwanted diversions and temptations, many of which are connected to modern media and communication technology, on which we have grown reliant. The enormous availability of media and the amount of time youngsters spend using media technology are obvious indications of our new generation's lives and priorities<sup>2</sup>. In the United States, children spend over seven and a half hours per day using media devices, an alarmingly high average in 2013, but a reality. Children across the globe are spending an increasing amount of time in front of televisions, computers, and mobile phones, making media a major part of their life. Young people nowadays are expected to be online all of the time, and many of them are. To make media accessible to youngsters, advertising, communications, and education offer a fresh new social networking picture.

Although the media is a valuable source of information for children and adolescents' mental health, its widespread usage raises concerns about young people's ability and desire to balance physical and mental activity. A research conducted by the Kaiser Family Foundation looked at media usage among very young children (0–6 years) and found that they spend as much time with electronic devices as they do playing outdoors. This research, like many others, finds a connection between media use and a rise in health concerns including obesity and other physical and mental difficulties. Media addiction, recognizing media as a role in mental illness, dependence, obsessive–compulsive behaviors, concentration difficulties, and other attention disorders are words used by healthcare experts. In addition to these physical and mental dangers, safety concerns are being raised in media-rich societies, with issues such as cyberbullying, young children being exposed to violence, sexually explicit content, and extreme or inappropriate behaviors being emphasized. With media tools and technology, the world at large, including societal deviances, is more closer and more readily accessible.

We define the media generation as young people who grow up in a hypermedia world. Unequal access to media is a significant issue in many nations, including India, particularly because information and communication technologies (ICT) are seen as key future knowledge resources. If children and young people's media usage is to be fully understood, it must be contextualized. To begin with, children's daily life offer background, which includes their family environment, school, and leisure activities. When analyzing the impact of new media and ICT on the lives of children, it's equally important to examine culture and norms. Young people's media usage is influenced by their social environment, which includes their family, community, and friends or peer groups. The media environment, which includes conventional media, serves as a backdrop for how new ICTs are adopted. The effect of media exposure on children will be mediated by their usage and receipt of it. Media usage may have far-reaching effects, affecting how youngsters spend their time, socialize, and even perceive the world. As a result, how young people perceive themselves and their life may be influenced by how they utilize media.

## **2. DISCUSSION**

One of the meditative movement techniques, therapeutic yoga, seems to be effective in helping youngsters deal with stress and anxiety. It promotes well-being by involving not just the body but, more crucially, the mind. The majority of the research included in this review seem to have had positive results. Yoga may be used to alleviate stress in a variety of ways. Asanas, pranayama, and mindfulness/meditation sessions are all yogic practices that have a soothing impact on the mind, lowering tension and anxiety levels. This is unsurprising, given that similar effects were shown in

the majority of the research examined in this article.

Self-regularity capacity improvement has a significant impact on the development of fundamental skills that support good behavioral, emotional, and academic results. According to the results of an RCT research, which agrees with Greenberg's, contemplative movements such as yoga assist relieve tension and obstruction of energy in the joints or organs. As tension is released, the flow of prana (life energy) is smoothed, resulting in a feeling of well-being and equilibrium in the body, mind, and spirit. After participating in therapeutic yoga, children's physical and mental well-being, resilience, mood, and self-regulation abilities related to emotions and stress improved. Despite these limitations, the findings of these research seem to suggest that a yoga program would improve students' psychological and emotional well-being. The advantages of yoga are undeniable, and schools must be ready to include this exercise in their curricula.

Breathing methods appealed to the participants in one of the qualitative research in this study, which is an intriguing result. Adult studies have shown that pranayama causes changes in brain activity and reduces oxidative stress, so this isn't unexpected. The parasympathetic nerve system is triggered, resulting in a decrease in heart rate. Similarly, the sympathetic nervous system's activity is decreased during shavasana (corpse posture) or profound relaxation (yoga nidra). Children may practice pranayama to de-stress when they were anxious or upset. It seems that if the advantages of yoga can be made more widely known, children may no longer need to rely on medicine when they are anxious. Instead of going to a clinic every time they have a stress or anxiety episode, these kids could try yoga.

However, most, if not all, of the studies included in this review were restricted not just by a small sample size but also by variability in the sample group. Because most of the participants in focus group interviews knew one other, peer dynamics may have influenced their answers. As a result, their opinions may have been biased in some manner. In addition, not all of the studies gathered data on participant factors such as family history and socioeconomic position, peer connections, and mental diagnosis (if any) prior to the research. All of this information would have helped understand the findings by giving more relevant context. Some studies, on the other hand, lacked control groups, making it difficult to tell if the outcomes were attributable to yoga or something else.

### **3. CONCLUSION**

Yoga, which includes asanas, pranayama, prathyhara, dharana, and dhyana, seems to be helpful in assisting youngsters in overcoming stress and anxiety. The restorative postures, such as shavasana (corpse position) and pranayama (life force expansion), induce prathyhara (sensory withdrawal), which allows the nervous system to relax. When children practice yoga on a regular basis, they may be able to connect with their inner world by coordinating their mind, body, and breathe to reach higher levels of awareness. Higher levels of serenity are attained, opening the path for a better physical, mental, and emotional existence. This meditative movement technique seems to be a cost-effective method of stress and anxiety management.

While more research into the assessment of psychosocial and educational outcomes in response to therapeutic yoga is needed, Malaysian schools should seriously consider incorporating this meditative movement regime into their classrooms, as it appears to be a viable practice supporting today's children's psychosocial needs. Yoga sessions should be introduced as part of the regular physical education class or after school hours as an additional co-curricular activity as a pilot project. Children with psychological and emotional problems may be prioritized for yoga sessions if resources are limited. Because yoga is non-denominational and may be practiced by anybody regardless of race, gender, or creed, schools may recruit or send current physical education instructors through rigorous training to become certified to teach yoga. In response, the Malaysian Ministry of Education may consider giving financial assistance for yoga teacher training. The next

stage would be to observe student behavior improvements and go from there. In the interim, schools may seek volunteer yoga teachers from non-governmental groups such as the Malaysian Yoga Society.

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