An Overview Of Yoga And It's Role In Children's Life

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ABSTRACT

The purpose of this study is to demonstrate how yoga may be used in education by presenting the results of the research. In order to achieve psychological and social equilibrium, yoga employs a variety of strategies. Our children are growing more sedentary, and they are distracted with the continual stream of stimuli from their mobile phones, computers, and televisions. We are seeing a rise in stress and emotional illnesses in youngsters. We may infer that yoga is useful in treating a wide range of ailments and disorders by analysing a number of studies. Stress, anxiety, and sadness may all be alleviated via regular yoga practise. Examines the possibility of incorporating yoga into educational programmes for both healthy and disabled students. Yoga has been demonstrated to increase attention, self-regulation, and reduce stress in students, according to preliminary findings. Instructors and teachers in certain yoga programmes are both trained by yoga instructors in order to run yoga programmes. Children with impairments may practise yoga, according to both personal experience and scientific evidence. In a recent study, 29 children with autism spectrum disorder were evaluated to see if and how yoga may help them.

Keywords: yoga, education, schools, health

1. INTRODUCTION

In today's environment, education is becoming more and more of a problem. For six hours a day, students sit at their desks listening to and transcribing from the blackboard while surrounded by mobile phones, other kinds of contemporary technology that deliver something new every day, and constant activity changes. Stress and anxiety are exacerbated in youngsters when they are subjected to unreasonably high standards and expectations. Teachers and parents' expectations can put youngsters under a lot of stress. However, parents and educators are typically dealing with a great deal of pressures of their own. While we teach children about the reproduction of annelids, we do not teach them how to breathe properly and so lessen their stress levels. The pressure on today's youth is palpable. According to Santalahti et al. (2005), Finnish research of teenagers found that as many as 50% of them suffer from mental and psychosomatic illnesses. Vuli Prtoric and Lonsareviç (2016) revealed that 13% to 17% of Croatian students aged 11 to 15 suffer with strong internalised symptoms, according to Croatian research (stress, anxiety, depression). Younger folks have higher amounts of stress than older people (Hagen, Nayar, 2014). Chronic stress can cause a wide range of health problems, including anxiety, sleeplessness, muscular discomfort, high blood pressure, decreased immunity, heart disease, depression, and more. This is based on (Hagen, Nayar, 2014). Stress levels can have a significant impact on attention levels (Stueck and Gloeckner, 2005). Stress diminishes the quantity of norepinephrine, which is responsible for concentration and mental energy, and dopamine, which weakens the enjoyment of previously rewarding activities. Serotonin, the neurotransmitter responsible for a positive state of mind, is also decreased as a result (Hagen, Nayar, 2014). Cortisol levels rise, which is linked to the death of dendritic cells and hippocampal shrinkage as well as memory problems (Lupien et al., 1998). Movement is restricted to a physical education lesson in the Croatian educational system. Children are also free to move during breaks, whereas mobility is limited or forbidden in the classroom. Research in the last few decades has paradoxically shown that there is a clear correlation between physical activity and learning. Neurotrophins, such as dopamine, encourage the development of existing neurons and increase the number of new neurons and neural connections in the brain via stimulating muscle activity (Fotuhi, 2013; Hanaford, 1995).

2. WHAT IS YOGA?

When it comes to yoga, the Sanskrit term for "union, link" is the original meaning (Paramhans Swami Maheshwarananda, 2006). Word "yoga" is originally defined as "an constantly awake

consciousness that maintains the equilibrium of the cosmos" (Paramhans Swami Maheshwarananda, 2006, 11). When we talk about yoga, we're not just talking about the end aim of achieving union and harmony with oneself and others. As the scriptures point out, yoga's origins may be traced back far further than previously thought, to a time when it was passed down orally rather than via written sources (Kumar, 2008). The "Yoga Sutra of Patanjali" is a foundational text in the yoga canon. According to Patanjali, the eight levels of yoga are as follows: Yama (niyama), Niyamas (Asanas), Pranyamas (Prayer), Dharanas (Meditation), and Samadhis (Sleep) (Paramhans Swami Maheshwarananda, 2012). There are five types of practises in yoga: pranayama (breathing exercises), pratyahara (sensory withdrawal practises), dharani (concentration exercises), dhyana (meditation), and final states of consciousness, or samadhi (unified consciousness). All around the world, it is still practised according to Patanjali's "Yoga Sutras." Yoga is a way of life that encompasses a number of practises aimed at increasing one's level of awareness and bringing the body and mind into balance. Beginning with relaxation techniques is a common practise in a yoga lesson. Each portion of the body is intentionally relaxed for five to ten minutes. In relaxation, we focus on breathing and practise appropriate breathing, which involves diaphragm breathing in addition to chest and clavicular breathing (so-called abdominal breathing). The joints and muscles are then warmed up and relaxed with dynamic movements. Asanas follow. The Sanskrit word for "position" is asana (Paramhans Swami Maheshwarananda, 2012). Asanas are the least exhausting and most helpful poses for the mind and body. The movement is synchronised with the breath, yet the movement is also conscious of its own existence.. A deliberate breathing practise (pranayama) and meditation are then performed.

To reap the many advantages of exercise, it's critical to begin by relaxing your body and mind before initiating any movement. The parasympathetic system is activated and strengthened through conscious relaxation (Hanson, Mendius, 2014). Relaxing the sympathetic nervous system is another benefit (Hanson, Mendius, 2014). Chronic stress-induced cell damage can be mitigated by the relaxation response, which can even modify gene reflection (Hanson, Mendius, 2014). Techniques like deep breathing and meditation can help you de-stress. Yoga breathing is conscious, which means it is regulated; it is deeper than normal exercise. It is possible to achieve a condition known as "flow" or "meditation" by inhaling and exhaling five times, each time deeper than normal; this elevates the energy level, relaxes, and engages the sympathetic and parasympathetic nerve systems (Hanson, Mendius, 2014). Coordination of motions, stretching muscles, and abdominal breathing promotes circulation and resulting in a release of tension, enhanced oxygenation, and a positive influence on the nervous system's central and autonomic nervous systems (Peck et al., 2005).

3. YOGA PRACTICE ADJUSTMENTS FOR CHILDREN

A child's psycho-physical capacities should be taken into consideration while designing yoga activities, as well as how they are performed and how long they are. Exercises are shorter and may be gradually increased in duration. Children's skeletons and hormones are still developing, therefore they shouldn't be in particular postures for lengthy periods of time without proper supervision. Yoga also necessitates specific qualifications, such as familiarity with the body's major organs, a working knowledge of breathing techniques, and the ability to tell the difference between tensed and relaxed muscles. New exercises should be introduced gradually; certain exercises can only be undertaken if the preceding steps have been mastered. It's only after youngsters are able to control their breathing that they may begin pranayama activities, such as in the case of children.

4. THE IMPACT OF YOGA ON PSYCHO-PHYSICAL HEALTH

Research shows that practising yoga may enhance one's overall health, posture, and immune system as well as alleviate or remove certain of one's health problems. Yoga is an anti-stress strategy that can reduce anxiety and depression, as well as improve psychological well-being, as evidenced by the existing studies. Practicing asanas can improve posture by realigning the

vertebrae, increasing range of motion, and preventing stiffness in the muscles and tendons (Khalsa, 2007). Practicing asanas and pranayama helps to rejuvenate internal organs, remove toxins and waste from the skin, digestive system, and cardiovascular system, and regulate the neural and endocrine systems. It also nourishes brain cells (Khalsa, 2007). Cardiovascular health is improved in all age groups by physical activity (Bhargava et al., 1988; Birdee et al., 2009). A person's lung capacity increases, their breathing becomes more regular, and their breaths per minute decrease (Joshi, Joshi, Gokhale, 1992; Raub, 2002). Yoga's ability to reduce stress, anxiety, and depression in adults and children has been examined in a number of studies. Self-assessments and physiological markers have been used in certain studies as measures of emotional states.

In both adults and children, yoga has been found to be an effective stress-reduction method (Granath et al., 2006; Kalayil, 1988). There have also been reports of positive benefits on anxiety and panic attacks (Telles, Gaur, Balkrishna, 2009; Kozasa et al., 2008; Kuttner et al., 2006; So, Orme-Johnson, 2001). The GABA neurotransmitter, which plays a role in anxiety disorder, is increased by yoga practise, unlike walking (Karri, Yakhkind, Jensen, 2010). In comparison to a control group, yoga activities helped elementary school students minimise situational anxiety (Kalayil, 1988), while high school students increased their ability to regulate anger, were less exhausted, were less anxious, and had a better mood (Khalsa et al., 2012). A meta-analysis of 124 research on the benefits of yoga, including asana practise, meditation, and breathing exercises, found that yoga can help alleviate symptoms of depression (Balasubramaniam, Telles, Doraiswamy, 2013). Higher ratings on a test measuring psychological well-being were found in individuals who used the "Siddha Samadhi Yoga" programme, which incorporates meditation and pranayama (Kozasa et al., 2008). Study participants aged 17 who practised yoga had greater levels of happiness and mental equilibrium, according to the findings (Gupta, Singh, Singh, 2016). Increased empathy has been linked to meditation (Lazar et al., 2005; Lutz et al., 2008).

5. YOGA AND COGNITIVE FUNCTIONS

Yoga has been shown to improve cognitive skills in both adults and children in several research. Improvements in attention, perception, and memory have been verified, and some study indicates that problem-solving speed and executive functions may be affected. A study on the impact of yoga on children's attention was published in the 1970s (Hopkins, Hopkins, 1979). A total of 34 kids, ranging in age from six to eleven, took part in the research. Exercise and psychomotor activities were separated into two groups of youngsters for 15 minutes each. The results of a single concentration game were used to gauge students' levels of concentration. Both groups saw a considerable increase in their ability to focus. The study's drawback is the absence of a control group, which would have done nothing throughout that period. In trials with a control group, yoga was found to improve attention spans in both children and adults (Hopkins, Hopkins, 1979; Razza, Bergen-Cico, Raymond, 2015; Pradhan, Nagendra, 2010; Manjunath, Teles, 2001; Tang et al., 2007; Telles et al., 1993; Valentine, Sweet, 1999). Performance on exams, questionnaires, and observation were used to gauge attention. In a study of 40 children ages 8 to 14 who practised yoga, Nilsoge et al. (2016) discovered that yoga had a positive effect on working memory, compared to the control group of children.

Girls aged 10 to 13 completed a mental health exam more quickly following a month of regular 75-minute yoga practise (Manjunath, Telles, 2001). According to Murphy, Donovan, and Tailor (1997) in their review study, meditation not only improves attention but also perception, creativity, and response speed. Researchers examining the effects of TM meditation came to similar results in So and Orme-Johnson (2001). A total of 154 pupils from a Chinese high school were split into two groups: one group practised meditation, the other remained in the classroom. The findings of practical intelligence, field reliance, inventiveness, and information processing speed were significantly improved after six months of regular exercise for 20 minutes, compared to the control group. According to several studies, students who practise

yoga see an increase in their academic performance, i.e., their grades, as a result of their improved cognitive capacities (Harrison, Manocha, Rubia, 2004; Kauts, Sharma, 2009).

6. YOGA AND SELF-REGULATION

Studies have shown a link between yoga and executive processes such as self-monitoring, planning and learning control, which play a critical part in the learning process. Children who practised yoga showed gains in planning speed, problem-solving speed, and memory, but those who engaged in other forms of physical exercise showed no such gains. When it comes to students' ability to succeed in school, self-regulation is a critical component (Blair 2002; Raver 2004). (Blair, Razza 2007; Ladd Birch, Buhs, 1999; McClelland, Morrison, Holmes, 1999). Self-esteem, health, and success are also linked to it (Moffitt et al., 2011; Shoda, Mischel, Peake, 2000). Research by Razza et al. (2015) looked at the effectiveness of a yoga-based intervention for preschoolers in enhancing their self-regulation (aged three to five). Experimental participants made much more progress than controls on all measures of self-regulation, deferred pleasure, and inhibitory control. 190 high school students who practised yoga showed considerable gains in self-control compared to a control group, according to Ramadoss and Bose (2010). Studies by Khalsa et al. (2012) and Noggle et al. (2012) found that students who practised yoga regularly had much greater control over their anger.

7. YOGA FOR CHILDREN WITH DISABILITIES

Children with impairments may practise yoga, according to both personal experience and scientific evidence. According to a recent study, which included 29 autistic children, practising yoga had both positive and negative effects on their well-being (Sotoodeh et al., 2017). During the course of eight weeks, a yoga teacher had worked with each kid one-on-one for 30 minutes three times a week. All save spoken language communication have seen substantial changes on The Autism Treatment Evaluation Checklist (ATEC). An investigation of the effects of yoga on children with intellectual impairments was conducted by Uma et al. (1989). For one school year, ninety children were split into two groups: one group participated in yoga exercises, and the other group engaged in regular school activities for one hour each day. In comparison to the control group, the yoga group improved significantly on intellectual tests, psychomotor abilities, and social skills. In addition, it was shown that meditating can help teenagers with certain learning issues lower their anxiety, enhance their social skills, and boost their academic performance (Beauchemin, Hutchins, Patterson, 2008). We also looked into the possibility of incorporating yoga into the school curriculum for students who suffer from emotional or behavioural issues. Teaching staff reported improved concentration and fewer indications of mood and behavioural issues after three and a half months of twice-weekly, one-hour workouts in the classroom (Steiner et al., 2013). Cerebral palsy patients are increasingly turning to yoga for its therapeutic benefits. A nine-year-old girl's posture, balance control, flexibility, and functional mobility improved following a six-week yoga programme for adults with motor impairments, according to one case study (Bugajski et al., 2013).

A number of studies have shown that practising yoga helps to alleviate the symptoms of attention deficit and hyperactivity disorder (ADHD), such as improved concentration and less impulsivity. Additionally, there have been significant shifts in parent and teacher assessments, as well as attention and reaction time tests (Boeshansz (2009), Grosswald et al. (2008), Chou (2017), Huang (2013), Hariprasad et al. (2013), Harrison (2005), Manocha (2007), Rubia (2004), Jensen (2005), and Shannahoff (2005)). (Chou, Huang, 2016). Organizational abilities, reading and writing, and oppositional behaviour can all be improved in children with ADHD, according to some study (Mehta Shah et al., 2012). (Redfering, Bowman, 1981). Practicing yoga together as a family provides an opportunity for parents and children to strengthen their bond. Sahaja meditation was shown to be effective in treating ADHD in children and their families by Harrison, Manocha, and Rubia (2004). Children's self-esteem, academic achievement, and the parent-child bond have improved significantly, and symptoms of ADHD have decreased. Additionally, the level of anxiety has dropped. Some youngsters have stopped

or lowered the dosage of their medical treatments. Meditation had significantly more of an impact on these children's well-being. Many youngsters claim to have better sleep and concentration. They had less issues with their classmates. Many parents reported considerable changes and pleasure with the programme, with 92 percent reporting that they were happy with it. No one in the control group made any notable improvement as they waited for the programme to begin. According to Hariprasad et al. (2013), even children with severe signs of ADHD can benefit from regular yoga practise. Patients aged five to 16 who suffered from severe ADHD symptoms were given daily exercise sessions by their parents while in the hospital. It was a month before they decided to go to the gym. They all made improvement with the activities and their symptoms diminished. After a few months of not exercising, the symptoms got worse.

8. YOGA IN SCHOOLS

Research thus far indicates that yoga might be a welcome addition to the school curriculum in order to assist students reach their goals. Yoga is already taught in over 9,000 schools in the United States. For yoga classes in schools, more than 5,400 instructors have been trained (Khalsa, Butzer, 2016). An increasing number of school-based assessment studies of yoga programmes are being conducted. In 2005 to 2009, six studies were published; in 2010 to 2014, 30 research were published; and in 2015, 11 studies were published (Khalsa, Butzer, 2016). There have been a large number of research undertaken in the United States and India. One study from Israel and one from Germany are both accessible. Yoga has been taught in European schools for at least 30 years, although there is no European research on the subject in the databases that are currently available. Some European nations have adopted Flak's "Research on Yoga in Education" initiative (http://www.ryeuk.org/) (France, UK, Italy, Belgium, etc.). Furthermore, according to Mahewwarananda's "Yoga in daily life," it is practised in many nations throughout Asia and Africa. With the "Yoga in daily life" method, many Croatian teachers are able to help pupils learn the practise.

Some teachers included exercises into their yoga lessons, either during or after their classes, although this was more common than one might expect. Instructors and teachers in certain yoga programmes are both trained by yoga instructors in order to run yoga programmes. There have been three systematic reviews of yoga-based classroom interventions based on the available evidence. The most recent comprehensive study was conducted in 2016 (Khalsa, Butzer, 2016). Only a small number of subsequent studies in this field followed rigorous methodological standards, meaning that they contained experimental and control groups in which participants were randomly recruited (so-called randomised controlled trials).

9. CONCLUSION

The purpose of this study was to shed light on the topic of yoga's place in education by evaluating a number of studies. Yoga's potential as a therapy for a wide range of ailments and diseases, as a means of preventive and intervention for children with impairments, and as a part of the school curriculum is being studied. Yoga has been shown to improve health, cognition, emotions, and self-regulation in previous studies. Some children's stress levels have dropped, their moods have improved, their attention spans have lengthened, and their overall sense of well-being has improved at schools where yoga has been included into the curriculum. Yoga exercises have been shown to be beneficial in the classroom, during breaks, and as a stand-alone practise. To summarise, yoga may play an important role in education by helping students realise their goals and cultivating their psychological well-being. Research thus far indicates that yoga might be a welcome addition to the school curriculum in order to assist students reach their goals. Yoga is already taught in over 9,000 schools in the United States. Some teachers included exercises into their yoga lessons, either during or after their classes, although this was more common than one might expect. Instructors and teachers in certain yoga programmes are both trained by yoga instructors in order to run yoga programmes. Children with impairments may practise yoga, according to both personal experience and scientific evidence. In a recent

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