







### TRABAJO DE FIN DE GRADO GRADO EN EDUCACIÓN INFANTIL (INGLÉS) CURSO ACADÉMICO 2024 - 2025 CONVOCATORIA OCTUBRE

### YOGA AS AN EDUCATIVE TOOL IN THE SECOND CYCLE OF PRESCHOOL EDUCATION

AUTORA: Vegas Hernández, Sheila

DNI: 47534060Y

En Móstoles, a 16 de Septiembre de 2024

#### ABSTRACT

This work explores the potential of yoga as a tool for promoting the integral development of preschool children. While traditionally viewed as a physical activity, yoga in this context extends beyond simple postures, offering a holistic approach to well-being.

The research examines how yoga can benefit preschoolers in three key areas: physical health, cognitive health and socioemotional health. Physically, yoga helps children develop strength, flexibility, coordination, and balance. Emotionally, it equips them, with tools for managing stress and anxiety, improving concentration and self-control, and fostering self-esteem.

This work outlines a methodology for implementing yoga in the preschool classroom. Emphasizing the importance of playful activities, integrating yoga seamlessly into their daily lives.

The incorporation of yoga in the preschool classroom can help foster a sense of wellbeing, allowing children to grow physically, emotionally, and socially in a healthy and harmonious way.

Keywords: Yoga, preschool education, integral development, holistic approach

#### RESUMEN

Este trabajo explora el potencial del yoga como una herramienta para promover el desarrollo integral de los niños de preescolar. A pesar de que tradicionalmente el yoga se entiende como una actividad física, en ese contexto, se extiende más allá de simple posturas, ofreciendo una perspectiva holística del bienestar.

Recientes investigaciones examinan cómo el yoga puede beneficiar a los preescolares en tres áreas clave: salud física, salud cognitiva y salud socioemocional. Físicamente, el yoga ayuda a los niños a desarrollar la fuerza, la flexibilidad, la coordinación y el equilibrio. Emocionalmente, les dota de herramientas para gestionar el estrés y la ansiedad, mejorar la concentración y el autocontrol y fomentar la autoestima.

Este trabajo propone una metodología para aplicar el yoga en el aula de preescolar. Haciendo hincapié en la importancia de las actividades lúdicas, integrando el yoga en su vida cotidiana.

La incorporación del yoga en el aula de preescolar puede ayudar a fomentar una sensación de bienestar, permitiendo a los niños crecer física, emocional y socialmente de forma sana y armoniosa.

Palabras clave: yoga, educación infantil, desarrollo integral, enfoque holístico



# TABLE OF CONTENTS

| ABSTRACT2   |
|---|
| RESUMEN2  |
| TABLE OF CONTENTS 3   |
| 1. INTRODUCTION   |
| 1.1 Justification   |
| 1.2 Motivation  |
| 2. THEORETICAL FRAMEWORK  |
| 2.1 Historical context of yoga in early childhood                                   |
| 2.2 Specific aspects of preschool education targeted by the study                   |
| 2.2.1 Geographical or Cultural Considerations Influencing the Study                 |
| 2.3 Study objectives  |
| 2.4 Relevance of the Topic7   |
| 2.4.1 Current relevance of yoga7  |
| 2.4.2 Comparative analysis with other alternative activities or practices in        |
| preschool education7  |
| 2.4.3 Future implications and potential long-term benefits for preschoolers and     |
| educational institutions  |
| 2.5 Theoretical frameworks supporting the importance of holistic education in early |
| childhood   |
| 1.6 Pedagogical paradigms that emphasize mind body integration in learning 10       |
| 3. IMPACT OF YOGA ON PRESCHOOLERS11   |
| 3.1 Physical benefits12   |
| 3.2 Cognitive benefits  |
| 3.3 Emotional and social benefits14   |

| 4. INTEGRATION OF YOGA INTO THE PRESCHOOL CURRICULUM                               |
|--|
| 4.1 Preschool objectives and yoga16  |
| 4.2 The areas of preschool education   |
| 5. INTEGRATION OF YOGA IN THE PRESCHOOL CLASSROOM                                  |
| 5.1 Time allocation and scheduling with the preschool day                          |
| 5.2 Classroom setup and arrangement conducive to yoga practice                     |
| 5.3 Involvement of technology or multimedia to enhance yoga session                |
| 6. YOGA PRACTICES FOR PRESCHOOLERS   |
| 6.1 Introduction to interactive yoga practices for preschoolers                    |
| 6.2 Underwater adventure22   |
| 6.3 Jungle Safari23  |
| 6.4 Landing on the moon24  |
| 6.5 Pirate's Treasure Hunt25   |
| 7. CHALLENGES AND LIMITATIONS  |
| 7.1. Cultural barriers or misconceptions related to yoga in certain communities or |
| regions  |
| 7.2 Teacher training and readiness to incorporate yoga in the curriculum           |
| 7.3 Financial or logistical challenges faced by preschools in implementing yoga    |
| programs   |
| 8. CONCLUSION  |



#### 1. INTRODUCTION

#### 1.1 Justification

In today's educational landscape, there is a growing recognition of the importance of fostering meaningful and contextualized learning experiences in early childhood classrooms. Traditional education methods often focus on cognitive skills, sometimes neglecting the physical and emotional development that is crucial at this stage. Integrating yoga into the preschool curriculum offers a holistic approach that addresses this gap. Yoga promotes physical health by enhancing flexibility, strength, and coordination. It also supports emotional wellbeing by teaching children how to manage stress, improve concentration, and cultivate a sense of inner peace.

By embedding yoga into the daily routine of preschoolers, educators can create a balanced learning environment that nurtures all aspects of a child's development, ultimately leading to improved academic performance and overall wellbeing.

#### 1.2 Motivation

My motivation for this topic comes from my passion for holistic education and my experiences witnessing the impact yoga can have on children's minds and bodies. Having practiced yoga for years, I have seen its benefits in managing stress and enhancing mental clarity. I am driven by the belief that introducing yoga at an early age can provide children with invaluable skills that will benefit them throughout their lives. By integrating yoga into preschool education, I hope to contribute to the development of well-rounded, emotionally resilient, and physically healthy children.

### 2. THEORETICAL FRAMEWORK

#### 2.1 Historical context of yoga in early childhood

Yoga is a physical, mental and spiritual discipline which originates in ancient India. The exact timeline of yoga is still debated (Britannica, T. Editors of Encyclopaedia, 2024), ranging from different scholars believing is 5000 years old, (Ministry of External Affairs, Government of India) up to 7500 years ago. One of the earliest signs of Yoga can be traced back to the Indus Valley, where some artifacts that depicted yoga poses were found, (Yan Y. Dhyanski, 1987)

The term yoga originates from the sanskrit "yug", which means "to join". The spiritual practice of yoga unifies the individual consciousness to the Universal consciousness. (Yan Y. Dhyanski, 1987). Yoga is also a key component of Hinduism and

Buddhism (Mace & McCulloch, 2020). Although in the last years, many people use Yoga as a mindfulness tool, separated from its religious origins for the benefits it can bring to both mind and body. (Sun et al., 2021).

Yoga evolved over the centuries, and by the 5th to 15th centuries CE, various schools of yoga emerged, emphasizing different aspects of a yoga practice. For example, Hatha Yoga

is most well-known for its focus on physical postures (also called asanas) and breath control (also called pranayama) (Jason Birch, 2011), while Yoga Nidra focuses on deep relaxation. (Cleveland Clinic Health Essentials, 2020)

The objective behind introducing a Yoga practice in preschool education is based on the numerous benefits yoga can present physically and mentally. Incorporating yoga into early childhood education is part of a broader movement of promoting mindfulness from an early age. (Sun et al., 2021)

The increased popularity of yoga in the last couple of years, (United Nations, 2020) has also led to an increased number of journals and research projects about yoga. While there is plenty of research on the benefits of yoga for teenagers and primary school-aged children, the literature addressing the applications and limits on preschooler is comparatively limited. The research for the use of Yoga in preschool is often focused on children with ADHD (Alyssa L. Chimiklis et al., 2018), ASD (Randye J. Semple, 2018), anxiety (Lindy L. Weaver et. al, 2015) and trauma (Kathryn A. Culver, 2015).

2.2 Specific aspects of preschool education targeted by the study

This study focuses on the application of a Yoga for young children of preschool age. Preschool education takes a crucial role in children's lives, as it is the first time they encounter education and the ages from 3 to 5 are a fundamental point in their development. This study aims to explore the emotional impact of a Yoga practice on the wellbeing of preschoolers. By better understanding the impact of this practice on their emotional development, it might offer insights on how to enhance the overall socio-emotional learning environment.

If yoga can prove to be a useful tool to enhance cognitive skills in young children, as it is well known to be for adults (Harvard Health Publishing, 2021), then it could be applied in a preschool setting to aid in their cognitive development during these crucial years of education. This study seeks to investigate how a Yoga practice might influence cognitive skills in young children.

2.2.1 Geographical or Cultural Considerations Influencing the Study

Making the appropriate geographical and cultural considerations is vital when attempting to introduce yoga into a preschool curriculum. Spain is a very diverse country with multifaceted approaches to wellness practices, education, physical and mental health.

As a capital city, Madrid faces different challenges than other regions of Spain, which may be more rural. These distinct cultural traditions and historical influences may affect the perception of yoga in preschool education. In rural areas, there may be a lack of variety or access to wellness practices, including amongst others yoga.

2.3 Study objectives

The primary aims of this study are to investigate the main benefits of introducing yoga into a preschool curriculum, focusing on the physical, mental and social benefits. This study will explore whether or not yoga can serve as a valuable tool for improving various skills in preschool age children, consistent or not with the known benefits of yoga for adults. (Harvard Health Publishing, 2021)

Implementing a yoga program into a preschool setting presents many challenges and questions that this study aims to answer. How to set up the space, what routines can be followed to ensure consistency, how to make it both beneficial for the children and practical for the teacher to fit into an already busy schedule. This study aims to provide a practical way of incorporating daily yoga practice that is both beneficial for the children and easy to implement.

#### 2.4 Relevance of the Topic

#### 2.4.1 Current relevance of yoga

Yoga is more popular than it ever was. According to a survey conducted by the National Complementary and Integrative Health and the National Center for Health Statistics of the US, "yoga was the most commonly used complementary health approach among U.S adults in 2012 (9.5%) and 2017 (14.3%)" (NCHS, 2018). This shows a growing interest on yoga.

There has been a significant increase in the number of research articles published on yoga, according to an analysis of the prevalence of yoga-related articles published on PubMed. This shows that the prevalence of yoga is not just among the public, but there is also an increasing interest in this practice coming from researchers (McMcall M.C. 2014).

2.4.2 Comparative analysis with other alternative activities or practices in preschool education

Preschool education often includes physical activities like outdoor play, sports, and creative arts. While these activities are beneficial for a child's development, they may not provide the holistic benefits that yoga may offer. For example, outdoor play and sports focus on gross motor skills and teamwork, but they may also introduce competition, which, while not inherently detrimental, is a component that is already commonly addressed in preschool settings. Creative arts that use physical movement like dance encourage self-expression but may not inherently incorporate mindfulness or bodily awareness. (Loy-EE, 2018)

Yoga is a strong contender as an activity for preschoolers due to its comprehensive and adaptable nature. Yoga creates a non-competitive environment, allowing each child to progress at their own pace and fostering a positive relationship with physical movement and their own bodies. Yoga's mindfulness component teaches valuable skills like self-regulation and emotional intelligence (Rashedi, 2021). It complements academic-focused activities that primarily engage cognitive development. Yoga's versatility allows for easy integration into daily routines, making it accessible for young children, including those with varying levels of physical abilities. Yoga is an inclusive and comprehensive practice that can benefit preschoolers at all developmental stages.

2.4.3 Future implications and potential long-term benefits for preschoolers and educational institutions

The incorporation of yoga into preschool education has promising long-lasting benefits for both preschoolers and educational institutions. Regular yoga practices can help young children develop mindfulness and emotional regulation skills, which may contribute to improved mental well-being, resilience, and coping mechanisms throughout their academic journey beyond preschool education (Rashedi, 2021). These foundational aspects can help preschoolers develop a positive attitude towards learning and enhance their socio-emotional development.

Additionally, integrating yoga into preschool curricula can have far-reaching implications for educational institutions. By promoting a holistic approach to early childhood education, institutions may see improvements in the overall well-being of students, which could have a positive impact on the school culture and learning environment (<u>Tirri, 2011</u>). The inclusion of mindfulness practices can help create a more focused and attentive student body, which can have a positive impact on academic performance and classroom dynamics (<u>Miller, 1992</u>).

Incorporating yoga into preschool education aligns with the broader societal shift towards holistic well-being. Educational institutions that adopt a more inclusive and holistic approach can position themselves as pioneers in fostering the overall development of young minds. Integrating yoga into preschool education has potential long-term benefits. It can create a foundation for a generation of individuals equipped with essential life skills and a positive outlook on learning and wellbeing.

2.5 Theoretical frameworks supporting the importance of holistic education in early childhood

Howard Gardner

Howard Gardner, renowned for his theory of multiple intelligences, posits that intelligence is not singular but rather encompasses a spectrum of aptitudes across various domains. These intelligences include musical, interpersonal, intrapersonal, naturalistic, bodily-kinesthetic, spatial-visual, and linguistic (Gardner, H. 2017).

His theory aims to broaden educational paradigms, recognizing the diverse array of intelligences individuals possess. By acknowledging these multiple intelligences, educators can tailor their teaching methodologies to accommodate the varied learning needs of students, thus facilitating more effective learning outcomes (Northern Illinois University, 2020).

Furthermore, Gardner's framework challenges conventional notions of intelligence, advocating for a more inclusive understanding that extends beyond traditional measures of logical-mathematical skills. It emphasizes the importance of valuing diverse abilities and skills, recognizing them as equally valuable contributors to overall intelligence.

Each type of intelligence outlined in Gardner's theory encompasses a unique set of skills. For instance, spatial-visual intelligence necessitates developed spatial perception, while musical-rhythmic intelligence requires a nuanced understanding of rhythm and musicality (Marenus, 2024).

Although Gardner suggests that these intelligences may be innate, he acknowledges that skills associated with them can be cultivated and refined through consistent practice. For example, a regular yoga regimen can enhance various aspects of intelligence, including gross motor skills, rhythmic proficiency, flexibility, coordination, and emotional regulation. (Gardner, H. 2017).

In summary, Howard Gardner's theory of multiple types of intelligence emphasizes the multifaceted nature of human intelligence, advocating for a more inclusive and adaptable approach to education that honors the diverse strengths and abilities of every learner.

• Maria Montessori

Montessori education has experienced significant growth in recent years, with an abundance of Montessori schools, literature, and training courses.

The Montessori approach is distinguished by its emphasis on respecting each child's unique developmental journey, fostering individual autonomy where the teacher adopts the role of the provider of educative opportunities rather than instructive role in the educational process. This departure from traditional teaching methods sets Montessori apart (Montessori, M. 2023).

These foundational principles uphold the distinctive nature of Montessori education compared to conventional alternatives. Montessori schools offer a unique pathway to achieving educational objectives, aligning with the core principles of the approach.

Integrating yoga into Montessori practice seamlessly complements these principles (Laviolette, 2022).

Yoga's adaptability to individual skill levels resonates with Montessori's philosophy of respecting each child's pace of learning. Moreover, yoga fosters emotional regulation skills, empowering children with tools for autonomy (Razza, 2013).

In summary, yoga practice harmonizes with Montessori principles and can be seamlessly integrated into Montessori schools to not only meet educational standards but also honor the foundational tenets of the Montessori approach.

• John Dewey

John Dewey is a renowned name in educational circles for championing a hands-on learning approach, famously known as "Learning by doing." His theory advocates for the development of various abilities through experiential learning. This study will primarily focus on his interdisciplinary approach (Reese, 2011).

Dewey argued that educational environments should adopt an interdisciplinary approach, integrating subjects to foster holistic and interconnected learning experiences (Sikandar, 2016). The multifaceted nature of yoga inherently embodies this holistic philosophy. Yoga incorporates physical skills like coordination, flexibility, and gross motor development, alongside non-physical skills such as emotional regulation, body awareness, and enhanced attention. Therefore, integrating yoga aligns perfectly with Dewey's interdisciplinary approach, enriching learning experiences by connecting various facets of development.

### • Rudolf Steiner-Waldorf

Rudolf Steiner's educational philosophy, known as Waldorf education, prioritizes a hands-on, creative, and holistic approach. Central to this approach is the incorporation of the arts as a unifying element throughout the educational experience. Waldorf education aims to foster physical, emotional, and cognitive development across all aspects of learning. It is this holistic perspective that seamlessly aligns Waldorf education with integrated yoga practices (Barnes, H. 1980).

Both Waldorf education and yoga share a common goal of promoting physical, emotional, and cognitive development through a holistic lens. Yoga, with its comprehensive approach, addresses multiple aspects of education principles and is compatible with various pedagogical approaches, including Spain's preschool curriculum. Its simplicity allows it to be integrated into popular educational methods while remaining faithful to their core principles.

1.6 Pedagogical paradigms that emphasize mind body integration in learning

In this section, the study delves into the more abstract and philosophical aspects of educational approaches that emphasize the integration of mind and body. As yoga embodies this integration, it serves as a focal point for examination.

• Embodied cognition

Embodied cognition is a philosophical standpoint that posits all human knowledge and cognition as inherently linked to bodily experiences (Journal of Clinical Neuroscience, 2022). This perspective upholds the interconnectedness of mind and body in shaping human understanding.

For example, when learning to ride a bicycle, cognitive processes such as balance, coordination, and spatial awareness are not solely mental activities but are integrated with bodily movements and sensory feedback. This holistic perspective challenges traditional Cartesian dualism, which separates mind and body, and emphasizes the inseparable nature of cognitive and physical phenomena (Lycan, 2003) by recognizing the integral role of the body in cognition, educators can design learning experiences that leverage embodied cognition principles to enhance student engagement, comprehension, and retention of information. Incorporating activities that involve physical movement, tactile experiences, and sensory

stimulation can enrich learning environments and facilitate deeper understanding of concepts (Von Bertalanffy, 1964).

Yoga, with its emphasis on mindful movement, breath awareness, and bodily sensations, exemplifies embodied cognition principles in practice.

• Somatic practice

Somatic practices have gained prominence, particularly for their role in trauma healing (<u>Van der Kolk, 1944</u>). These practices involve consciously sensing and acknowledging emotions within the body, coupled with a heightened internal focus on movement experiences and their impact on bodily sensations (<u>Meehan, 2021</u>).

Yoga is often integrated into somatic practices because of its emphasis on body awareness and meditative qualities, such as in yoga nidra. Practitioners value yoga for its ability to facilitate relaxation, develop body awareness, and aid in coping with trauma and emotional challenges (Kumari, 2020).

• Mindfulness in Education

Mindfulness, centered on present-moment awareness, has emerged as a popular technique for enhancing emotional well-being. It has been shown to alleviate stress, anxiety, and insomnia in daily life (Bertolín Guillén, 2015).

The inherent bodily awareness cultivated in yoga aligns with mindfulness practices. The mind-body connection inherent in yoga encourages individuals to focus on bodily sensations, grounding them in the present moment and fostering awareness of their current emotional state (Cottone, 2017).

• Experiential learning

Experiential learning involves active engagement, with students learning through hands-on experiences. It emphasizes learning through reflection on action, distinguishing it from more passive forms of learning.

Yoga naturally embodies experiential learning principles. By directing attention to bodily sensations and emotional experiences during practice, individuals engage in reflective learning. This aspect is particularly evident in practices like yoga nidra, where guided meditation prompts individuals to focus on specific body parts, facilitating introspection and experiential learning.

## **3. IMPACT OF YOGA ON PRESCHOOLERS**

Numerous studies have explored the efficacy of yoga either as a standalone practice or as an integral component of mindfulness-based curricula such as MindUp (Maloney, 2016), InnerExplorer (Strickland, 2023), OpenMind (Jackman, 2019), Kindness Curriculum (Flook et al, 2015), Mini Mind (Wood, 2018) and Yoga 4 Classrooms (Khalsa, 2015). These programs incorporate yoga practices into their curriculum to promote holistic well-being and enhance various aspects of child development.

The average duration of the yoga sessions from the studies used as sources range from 30 (Noggle, 2012) to 90 minutes in duration (Espil, 2020), with a frequency of three or more times per week. These sessions typically spanned a duration of one to six months, allowing for a comprehensive exploration of the potential benefits of regular yoga practice for young children.

### 3.1 Physical benefits

While specific studies directly examining the physical benefits of yoga for preschoolaged children may be limited, research focusing on older children suggests that the positive effects of yoga on physical health and well-being can extend to younger age groups as well. By introducing yoga practices during the preschool years, children can establish healthy habits and movement patterns from a young age. Therefore, implementing yoga in preschool settings can lay the foundation for lifelong physical well-being by promoting body awareness, healthy movement, and the development of fundamental motor skills.

Research examining the therapeutic effects of yoga for children, as demonstrated in the study "Therapeutic Effects of Yoga for Children: A Systematic Review of the Literature" by Galantino, Galbavy, and Quinn (2008), highlights the significant improvements in physical health associated with yoga practice. This systematic review, published in Pediatric Physical Therapy, supports the positive impact of yoga on children's physical well-being, including neuromuscular benefits, cardiopulmonary benefits, and musculoskeletal improvements.

Bhavanani et al.'s study elucidated that yoga not only reduced reaction time but also enhanced sensory-motor performance and facilitated improved processing within the central nervous system (CNS) among adolescents aged 13 to 16 years old. Furthermore, Dash and Telles observed notable enhancements in motor speed specifically in repetitive finger movements post-yoga training (Bhavanani et al. 2003).

Manjunath and Telles, who highlighted its role in enhancing delayed recall of spatial information, further supported the neurological benefits of yoga. Moreover, their findings revealed a reduction in planning and execution time across both simple and complex tasks, indicating improved efficiency in task completion, particularly in intricate scenarios (Manjunath, 2001).

Breathing exercises, as investigated by Naveen et al., demonstrated a positive correlation with spatial scores, suggesting a potential avenue for enhancing cognitive functioning through yoga-based respiratory techniques (Naveen et al. 1997).

Static motor performance was also shown to improve with yoga practice, as suggested by Telles et al.'s study. This finding accentuates the holistic impact of yoga on various facets of physical performance and coordination (Telles et al. 1993).

In the realm of special education, Uma et al.'s study provided compelling evidence regarding the efficacy of yoga interventions for children with varying degrees of mental retardation. Their research indicated significant improvements in IQ and social adaptation parameters, positioning yoga as a viable therapeutic tool in the holistic management of children with mental retardation (Uma et al. 1989).

A study conducted by Udupa et al. revealed compelling evidence that pranayama yoga training effectively regulates ventricular performance by modulating sympathetic output, consequently enhancing parasympathetic output. This finding underscores the significant impact of yoga on autonomic nervous system functioning and cardiovascular health.

Research conducted by Rauhala et al. investigated the effects of stretching and breathing exercises, integral components of yoga, on children residing in community homes who exhibited fear and anxiety. The study observed a noteworthy reduction in resting heart rate, as well as decreases in systolic and diastolic blood pressure, suggesting the potential of yoga-based interventions in mitigating physiological stress responses in children (Rauhala et al. 1990).

A study by S Telles et al. examined emotionally traumatized children characterized by irregular breathing patterns and heightened heart rates associated with anxiety. The findings demonstrated that yoga practice facilitated a normalization of breath rate, indicating its potential efficacy in regulating physiological arousal levels in vulnerable populations (S Telles et al. 1997).

Platania-Solazzo et al. investigated the impact of yoga on hospitalized children and observed a significant reduction in cortisol levels following yoga sessions. This suggests that yoga may serve as a valuable tool in managing stress and promoting relaxation in pediatric medical settings (A Platania-Solazzo et al. 1992).

Research by S C Jain et al. explored the effects of yoga on children with asthma, revealing substantial improvements in pulmonary function and exercise capacity. These findings suggest that yoga interventions may contribute to alleviating asthma symptoms and reducing the need for medication in pediatric patients (S C Jain et a. 1991).

Mandanmohan et al. conducted a study demonstrating that yoga practice enhances handgrip strength, endurance, and inspiratory and expiratory muscle strength in children (Mandanmohan et al. 2003). This observation is supported by multiple studies, including those by P Raghuraj et al. and P Raguraj and S Telles, highlighting the consistent beneficial effects of yoga on physical fitness and musculoskeletal health in children (P Raghuraj et al. 1997), (P Raguraj, S Telles. 1997).

A comprehensive study conducted by Jarraya et al. assessed the impact of yoga practice on kindergarten children compared to those engaged in a standard physical education curriculum. The findings revealed significant enhancements in various motor skills among the yoga group, including heightened arm strength, leg strength, flexibility, speed, and balance. This study sheds light on the profound benefits of incorporating yoga into early childhood education for promoting physical development and motor proficiency (Jarraya et al. 2022).

Veljkovic et al. conducted a study focusing on preschool children to investigate the effects of yoga on fine motor integration and coordination. The results demonstrated notable improvements in fine motor skills, bilateral coordination, balance, and overall body coordination among the participants engaged in yoga practice. These findings underscore the

importance of yoga as a valuable tool for enhancing motor skills and coordination abilities in young children (Veljkovic et al. 2021).

Gaylord et al. examined the impact of yoga on motor skills in preschoolers and observed significant improvements in various domains, including static balance, strength, bilateral coordination, flexibility, and functional lower extremity strength. This study provides compelling evidence supporting the efficacy of yoga interventions in promoting holistic physical development and motor competence among preschool-aged children (Gaylord et al. 2014).

### 3.2 Cognitive benefits

Yoga's impact on cognitive development in children has become an increasingly explored topic in recent research literature. Of particular interest is the growing body of studies examining how yoga influences conditions like Attention Deficit Hyperactivity

Disorder (ADHD). This focus highlights the importance of understanding how yoga practices can potentially enhance attention, concentration, and cognitive functioning in young populations.

Jensen's study involved children with ADHD participating in yoga sessions and observed improvements in ADHD symptoms on the Parents Rating Scales, which measures Hyperactivity, impulsiveness Anxious or shy, social problems, perfectionism. There was also an improvement on TOVA Response Timm Variability and Global Emotional Lability subscale. It specifically recommends including yoga in the evenings when the ADHD medication has started to decrease, and the symptoms increase (S Jensen, 2004).

Majunath's study in 2004 compared the effects of yoga training with fine arts training on children's verbal and spatial memory. The results revealed a significant 43% increase in spatial memory among children engaged in yoga practice, whereas the fine arts group showed no such improvement (Majunath, 2004).

Flook et al.'s research in 2015 explored the benefits of a yoga program for preschool children and found notable enhancements in delayed gratification, cognitive abilities, and flexibility (Flook et al. 2015). Similarly, Roach et al.'s study in 2018 investigated the impact of a mindfulness program incorporating yoga on preschoolers' executive functions, demonstrating significant improvements in these cognitive processes (Roach et al. 2018).

Razza et al.'s study in 2019 focused on preschoolers living in communities with high levels of trauma, revealing that yoga interventions improved attention regulation among these children (Razza et al. 2019). Lastly, Jarraya et al.'s 2019 study highlighted the effectiveness of hatha yoga in enhancing attention, visual-motor precision, and reducing behaviors associated with inattention and hyperactivity in 5-year-old preschoolers compared to conventional physical education programs. These findings collectively support the potential of yoga as a holistic approach to promoting cognitive development and emotional regulation in young children (Jarraya et al. 2019).

3.3 Emotional and social benefits

Several studies have investigated the potential benefits of incorporating yoga into programs designed for preschool-age children. One such study, conducted by Jackman et al. (2019), revealed that children participating in such programs demonstrated improvements in various areas, including self-regulation, self-calming, empathy, emotional awareness, body awareness, and awareness of others' feelings (Jackman et al. 2019).

Similarly, Flook et al. (2015) examined the effects of a yoga program for preschool children and found enhancements in prosocial behavior and social competence among participants (Flook et al. 2015). Furthermore, Lemberger et al. (2018) explored mindfulness interventions, including yoga, for economically disadvantaged 4-year-olds, observing improvements in self-regulatory behaviors (Lemberger et al. 2018).

Razza (2013) implemented a yoga program for preschoolers aged 3 to 5 years old, reporting advancements in self-regulation, attention, delay of gratification, and inhibitory control. Interestingly, the study noted that children at higher risk of self-regulation dysfunction derived the greatest benefits from the intervention (Razza, 2013).

Viglas et al. (2017) conducted a mindfulness program, incorporating yoga, for preschoolers aged 4 to 6 years old, which resulted in enhanced self-regulation, prosocial behavior, and reduced hyperactivity. These findings collectively suggest the potential of yoga interventions in promoting various aspects of social-emotional development among preschool-aged children (Viglas, et al. 2017).

Razza et al. (2019) conducted a study involving preschoolers residing in communities with high levels of trauma, which revealed that participating in yoga sessions resulted in noticeable improvements in their behavior (Razza et al. 2019).

Cohen et al. (2009) investigated the effects of yoga practice on preschoolers diagnosed with ADHD, observing several positive outcomes. These included faster reaction times on a go/no-go task, reduced distractibility errors of omission, enhanced T1 control, improved parent-rated scores on the Strengths and Difficulties Questionnaire for Hyperactivity-Inattention, and better results on the Inattention subscale of the ADHD Rating Scale. Additionally, the study noted an improvement in prosocial behavior among participants (Cohen et al. 2009).

Rich (2010) explored the impact of yoga on preschoolers aged 4 to 6 years with ADHD symptoms, finding that yoga intervention led to a reduction in overall ADHD symptoms, as evidenced by improved scores on a global ADHD index (Rich, 2010).

Goldberg (2015), incorporated yoga as part of a broader mindfulness program, resulting in gains in social competence, executive functioning, self-regulation behaviors, and prosocial behavior among participants (Goldberg, 2015).

Eunjin Kim et al. (2020) investigated the effects of a mindfulness curriculum, including yoga, on preschool children, revealing higher scores in lability/negativity, resilience, adaptive regulation, and prosocial behavior among program participants (Kim et al. 2020).

Lemberger et al. (2018) conducted a study involving 3- and 4-year-old preschoolers participating in a mindfulness program incorporating yoga, which demonstrated higher scores in self-regulation among children in the program (Lemberger, et al. 2018).

Thierry et al. (2018) conducted a study implementing a mindfulness program, which integrated yoga, for 4-year-old children. The findings indicated notable enhancements in executive function among program participants. Specifically, children involved in the program demonstrated improvements in various cognitive domains, including better retention of rules in working memory, enhanced ability to inhibit distractors, and increased flexibility in focusing attention. Additionally, participants exhibited quicker reaction times, suggesting an overall cognitive advancement attributable to the mindfulness-based program (Thierry, et al. 2018).

Viglas et al. (2017) investigated the effects of a mindfulness-based program on preschoolers aged 4 to 6 years. The study revealed positive outcomes, including improvements in self-regulation, heightened levels of prosocial behavior, and reduced levels of hyperactivity among participants (Viglas et al., 2017).

### 4. INTEGRATION OF YOGA INTO THE PRESCHOOL CURRICULUM

4.1 Preschool objectives and yoga

The legislation currently governing the objectives and foundational knowledge of Spain's preschool curriculum is encapsulated in <u>Real Decreto 95/2022</u>. This regulatory framework outlines several key goals for the entire preschool cycle, three of which are particularly pertinent to this study:

- 1. To know one's own body and other's bodies, to know its possibilities of action and to learn to respect the differences.
- 2. To develop emotional and affective skills.
- 3. To get started on logical mathematical knowledge, on reading, writing, movement, gestures and rhythm.

A yoga practice helps to develop and enhance a sense of body awareness and its possibilities of action. Through yoga, individuals develop an enhanced sense of bodily awareness and potential for action. Body awareness, characterized by an acute consciousness of proprioceptive and interoceptive senses, enables individuals to recognize subtle bodily cues. While existing literature primarily addresses the role of heightened body awareness in relieving chronic pain, its broader benefits are widely acknowledged. Modalities such as mindfulness, meditation, Tai Chi, and yoga are recognized for their efficacy in developing body awareness. Consequently, integrating yoga into preschool activities can significantly contribute to achieving this goal.

Yoga also emerges as a means for nurturing emotional regulation skills, addressing the second objective. Widely endorsed for its effectiveness in managing anxiety, depression, and pain, yoga stands as a preferred tool for promoting emotional well-being. Its synergy with meditation and mindfulness underscores its significance in fostering emotional resilience.

This facet of emotional regulation renders yoga a particularly apt inclusion in preschool curricula, aligning seamlessly with the overarching objectives of Spain's educational framework.

Regarding the final objective, which encompasses various domains including movement, non-verbal communication, and rhythmic awareness, our focus narrows to the facet of "movement." Yoga, fundamentally a practice rooted in physical movement, lends itself naturally to fulfilling this aspect of the curriculum. By incorporating yoga into preschool activities, educators can effectively address the development of motor skills and bodily coordination.

Of the eight primary goals delineated by Spain's educational authorities, yoga demonstrates potential in advancing nearly three of them. This multifaceted utility alleviates some of the burdens associated with curriculum planning, allowing educators greater flexibility to address other pressing concerns. In essence, integrating yoga into preschool programs not anly aligns with educational objectives but also optimizes resource allocation, fostering a holistic approach to early childhood development.

4.2 The areas of preschool education

The <u>Real Decreto 95/2022</u>. divides the preschool cycle into three areas: Growing in harmony; discovering and exploration of the environment; and communication and representation of reality. Each of these areas have specific competences or skills and evaluation criteria that determines the content of each one. This decree establishes that it is recommended that the content of these areas interact with each other in a holistic and interdisciplinary manner.

• Growing In Harmony

Inside the Growing in harmony area, we find an emphasis of respecting each child's pace. This area is divided into four smaller areas being: development of one's own identity; developing of the physical and affective dimensions; self-care and care of the environment and developing of the interaction with civic and social environment.

Out of these four subareas, there is an emphasis on the progressive development of healthy habits and care of the body. It considers the body as a learning source, a tool for relation and expression. It emphasizes the acquisition of intentional and progressive motor development and activity.

The specific competencies of this area include to progress in the knowledge and control of the body and acquisition of different strategies, adequate to their actions and the reality of their environment in a safe manner, to build an adequate and positive image of oneself. It also includes as well, adopting models, norms and habits, developing confidence in one's possibilities and feelings of achievement, to promote a healthy lifestyle that's ecosocially responsible.

Part of the evaluation criteria of this area includes point 1.1: to progress in the knowledge of one's body adjusting actions, reactions, developing balance, sensorial perception and movement coordination.

The basic knowledge or skills of this area includes:

A. The body and the progressive control of it.

- Global and segmentary image of the body: Individual characteristics and perception of changes in the body.

- The feelings and their functions. The body and the environment.

- Movement: Progressive control of coordination, tone, balance and movements.

- Active control of the tone and posture according to the characteristics of objects, actions and situations.

B. Affective development and equilibrium

- Tools for progressive recognition, expression, acceptance and control of emotions, feelings, lived experiences, interests and preferences.

C. Healthy habits for self-care and care of the environment.

- Practical, sustainable and eco-socially responsible habits related to diet, hygiene, rest, self-care and care of the environment.

- Structured physical activity with graded levels of intensity.

Yoga aligns closely with the objectives outlined within the "Growing in Harmony" area, which emphasizes holistic development and respect for each child's pace. Within this area, there is a focus on various aspects of personal development, including the progressive acquisition of healthy habits and care for the body.

Yoga contributes to the development of healthy habits and body awareness by treating the body as a source of learning and expression. Through yoga practice, children learn to understand and respect their bodies, developing coordination, balance, and sensory perception. This aligns with the goal of progressing in the knowledge and control of the body, as outlined in the specific competences of the "Growing in Harmony" area.

Furthermore, yoga promotes emotional balance and self-awareness, supporting progressive recognition, expression and acceptance of emotions and feelings. By incorporating mindfulness and breath awareness techniques, yoga provides children with tools

to manage their emotions effectively, contributing to their affective development and equilibrium.

Moreover, yoga encourages sustainable and eco-socially responsible habits related to self-care and care for the environment. Through practices such as mindfulness and gratitude, children learn to appreciate and respect their surroundings, fostering a sense of connections and responsibility towards the environment.

Additionally, structured physical activities such as yoga offer graded levels of intensity, supporting the development of motor skills and coordination. By engaging in yoga poses and movements, children develop strength, flexibility, and body awareness, contributing to their overall physical health and well-being.

In summary, yoga complements many of the objectives outlined about the "Growing in Harmony" area by promoting holistic development, fostering body awareness, emotional balance, and healthy habits, and supporting the acquisition of essential skills for personal and environmental care.

• Discovering and exploration of the environment

The second area is discovering and exploration of the environment. Although this area is more focused on the relationship of the child with the environment and the development of logical thinking there are still quite a couple of points relevant to this study.

Inside the evaluation criteria of this area, we can find the next points:

4.3 To locate oneself adequately in habitual spaces, whether while resting or while moving, applying the basic spatial notions and playing with one's own body and with objects.

Inside the basic knowledge or skills of this area we can find:

A. Dialogue between the body and the environment.

- Basic spatial notions in relation to one's body, objects and actions, whether while resting or while moving.

Yoga contributes to the objectives outlined in the "discovering and exploration of the environment" area by fostering the child's relationship with their surroundings and enhancing spatial awareness.

Through yoga practice, children learn to engage with their environment in a mindful and intentional manner. They develop an understanding of spatial concepts such as distance, direction, and orientation, as they navigate through different yoga poses and movements. For example, children may be encouraged to explore how their bodies move in relation to the space around them, whether they are resting in a relaxed pose or actively moving through a sequence.

Moreover, yoga encourages children to playfully interact with their environment, using their bodies and objects around them to support their practice. This may involve incorporating props such as yoga blocks into their poses, or simply using the space available to explore different movement patterns and spatial relationships-

By engaging in yoga, children learn to locate themselves adequately within their habitual spaces, whether they are resting peacefully or actively moving through yoga sequences, which are essential for their overall cognitive and physical development.

### 5. INTEGRATION OF YOGA IN THE PRESCHOOL CLASSROOM

5.1 Time allocation and scheduling with the preschool day

Per the curriculum, Spanish schools has psychomotricity lessons. Yoga can be integrated into these sessions in two main ways: as a dedicated unit focusing solely on yoga for an extended period, or as part of the customary "cool-down" segment following a regular psychomotor lesson, particularly if the yoga approach adopted is geared towards either relaxation or meditation.

Moreover, yoga can be seamlessly incorporated into the daily relaxation period typically scheduled after recess. This designated time, usually around 45 minutes, aims to help children unwind and refocus for their upcoming activities. Often, children use this time to rest or remain seated quietly, depending on the school's policies. This study suggests utilizing this relaxation time for yoga practice, leveraging its benefits to address the heightened energy levels resulting from vigorous play during recess. Instead of merely encouraging stillness or sleep, incorporating yoga into this period allows children to channel their excess energy into calming their bodies through movement. Yoga has been shown to alleviate stress and enhance attention more effectively than passive rest, making it an ideal tool for this purpose.

#### 5.2 Classroom setup and arrangement conducive to yoga practice

The classroom setup for yoga practice varies depending on whether it is integrated into psychomotor lessons or relaxation time. In dedicated psychomotor rooms, specially designed for the subject, a variety of materials are typically available to facilitate various activities. Depending on the materials at hand, some of these resources can prove useful for incorporating yoga elements into the lessons. For instance, props like foam rollers, balance beams, or soft balls can complement yoga poses, enhancing children's engagement and physical development. Alternatively, for straightforward yoga sessions that do not necessitate specialized equipment, the presence of exercise mats or even basic floor coverings can suffice. These provide a comfortable surface for children to perform yoga poses and movements while minimizing strain on their joints and muscles. Moreover, incorporating elements of nature, such as arranging mats on grassy areas during outdoor sessions, can offer a refreshing and invigorating experience, connecting children with the environment while practicing mindfulness and movement.

In classrooms lacking dedicated exercise spaces, the "Asamblea" area might be enough as it typically features a carpet where children gather for group activities, it can also serve as an ideal space for short yoga sessions. Utilizing this familiar and accessible space ensures minimal disruption to the daily routine while providing an opportunity for children to engage in physical activity and relaxation.

Furthermore, adapting yoga routines to accommodate standing or seated positions offers flexibility in addressing space constraints and resource limitations. Variations of traditional yoga poses can be performed entirely in a standing position or modified for seated practice, making them suitable for environments with restricted space and minimal equipment. This versatility ensures that yoga remains accessible and beneficial, regardless of the setting or available resources.

5.3 Involvement of technology or multimedia to enhance yoga session

The role of technology in schools sparks debate and controversy, with opinions ranging from concerns about its excessive use and potential negative effects, especially on children, to its potential as a valuable tool for enhancing education when used appropriately. Regardless of one's stance on this issue, this study explores how technology can be utilized to enhance yoga sessions if desired.

To augment a relaxing yoga session, one can incorporate soothing music readily available on the web. Additionally, there are meditation tracks specifically designed for children that can be played during or after the yoga session. There are numerous online videos featuring yoga sessions tailored for children, it's important to note that the use of these videos should be reserved for unforeseen circumstances like transitioning to online learning during crises such as the COVID-19 pandemic, relying on them for a typical classroom day is the least recommended approach. Instead, having the teacher lead the yoga session in person is the ideal method, as it allows for personalized guidance and interaction, enhancing the overall experience for the children.

### 6. YOGA PRACTICES FOR PRESCHOOLERS

6.1 Introduction to interactive yoga practices for preschoolers

In this section, this study introduces a series of interactive yoga practices tailored for preschoolers. These activities have as the goal to be engaging, playful but still educational experiences that promote physical, mental and emotional well-being.

In each of the practices presented in these sections, the poses are integrated into a fun narrative or theme, guiding children through a playful and engaging journey of movement and imagination. This section aligns the poses with the storyline or theme that the teacher will say out loud. Some practices may include elements such as soft lighting, calming music, or nature sounds to set the mood and engage the senses of the children.

### 6.2 Underwater adventure

The "Underwater adventure" practice is designed to be low-energy, easy-going, and suitable for introducing yoga to preschoolers. It incorporates simple, basic movements and focuses on relaxation. Additionally, it provides an opportunity to teach children about sea animals in a fun and engaging way. For this practice all that's needed are mats, although dim lights and underwater sounds or wave sounds are recommended. It lasts for 10 to 15 minutes.

#### **1. Opening Circle:**

"Welcome, little adventurers! Today, we're going on an exciting underwater journey! Let's start by sitting down comfortably on our mats, just like we're sitting on the sandy ocean floor. Take a deep breath in and out, like the waves of the ocean.

#### 2. Upward Hands Pose

Now, let's warm up our bodies. Reach up high to the sky, like a happy fish jumping out of the water to say hello to the sun.

#### 3. Starfish pose

Imagine you're a starfish, spreading your arms and legs wide on the ocean floor. Wiggle your fingers and toes like you're playing in the sand.

#### 4. Child's pose

Now, curl up into a cozy seashell. Can you hear the sound of the ocean inside your seashell? Take a deep breath in and out.

#### 5. Downward Facing Dog

Time to swim like dolphins. Lift your hips up high and stretch your arms forward. Let's make some dolphin nose together, 'Eeee-eee".

#### 6. Crab Pose

Turn over onto your backs and lift your hips up, just like playful crabs walking along the shore. Can you move sideways like a crab?

#### 7. Forward fold

Sway gently like a jellyfish floating in the water. Hang your arms and head down towards the ocean floor, feeling loose and relaxed.

### 8. Child's pose (with praying hands above the neck)

Uh-Oh! Watch out for the sharks! Lift one arm up like a shark's fin, and wiggle it side to side. Don't let the sharks catch you!

### 9. Fish pose

Now let's become colorful fish swimming in the sea! Lie on your back, and arch up like a fish, opening your chest and gazing up towards the surface.

## **10. Closing circle**

Well done, little adventurers! We've explored the depths of the ocean together. Let's take one last deep breath in, filling our lungs with ocean air, and slowly exhale. Great job today!

### 6.3 Jungle Safari

The Jungle Safari practice is designed to be a moderatly high-energy and engaging practice for preschoolers who have already been introduced to yoga. It incorporates slightly more complex poses, with a focus on balance, and aims to maintain relaxation while providing a moderate level of activity. Additionally, it provides an opportunity to teach children about jungle animals in a fun and engaging way. For this practice, all that it's needed are mats, jungle sounds are recommended. It lasts for 10 to 15 minutes.

### **1. Opening Circle:**

"Welcome, brave explorers! Today, we're embarking on an exciting jungle safari adventure! Let's begin by gathering around in a circle, just like we're preparing to explore the wild jungle. Take a deep breath in and out, feeling the excitement of our journey ahead."

### 2. Mountain pose:

"First, let's wake up our bodies with some Sunrise Stretches. Reach up high to the sky, like tall trees reaching for the morning sun in the jungle!"

## 3. Wide Leg Standing Forward Fold:

"Imagine you're a strong and mighty elephant! Stand tall with your feet wide apart, and take big elephant breaths. Inhale deeply through your nose, lifting your arms up like a trunk, and then exhale loudly through your mouth, making a trumpeting sound like an elephant!"

### 4. Hanging Forward Fold

"Let's swing through the jungle like playful monkeys! Hang from your hands and feet like a monkey on a vine, and sway from side to side, making silly monkey noises, 'Oo-oo-ah-ah!'"

## 5. Low Lunge

"Get ready to stalk through the jungle like a fierce tiger! Crouch down low to the ground, and stretch one leg back behind you while reaching your arms forward like tiger claws. Grrr!"

### 6. Cobra Pose

"Now, let's slither through the jungle like a slithery snake! Lie down on your belly, and lift your chest and head up off the ground, hissing like a snake as you wiggle side to side."

### 7. Tree Balance

"Stand tall and strong like a mighty tree in the jungle! Root one foot down into the ground, and lift the other foot to rest on your ankle or thigh. Stretch your arms up high like branches reaching for the sky."

### 8. Butterfly pose

"Sit down on your mat and bring the soles of your feet together, like a beautiful butterfly resting on a flower. Hold onto your feet and flap your butterfly wings up and down gently."

## 9. Closing Circle:

"Well done, explorers! We've journeyed through the jungle together and discovered the wonders of nature. Let's take one last deep breath in, filling our lungs with fresh jungle air, and exhale slowly. Great job today!"

### 6.4 Landing on the moon

The Landing on the Moon practice is designed to incorporate slightly more complex poses inspired by space exploration, focusing on balance and building strength. For this practice, all that's needed are mats. It can last from 10 up to 20 minutes, depending on how long the poses can be held, as some of them can be more complex than in previous sequences.

## 1. Opening Circle

"Welcome, little astronauts! Today, we're setting off on an exciting journey into outer space! Let's begin by gathering around in a circle, just like we're preparing to board our rocket ship. Take a deep breath in and out, feeling the excitement of our journey ahead."

### 2. Mountain Pose:

"Now, we stand tall and strong like rocket ships about to launch. Reach your arms up high to the sky. Ready? 3...2...1... BLAST OFF! Woosh!"

### 3. Tree Pose:

"As we float through space, let's find our balance like astronauts in zero gravity. Lift one foot and place it on the opposite leg. Arms up to the sky, and let's sway like we're floating in space. Great job, space explorers!"

### 4. Child's Pose:

"Look! We've arrived on a distant planet. Let's meet some friendly aliens. Kneel down, sit back on your heels, and stretch your arms out in front of you. Wiggle your fingers like little alien antennas. Hello, aliens!"

## 5. Crescent Lunge

"Uh-oh! A meteor shower is coming! Let's get into Meteor Pose to avoid them. Step one foot forward, bend your knee, and stretch your arms up high. Dodge the meteors by swaying gently from side to side."

#### 6. Half Moon Pose:

"Look up, astronauts! We can see the moon in the distance. Let's reach for the moon in Half Moon Pose. Lean to one side, lifting your leg and arm like a crescent moon. Amazing! We're getting closer."

#### 7. Mountain Pose

"It's time to head back home. Let's stand tall and strong again like rocket ships ready to return. Reach your arms up high to the sky. 3...2...1... BLAST OFF! Woosh!"

#### 8. Closing Circle:

"We did it! We made it to the moon and back. Let's sit down, cross our legs, and close our eyes. Take a deep breath in and out. I'm so proud of all my little astronauts. Until our next adventure, keep exploring and reaching for the stars."

#### 6.5 Pirate's Treasure Hunt

The Pirate's Treasure Hunt practice is designed to be a slightly more invigorating practice. This session focuses on balance, flexibility and upper body strength. For this practice

all that's needed are mats. It is the most complex of all the sequences and therefore the longest, taking at least 15 minutes and up to 25 minutes.

### **1. Opening Circle:**

"Today we start our adventure on the pirate ship. Let's sit down, cross our legs, and close our eyes. Take a deep breath in and out. Imagine you're on a pirate ship, ready to embark on an exciting journey. When you open your eyes, our adventure will begin?"

#### 2. Boat Pose:

"We start our adventure on the pirate ship. Sit down, lift your legs, and hold onto your knees. Arr! Ready to set sail?

### 3. Warrior II:

"As we sail through the rough seas, we must be strong and fierce like true pirates. Step one foot back, arms out wide, and gaze over your front hand. Arrr! We be mighty pirates, sailing the open seas!"

### 4. Extended Triangle Pose:

"Look through your spyglass! What do ye see? A secret island, home to hidden treasure! Reach one hand up high and the other down low."

### 5. Staff Pose:

"It's time to row the boat to shore, me hearties! Sit up straight, legs out wide, and hold onto your oars. Row, row, row your boat gently to the island."

#### 6. Downward Facing Dog:

"We've made it to the island! Let's take out our treasure map and follow it. Push your hips up high like a mountain and stretch your legs and arms out. Look at your treasure map and find the 'X' that marks the spot."

### 7. Child's Pose:

"We've found the spot. Now it's time to dig for treasure! Kneel, sit back on your heels, and stretch your arms in front of you. Start digging but remember! The treasure might be buried deep."

#### 8. Warrior III:

"Other pirates are trying to steal our treasure! Stand on one leg, lean forward, and lift your back leg. Get ready to fight off those rascals and protect our treasure!"

#### 9. Bridge Pose:

"We've won the battle! The treasure is ours! Lie on your back, bend your knees, and lift your hips up high. Open the treasure chest and see all the gold and jewels inside. Hooray!"

#### **10. Closing Circle:**

"Well done We've found the treasure and protected it from those pesky pirates. Let's sit down, cross our legs, and close our eyes. Take a deep breath in and out. Until our next adventure!"

### 7. CHALLENGES AND LIMITATIONS

7.1. Cultural barriers or misconceptions related to yoga in certain communities or regions

A study conducted by <u>Wolff et al. (2019)</u> examined teachers' perceptions of a preschool yoga program, revealing intriguing insights into its effectiveness. One teacher remarked,

- Honestly, I was like this is never going to work, because these kids are wild and yoga is calm. They are never going to be able to calm down and do this. But it was almost like they were in a trance once they started.

Another expressed initial skepticism, stating, "I was like, they're going to get bored and it's just not gonna go well." However, following the yoga sessions, teachers reported positive experiences and observed unexpected engagement from the children.

Wolff et al. (2017) also explored the experiences of children participating in yoga sessions, shedding light on their perceptions. During interviews regarding their post-yoga feelings, 4-year-old and 5-year-old children expressed their sentiments. One child stated, "I just feel good," while another mentioned, "It makes me calm and makes me wanna stretch."

Another child joyfully exclaimed, "Really happy!" These testimonials support the positive impact of yoga on young children's emotional well-being and highlight their enjoyment and engagement with the practice.

7.2 Teacher training and readiness to incorporate yoga in the curriculum

Incorporating yoga into the preschool curriculum necessitates that teachers are trained and prepared to integrate this practice effectively. Given that many preschool teachers may not have specific training in yoga instruction, it becomes essential to provide them with the necessary knowledge and skills. Teachers may already possess expertise in related fields such as psychomotricity, which focuses on the holistic development of children through movement activities. However, additional training in yoga instruction is crucial to ensure that teachers can lead yoga sessions tailored to the developmental needs of preschoolers.

Teacher training programs should encompass various aspects, including understanding child development, adapting yoga practices for young children, creating a safe and supportive environment, and implementing age-appropriate techniques to engage preschoolers effectively. Moreover, fostering a mindset of openness, mindfulness, and patience among teachers is fundamental to cultivating a positive yoga experience for preschoolers. By investing in comprehensive teacher training programs, educational institutions can empower teachers to incorporate yoga seamlessly into the preschool curriculum, thereby enhancing the physical, emotional, and cognitive development of young learners.

7.3 Financial or logistical challenges faced by preschools in implementing yoga programs

Implementing yoga programs in preschools may pose various financial and logistical challenges for educational institutions. One significant obstacle is the allocation of resources to provide adequate training and support for teachers. Ensuring that teachers are knowledgeable about yoga principles, techniques, and child-friendly practices requires investment in specialized training programs.

Additionally, the integration of yoga into the curriculum necessitates creative adaptation to suit the developmental needs and interests of preschoolers. Teachers must employ innovative methods to engage young children effectively in yoga sessions while maintaining a safe and supportive environment. Moreover, logistical challenges such as scheduling conflicts, limited space, and resource constraints may hinder the seamless implementation of yoga programs.

Overcoming these obstacles requires careful planning, collaboration between stakeholders, and a commitment to prioritizing the holistic well-being of preschoolers. By addressing financial and logistical challenges proactively, preschools can create opportunities for children to experience the numerous benefits of yoga practice, fostering their physical, emotional, and cognitive development.

### 8. CONCLUSION

Based on the exploration of yoga practices for preschoolers and its integration into the preschool curriculum, this study offers insights into the benefits of yoga in early childhood education.

One of the key points of this study is the alignment between yoga practices and the objectives outlined in Spain's preschool curriculum. By integrating yoga into the curriculum, preschools can enhance children's physical, mental, and emotional well-being while addressing core educational goals. Moreover, this study highlights the importance of collaborative approaches involving teachers, parents, and external yoga instructors in implementing yoga programs effectively.

This study emphasizes the practical considerations involved in integrating yoga into the preschool classroom, such as time allocation, scheduling, and the potential use of technology or multimedia to enhance yoga sessions. By addressing these logistical challenges, preschools can ensure seamless integration and maximize the benefits of yoga for preschoolers.

Through continued research and collaboration, educators can take advantage of the potential of yoga to promote the holistic development of preschoolers, ultimately shaping a brighter future for the next generation.

#### BIBLIOGRAPHY

The Editors of Encyclopaedia Britannica. Yoga (Philosophy). In Encyclopedia Britannica. (https://www.britannica.com/topic/Yoga-philosophy)

Basavaraddi, I.V. (2015, April 23). Yoga: Its Origin, History and Development. Ministry of External Affairs, Government of India.

Dhyansky, Y. Y. (1987). The Indus Valley Origin of a Yoga Practice. In Artibus Asiae (Vol. 48, Issue 1/2, p. 89). Artibus Asiae. https://doi.org/10.2307/3249853

Dhyansky, Y. Y. (1987). The Indus Valley Origin of a Yoga Practice. In Artibus Asiae (Vol. 48, Issue 1/2, p. 89). Artibus Asiae. <u>https://doi.org/10.2307/3249853</u>

Mace, J.L.; McCulloch, S.P. Yoga, *Ahimsa* and Consuming Animals: UK Yoga Teachers' Beliefs about Farmed Animals and Attitudes to Plant-Based Diets. *Animals* **2020**, *10*, 480. https://doi.org/10.3390/ani10030480

Sun, Y.; Lamoreau, R.; O'Connell, S.; Horlick, R.; Bazzano, A.N. Yoga and Mindfulness Interventions for Preschool-Aged Children in Educational Settings: A Systematic Review. *Int. J. Environ. Res. Public Health* **2021**, *18*, 6091. https://doi.org/10.3390/ijerph18116091

Birch, J. (2011). The Meaning of hatha in Early Hathayoga. *Journal of the American Oriental Society*, 131(4), 527–554. http://www.jstor.org/stable/41440511

Cleveland Clinic. (2020, September 13). What Is Yoga Nidra? If you're looking for deep relaxation, this form of yoga can help. Cleveland Clinic. <u>https://health.clevelandclinic.org/what-is-yoga-nidra</u>

Sun, Y.; Lamoreau, R.; O'Connell, S.; Horlick, R.; Bazzano, A.N. Yoga and Mindfulness Interventions for Preschool-Aged Children in Educational Settings: A Systematic Review. *Int. J. Environ. Res. Public Health* **2021**, *18*, 6091. https://doi.org/10.3390/ijerph18116091

Chimiklis, A. L., Dahl, V., Spears, A. P., Goss, K., Fogarty, K., & Chacko, A. (2018). Yoga, Mindfulness, and Meditation Interventions for Youth with ADHD: Systematic Review and Meta-Analysis. *Journal of Child and Family Studies*, 27(10), 3155-3168. https://doi.org/10.1007/s10826-018-1148-7

Semple, R. J. (2018). Review: Yoga and mindfulness for youth with autism spectrum disorder: review of the current evidence. In Child and Adolescent Mental Health (Vol. 24, Issue 1, pp. 12–18). Wiley. <u>https://doi.org/10.1111/camh.12295</u>

Lindy L. Weaver, Amy R. Darragh; Systematic Review of Yoga Interventions for Anxiety Reduction Among Children and Adolescents. *Am J Occup Ther* November/December 2015, Vol. 69(6), 6906180070p1–6906180070p9. doi: <u>https://doi.org/10.5014/ajot.2015.020115</u>

Culver, K. A., Whetten, K., Boyd, D. L., & O'Donnell, K. (2015). Yoga to Reduce Trauma-Related Distress and Emotional and Behavioral Difficulties Among Children Living in Orphanages in Haiti: A Pilot Study. *Journal of alternative and complementary medicine* (*New York, N.Y.*), 21(9), 539–545. <u>https://doi.org/10.1089/acm.2015.0017</u>

Harvard Health Publishing. (2021, June 12). Yoga for better mental health. Harvard Health Publishing. <u>https://www.health.harvard.edu/staying-healthy/yoga-for-better-mental-health</u>

Harvard Health Publishing. (2021, June 12). Yoga for better mental health. Harvard Health Publishing. <u>https://www.health.harvard.edu/staying-healthy/yoga-for-better-mental-health</u>

Clarke, T.C., Barnes, P.M., Black, L.I., Stussman, B.J., & Nahin, R.L. (2018, November 8). Use of yoga, meditation, and chiropractors among U.S. adults aged 18 and older. NCHS Data Brief, no. 325. National Center for Health Statistics. <u>https://www.nccih.nih.gov/research/research-results/national-survey-reveals-increased-use-of-yoga-meditation-and-chiropractic-care-among-us-adults</u>

McCall, M. (2014). In search of yoga: Research trends in a western medical database. In International Journal of Yoga (Vol. 7, Issue 1, p. 4). Medknow. <u>https://doi.org/10.4103/0973-6131.123470</u>

Loy-Ee, C. B. P., & Ng, P. M. H. (2018). The Effectiveness of a Formal Physical Education Curriculum on the Physical Ability of Children in a Preschool Context. In Journal of Curriculum and Teaching (Vol. 7, Issue 1, p. 13). Sciedu Press. https://doi.org/10.5430/jct.v7n1p13

Rashedi, R.N., Rowe, S.E., Thompson, R.A. *et al.* A Yoga Intervention for Young Children: Self-Regulation and Emotion Regulation. *J Child Fam Stud* **30**, 2028–2041 (2021). https://doi.org/10.1007/s10826-021-01992-6

Tirri, K. (2011). Holistic school pedagogy and values: Finnish teachers' and students' perspectives. In International Journal of Educational Research. Elsevier BV. <u>https://doi.org/10.1016/j.ijer.2011.07.010</u>

Miller, R. (1992). Introducing Holistic Education: The Historical and Pedagogical Context of the 1990 Chicago Statement. *Teacher Education Quarterly*, *19*(1), 5–13. http://www.jstor.org/stable/23475623

Gardner, H. (2017). Estructuras de la mente: La teoría de las inteligencias múltiples

Northern Illinois University Center for Innovative Teaching and Learning. (2020).Howard Gardner's theory of multiple intelligences. In Instructional guide for universityfacultyandteachingassistants. Retrievedfrom <a href="https://www.niu.edu/citl/resources/guides/instructional-guide">https://www.niu.edu/citl/resources/guides/instructional-guide</a>

Marenus, M. (2024). Howard Gardner's theory of multiple intelligences. Reviewed by S. Mcleod, PhD, & O. Guy-Evans, MSc. Retrieved from https://www.simplypsychology.org/multiple-intelligences.html

Montessori, M. (2023). El método Montessori [The Montessori Method] (Translated) (1st ed.). ALEMAR S.A.S.

Laviolette, Nicole. (2022). The Influence of Yoga and Meditation on Intrinsic Motivation in Early Childhood Education. Retrieved from Sophia, the St. Catherine University repository website: https://sophia.stkate.edu/maed/493

Reese, H. W. (2011). The learning-by-doing principle. In Behavioral Development Bulletin (Vol. 17, Issue 1, pp. 1–19). American Psychological Association (APA). https://doi.org/10.1037/h0100597

Sikandar, A. (2016). John Dewey and His Philosophy of Education. In Journal of Education and Educational Development (Vol. 2, Issue 2, p. 191). Institute of Business Management. <u>https://doi.org/10.22555/joeed.v2i2.446</u>

Barnes, H. (2023). *Waldorf Education: An Introduction* [Ebook]. Waldorf Publications.

Lycan, W. G. (2003). The Mind-Body Problem. In The Blackwell Guide to Philosophy of Mind (pp. 47–64). Wiley. <u>https://doi.org/10.1002/9780470998762.ch2</u>

VON BERTALANFFY, LUDWIG Ph.D.. The Mind-Body Problem: A New View. Psychosomatic Medicine 26(1):p 29-45, January 1964.

Van der Kolk, B. A. (1994). The Body Keeps the Score: Memory and the EvolvingPsychobiology of Posttraumatic Stress. In Harvard Review of Psychiatry (Vol. 1, Issue 5, pp.253–265).OvidTechnologies(WoltersKluwerHealth).https://doi.org/10.3109/10673229409017088

Meehan, E., & Carter, B. (2021). Moving With Pain: What Principles From Somatic Practices Can Offer to People Living With Chronic Pain. In Frontiers in Psychology (Vol. 11). Frontiers Media SA. <u>https://doi.org/10.3389/fpsyg.2020.620381</u>

Kumari, P., & Tripathi, J.S. (2022). Therapeutic Practices of Yoga Nidra & its Psychological Impact. In EditorInitials. EditorLastName (Ed.), *YOG PATH* (pp. 161-171). INDIRA GANDHI NATIONAL TRIBAL UNIVERSITY.

Bertolín Guillén, José Manuel. (2015). Eficacia-efectividad del programa de reducción del estrés basado en la conciencia plena (MBSR): actualización. *Revista de la Asociación Española de Neuropsiquiatría*, 35(126), 289-307. <u>https://dx.doi.org/10.4321/S0211-57352015000200005</u>

Cook-Cottone C, LaVigne M, Guyker W, Travers L, Lemish E (2017) Trauma-Informed Yoga: An Embodied, Cognitive-Relational Framework. Int J Complement Alt Med 9(1): 00284. DOI: 10.15406/ijcam.2017.09.00284 Maloney, J.E., Lawlor, M.S., Schonert-Reichl, K.A., Whitehead, J. (2016). A Mindfulness-Based Social and Emotional Learning Curriculum for School-Aged Children: The MindUP Program. In: Schonert-Reichl, K., Roeser, R. (eds) Handbook of Mindfulness in Education. Mindfulness in Behavioral Health. Springer, New York, NY. https://doi.org/10.1007/978-1-4939-3506-2\_20

Strickland, K. (2023). Effectiveness of the Inner Explorer social-emotional learning program in reducing disruptive behaviors in a Title 1 setting. *Dissertation & Theses.* 2023. 30309754.

Jackman, M. M., Nabors, L. A., McPherson, C. L., Quaid, J. D., & Singh, N. N. (2019). Feasibility, Acceptability, and Preliminary Effectiveness of the OpenMind (OM) Program for Pre-School Children. In Journal of Child and Family Studies (Vol. 28, Issue 10, pp. 2910–2921). Springer Science and Business Media LLC. <u>https://doi.org/10.1007/s10826-019-01506-5</u>

Flook, L., Goldberg, S. B., Pinger, L., & Davidson, R. J. (2015). Promoting prosocial behavior and self-regulatory skills in preschool children through a mindfulness-based Kindness Curriculum. *Developmental psychology*, *51*(1), 44–51. https://doi.org/10.1037/a0038256

Wood, L., Roach, A. T., Kearney, M. A., & Zabek, F. (2018). Enhancing executive function skills in preschoolers through a mindfulness-based intervention: A randomized, controlled pilot study. In Psychology in the Schools (Vol. 55, Issue 6, pp. 644–660). Wiley. https://doi.org/10.1002/pits.22136

Khalsa, S. B. S., & Butzer, B. (2016). Yoga in school settings: a research review. In Annals of the New York Academy of Sciences (Vol. 1373, Issue 1, pp. 45–55). Wiley. https://doi.org/10.1111/nyas.13025

Noggle, J. J., Steiner, N. J., Minami, T., & Khalsa, S. B. S. (2012). Benefits of Yoga for Psychosocial Well-Being in a US High School Curriculum. In Journal of Developmental & amp; Behavioral Pediatrics (Vol. 33, Issue 3, pp. 193–201). Ovid Technologies (Wolters Kluwer Health). https://doi.org/10.1097/dbp.0b013e31824afdc4

Espil, F.M., Rettger, J.P., Weems, C.F. *et al.* Measuring the Fidelity of a School-Based Yoga and Mindfulness Curriculum for Youth: A Transdisciplinary Feasibility Study. *Child Youth Care Forum* **50**, 57–75 (2021). <u>https://doi.org/10.1007/s10566-020-09558-1</u>

Galantino, M. L., Galbavy, R., & Quinn, L. (2008). Therapeutic Effects of Yoga for Children: A Systematic Review of the Literature. In Pediatric Physical Therapy (Vol. 20, Issue 1, pp. 66–80). Ovid Technologies (Wolters Kluwer Health). https://doi.org/10.1097/pep.0b013e31815f1208 Bhavanani, A. B., Madanmohan, & Udupa, K. (2003). Acute effect of Mukh bhastrika (a yogic bellows type breathing) on reaction time. *Indian journal of physiology and pharmacology*, 47(3), 297–300.

Manjunath, N. K., & Telles, S. (2001). Improved performance in the Tower of London test following yoga. *Indian journal of physiology and pharmacology*, *45*(3), 351–354.

Naveen, K. V., Nagarathna, R., Nagendra, H. R., & Telles, S. (1997). Yoga breathing through a particular nostril increases spatial memory scores without lateralized effects. *Psychological reports*, *81*(2), 555–561. <u>https://doi.org/10.2466/pr0.1997.81.2.555</u>

Telles, S., Hanumanthaiah, B., Nagarathna, R., & Nagendra, H. R. (1993). Improvement in static motor performance following yogic training of school children. *Perceptual and motor skills*, 76(3 Pt 2), 1264–1266. https://doi.org/10.2466/pms.1993.76.3c.1264

Uma, K., Nagendra, H. R., Nagarathna, R., Vaidehi, S., & Seethalakshmi, R. (1989). The integrated approach of yoga: a therapeutic tool for mentally retarded children: a one-year controlled study. *Journal of mental deficiency research*, *33 ( Pt 5)*, 415–421. https://doi.org/10.1111/j.1365-2788.1989.tb01496.x

Rauhala, E., Alho, H., Hänninen, O., & Helin, P. (1990). Relaxation training combined with increased physical activity lowers the psychophysiological activation in community-home boys. *International journal of psychophysiology : official journal of the International Organization of Psychophysiology*, *10*(1), 63–68. <u>https://doi.org/10.1016/0167-8760(90)90046-g</u>

Telles, S., Narendran, S., Raghuraj, P., Nagarathna, R., & Nagendra, H. R. (1997). Comparison of changes in autonomic and respiratory parameters of girls after yoga and games at a community home. *Perceptual and motor skills*, 84(1), 251–257. https://doi.org/10.2466/pms.1997.84.1.251

Platania-Solazzo, A., Field, T. M., Blank, J., Seligman, F., Kuhn, C., Schanberg, S., & Saab, P. (1992). Relaxation therapy reduces anxiety in child and adolescent psychiatric patients. *Acta paedopsychiatrica*, *55*(2), 115–120.

Jain, S. C., Rai, L., Valecha, A., Jha, U. K., Bhatnagar, S. O., & Ram, K. (1991). Effect of yoga training on exercise tolerance in adolescents with childhood asthma. *The Journal of asthma : official journal of the Association for the Care of Asthma*, 28(6), 437–442. https://doi.org/10.3109/02770909109110627

Mandanmohan, Jatiya, L., Udupa, K., & Bhavanani, A. B. (2003). Effect of yoga training on handgrip, respiratory pressures and pulmonary function. *Indian journal of physiology and pharmacology*, 47(4), 387–392.

Raghuraj, P., Nagarathna, R., Nagendra, H. R., & Telles, S. (1997). Pranayama increases grip strength without lateralized effects. *Indian journal of physiology and pharmacology*, *41*(2), 129–133.

Raghuraj, P., & Telles, S. (1997). Muscle power, dexterity skill and visual perception in community home girls trained in yoga or sports and in regular school girls. *Indian journal of physiology and pharmacology*, *41*(4), 409–415.

Sana Jarraya, Mohamed Jarraya, Saber Nouira; Effect of Yoga on Motor Skills and Self-Esteem in Kindergarten Children: A Randomized Controlled Trial. *Int J Yoga Therap* 1 January 2022; 32 (2022): Article 10. doi: <u>https://doi.org/10.17761/2022-D-21-00060</u>

Aleksić Veljković, A., Katanić, B., & Masanovic, B. (2021). Effects of a 12-Weeks Yoga Intervention on Motor and Cognitive Abilities of Preschool Children. *Frontiers in pediatrics*, 9, 799226. <u>https://doi.org/10.3389/fped.2021.799226</u>

Gaylord, S. (2014). A Comparison of Preschoolers' Motor Abilities Before and After a 6 Week Yoga Program. In Journal of Yoga & amp; Physical Therapy (Vol. 04, Issue 02). OMICS Publishing Group. <u>https://doi.org/10.4172/2157-7595.1000158</u>

Jensen, Pauline. S., & Kenny, D. T. (2004). The effects of yoga on the attention and behavior of boys with Attention-Deficit/hyperactivity Disorder (ADHD). In Journal of Attention Disorders (Vol. 7, Issue 4, pp. 205–216). SAGE Publications. https://doi.org/10.1177/108705470400700403

Manjunath, N. K., & Telles, S. (2004). Spatial and verbal memory test scores following yoga and fine arts camps for school children. *Indian journal of physiology and pharmacology*, 48(3), 353–356.

Wood, L., Roach, A. T., Kearney, M. A., & Zabek, F. (2018). Enhancing executive function skills in preschoolers through a mindfulness-based intervention: A randomized, controlled pilot study. In Psychology in the Schools (Vol. 55, Issue 6, pp. 644–660). Wiley. https://doi.org/10.1002/pits.22136

Razza, R. A., Linsner, R. U., Bergen-Cico, D., Carlson, E., & Reid, S. (2019). The Feasibility and Effectiveness of Mindful Yoga for Preschoolers Exposed to High Levels of Trauma. In Journal of Child and Family Studies (Vol. 29, Issue 1, pp. 82–93). Springer Science and Business Media LLC. <u>https://doi.org/10.1007/s10826-019-01582-7</u>

Jarraya, S., Wagner, M., Jarraya, M., & Engel, F. A. (2019). 12 Weeks of Kindergarten-Based Yoga Practice Increases Visual Attention, Visual-Motor Precision and Decreases Behavior of Inattention and Hyperactivity in 5-Year-Old Children. In Frontiers in Psychology (Vol. 10). Frontiers Media SA. <u>https://doi.org/10.3389/fpsyg.2019.00796</u>

Flook, L., Goldberg, S. B., Pinger, L., & Davidson, R. J. (2015). Promoting prosocial behavior and self-regulatory skills in preschool children through a mindfulness-based Kindness Curriculum. *Developmental psychology*, *51*(1), 44–51. https://doi.org/10.1037/a0038256

Lemberger-Truelove, M. E., Carbonneau, K. J., Atencio, D. J., Zieher, A. K., & Palacios, A. F. (2018). Self-Regulatory Growth Effects for Young Children Participating in a Combined Social and Emotional Learning and Mindfulness-Based Intervention. In Journal of

Counseling & amp; Development (Vol. 96, Issue 3, pp. 289–302). Wiley. https://doi.org/10.1002/jcad.12203

Razza, R. A., Bergen-Cico, D., & Raymond, K. (2013). Enhancing Preschoolers' Self-Regulation Via Mindful Yoga. In Journal of Child and Family Studies (Vol. 24, Issue 2, pp.

372–385). Springer Science and Business Media LLC. <u>https://doi.org/10.1007/s10826-013-9847-6</u>

Viglas, M., & Perlman, M. (2017). Effects of a Mindfulness-Based Program on Young Children's Self-Regulation, Prosocial Behavior and Hyperactivity. In Journal of Child and Family Studies (Vol. 27, Issue 4, pp. 1150–1161). Springer Science and Business Media LLC. https://doi.org/10.1007/s10826-017-0971-6

Razza, R. A., Linsner, R. U., Bergen-Cico, D., Carlson, E., & Reid, S. (2019). The Feasibility and Effectiveness of Mindful Yoga for Preschoolers Exposed to High Levels of Trauma. In Journal of Child and Family Studies (Vol. 29, Issue 1, pp. 82–93). Springer Science and Business Media LLC. <u>https://doi.org/10.1007/s10826-019-01582-7</u>

Cohen, S. C. L., Harvey, D. J., Shields, R. H., Shields, G. S., Rashedi, R. N., Tancredi, D. J., Angkustsiri, K., Hansen, R. L., & Schweitzer, J. B. (2018). Effects of Yoga on Attention, Impulsivity, and Hyperactivity in Preschool-Aged Children with Attention-Deficit Hyperactivity Disorder Symptoms. In Journal of Developmental & amp; Behavioral Pediatrics (Vol. 39, Issue 3, pp. 200–209). Ovid Technologies (Wolters Kluwer Health). https://doi.org/10.1097/dbp.00000000000552

Rich, N.F. (2010). A study of yoga therapy to increase attention in preschool children (Doctoral dissertation). Capella University, ProQuest Dissertations Publishing. (Accession or Order Number: 3423959).

Flook, L., Goldberg, S. B., Pinger, L., & Davidson, R. J. (2015). Promoting prosocial behavior and self-regulatory skills in preschool children through a mindfulness-based kindness curriculum. *Developmental Psychology*, 51(1), 44–51. <u>https://doi.org/10.1037/a0038256</u>

Kim, E., Jackman, M.M., Jo, SH. *et al.* Effectiveness of the Mindfulness-Based *OpenMind-Korea* (OM-K) Preschool Program. *Mindfulness* **11**, 1062–1072 (2020). <u>https://doi.org/10.1007/s12671-020-01337-2</u>

Lemberger-Truelove, M. E., Carbonneau, K. J., Atencio, D. J., Zieher, A. K., & Palacios, A. F. (2018). Self-Regulatory Growth Effects for Young Children Participating in a Combined Social and Emotional Learning and Mindfulness-Based Intervention. In Journal of Counseling & amp; Development (Vol. 96, Issue 3, pp. 289–302). Wiley. https://doi.org/10.1002/jcad.12203

Thierry, K.L., Vincent, R.L., Bryant, H.L. *et al.* A Self-Oriented Mindfulness-Based Curriculum Improves Prekindergarten Students' Executive Functions. *Mindfulness* **9**, 1443–1456 (2018). https://doi.org/10.1007/s12671-018-0888-1

Viglas, M., Perlman, M. Effects of a Mindfulness-Based Program on Young Children's Self-Regulation, Prosocial Behavior and Hyperactivity. *J Child Fam Stud* 27, 1150–1161 (2018). <u>https://doi.org/10.1007/s10826-017-0971-6</u>

Real Decreto 95/2022, de 1 de febrero de 2022.

Real Decreto 95/2022, de 1 de febrero de 2022.

Wolff, K., & Stapp, A. (2019). Investigating Early Childhood Teachers' Perceptions of a Preschool Yoga Program. In SAGE Open (Vol. 9, Issue 1, p. 215824401882175). SAGE Publications. <u>https://doi.org/10.1177/2158244018821758</u>

Stapp, A. C., & Wolff, K. (2017). Young children's experiences with yoga in an early childhood setting. In Early Child Development and Care (Vol. 189, Issue 9, pp. 1397–1410). Informa UK Limited. https://doi.org/10.1080/03004430.2017.1385607