

# Yoga in school-aged children: Impact on children's mental health and well-being during the COVID-19 pandemic



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- Key definitions used
- Public health implications of child mental health in the UK
- Impact of Covid-19 on child mental health.
- Yoga as a potential public health intervention.
- Mixed-methods evaluation of online yoga intervention
- Preliminary data analysis Yoga intervention.



# Key definitions

- Mental health is defined differently from that of adults due to a child's unique development milestone experiences (Sheridan, 2014)

- The roots of yoga lie in India and is an ancient science dating back 10,000 years (Satpathy *et al.*, 2018)



- Yoga is regarded as a holistic approach to improving one's fitness. Yoga incorporates physical poses (Asanas), multiple breathing techniques (Pranayama) (Alter, 2004)

## Public health implications



- **1 in 8 child in the UK had some form of mental health diagnosis in 2017**
- **£3 billion every year on interventions**
- **Local areas in England spend £54 per child on mental health, compared to £800 on physical health**

(NHS, 2018)

**Depression, anxiety, self-harm and attempted suicide are rising (RCoEM, 2017)**

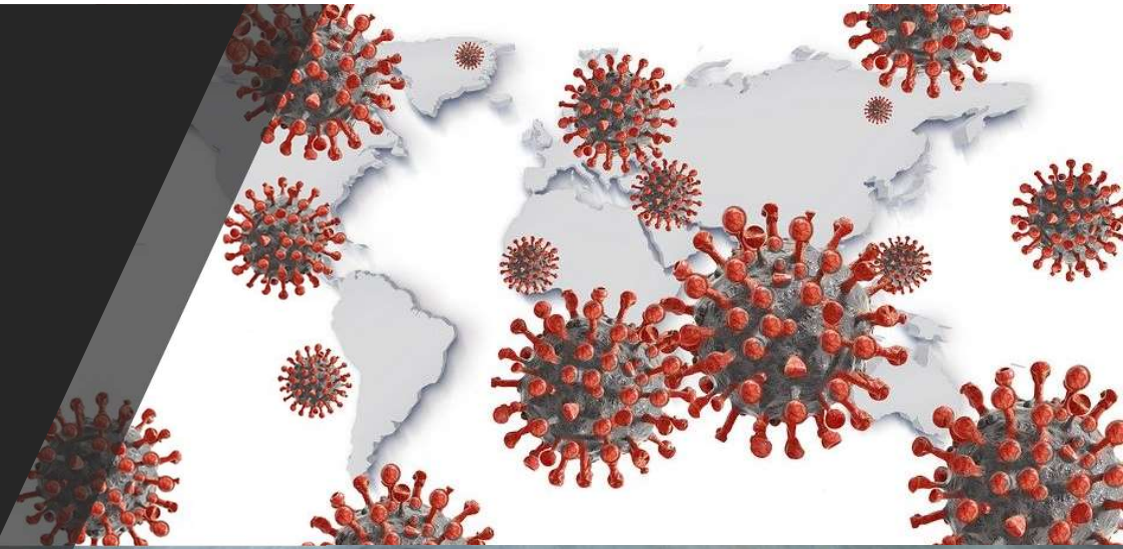


**Continue into adulthood  
(CDC, 2021, Department of Health, 2015, Perrin *et al.*, 2001)**

# The impact of Covid-19 on child mental health

- Social isolation
- Reduced outdoor activities
- Routine disruptions
- Relationship problems
- Family bereavement
- Increase in stress
- Uncertainty regarding education
- Future opportunities

(Golberstein *et al.*, 2020, Newlove-Delgado *et al.*, 2021, Unicef, 2020).



## Yoga as a Public Health Intervention

- Increasingly popular as a health promotion intervention globally
- Research on yoga's mental and physical aspects began in the 1920s (Khalsa and Butzer, 2016)
- Yoga is a safe activity and can be performed in the classroom
- Cost-effective

(Shreve *et al.*, 2021)



# Online Yoga

- Children's yoga
- Started in March 2020 – now running for 16 months

**Patanjali Yog Peeth (UK) Trust**  
Reg Charity in England & Wales No.1115370 / Scotland No.5C041991

**FREE CHILDREN'S ONLINE YOG CLASS**  
By Madhurika Trivedi  
Every Sunday 10.00am to 11.00am  
Online on Zoom  
Meeting ID 747 254 7914  
Password will be on PYPT children group one hour before

**PARENTS PLEASE NOTE**  
Register your child age 5+ years on PYPT Children whatsapp group one hour before with Mr Sohal, mob: 07803149781 or Madhurika Trivedi on WhatsApp PYPT Children Group  
Any problem in login, contact above. During Yog session please keep open your video all the time  
You must display Name of child on login. Parents are welcome with their children only  
Parents are responsible during Yog session for their Health and safety

**You will Learn**  
Pranayam - Breathing Exercises  
Asanas - Yog postures, Vyayam - Exercises  
Surya Namaskar - Sun salutation and more

**For information please contact**  
Darshanlal Sohal : 07803149781

**For our other Online Adult Classes see our website**  
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**41 Lambhill Street, Kinning Park, Glasgow, G41 1AU**  
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# The impact of yoga on mental health and wellbeing of school-aged children during the COVID-19 pandemic

## Aims and Objectives

- Evaluate yoga intervention
- Most studies carried out in countries other than the UK (James-Palmer *et al.*, 2020)
- Compare the mental health impact to national data UK



## The research questions

1. Can yoga feasibly be implemented online to children?
2. Is online yoga effective at promoting mental health and enhance the wellbeing of school-aged children in the UK?

Ethical approval was gained in July 2020



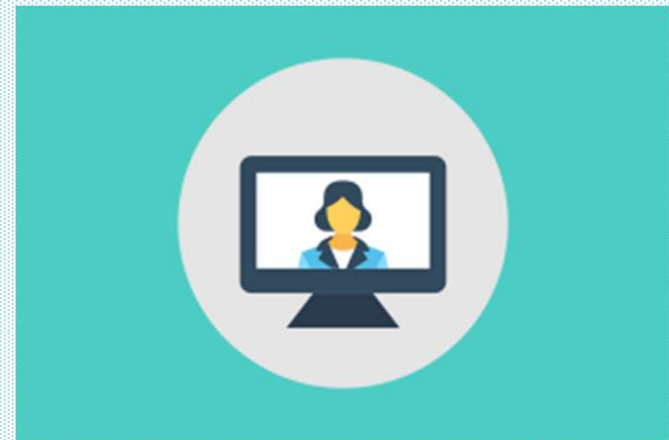
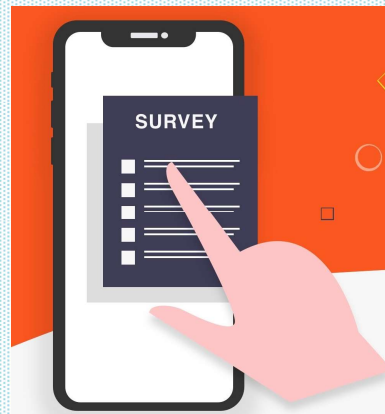
## Study design and participants

Mixed-methods approach:

**Stage 1.** Parent and child characteristics and Strengths & Difficulties Questionnaire (SDQ) completed online via UCL Opino

**Stage 2.** Structured interviews conducted online via Teams, WhatsApp or Zoom

- Parents/guardians (aged 18 or older)
- School-aged children (5-16 years)
- Participants were only interviewed if they provided consent



## Study procedure

### Department of Epidemiology & Public Health



In collaboration with Patanjali Yog  
Peeth Trust (PYPT) (UK)

Recruiting **parents** whose children (aged 5 to 16) are taking part in PYPT yoga intervention online during the Covid-19 pandemic

We are looking at mental health and wellbeing among children participating.

Participation involves a short survey and a 1-1 interview

For information please contact

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Alternatively - Mr Darshan Sohal  
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All information will be treated as strictly confidential and handled in accordance with the GDPR 2018



 **Patanjali Yog Peeth (UK) Trust** [main page](#) [contact us](#)  
— a UK-based Registered Charity promoting healthy living and wellbeing in the Community

"Good Health is  
Humanity's Birthright"



# National Comparisons

- The survey used the SDQ online for parents
- Findings draw on a sample of 3,570 children in England
- Ethnic minority participants (460)



## Mental Health of Children and Young People in England, 2020

Wave 1 follow up to the 2017 survey

# Data Analysis

- SPSS (version 27.0). SDQ categories were calculated using syntax
- Preliminary analysis started in January 2021 I had 62 responses to SDQ & 15 interviews
- Data was collected between July 2020 to December 2020

## Parent & Child Age & Child Ethnicity

Parent Gender	Mean	N	Std. Deviation
Female	38.6	40	8.4
Male	45.1	22	7.7
Total	40.9	62	8.7
Child Gender			
Female	11.5	45	3.5
Male	10.3	17	4.1
Total	11.1	62	3.7
Child Ethnicity (n)			
	Indian	White & Asian	Total
Female	43	2	45
Male	15	2	17
Total	58	4	62

## Preliminary Quantitative Results

- Suggest positive outcomes in their child's overall mental health and wellbeing
- Children did not display difficulties in home life, Friendships, Classroom Learning or Leisure Activities

Overall distress and impairment in children practising yoga during Covid-19

Child Gender	Total Impact Score		Total
	Not at all or Only a Little	A Great Deal	
Female	45	0	45
Male	16	1	17
Total	61	1	62

## National data

Mean SDQ scores, total difficulties and Impact score for mental health of all children aged 5-16 years compared to the National Data 2020<sup>1</sup> for ethnic minorities of the same age

SDQ Scales	Yoga Intervention	National Data for ethnic minorities 2020 <sup>1</sup>
Mean emotional problems score	1.3	2.0
Mean conduct problems score	0.8	1.1
Mean hyperactivity problems score	2.9	3.3
Mean peer problems score	1.3	1.8
Mean prosocial behaviours score	8.6	8.3
Mean total difficulties score	6.5	8.2
Mean impact score	0.03	0.4
Sample Size Total	62	460

1. Mental Health of Children and Young People in England, 2020 Wave 1 follow up to the 2017 survey (NHS, 2020)

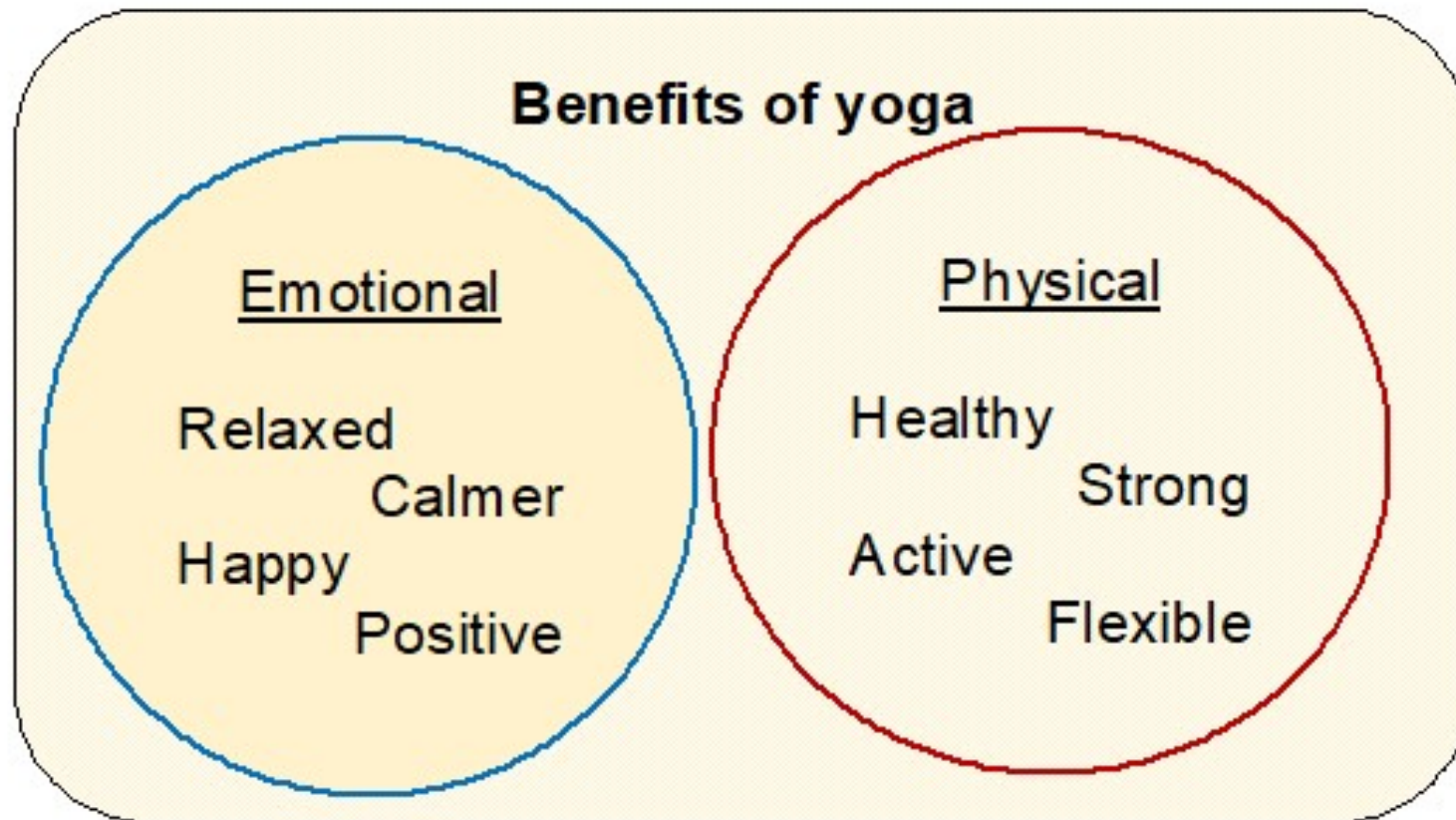


# Preliminary Qualitative Interview Progress

- A total of 14 parents have been interviewed
- (i) The perceived gains from PYPT yoga on their child's mental health and wellbeing?
- (ii) How PYPT yoga integrated into daily life?
- (iii) Overall impression of yoga being taught in schools?



# Thematic Analysis from the preliminary qualitative interviews



# Discussion

- Preliminary qualitative analysis – parents would like to see yoga in school
- Online yoga accessible
- Part of community
- Improved ability to manage anxiety, stress, and felt happy



# Implications

- This research shows online yoga aimed at children may hold promise
- Further data needs to be analyzed

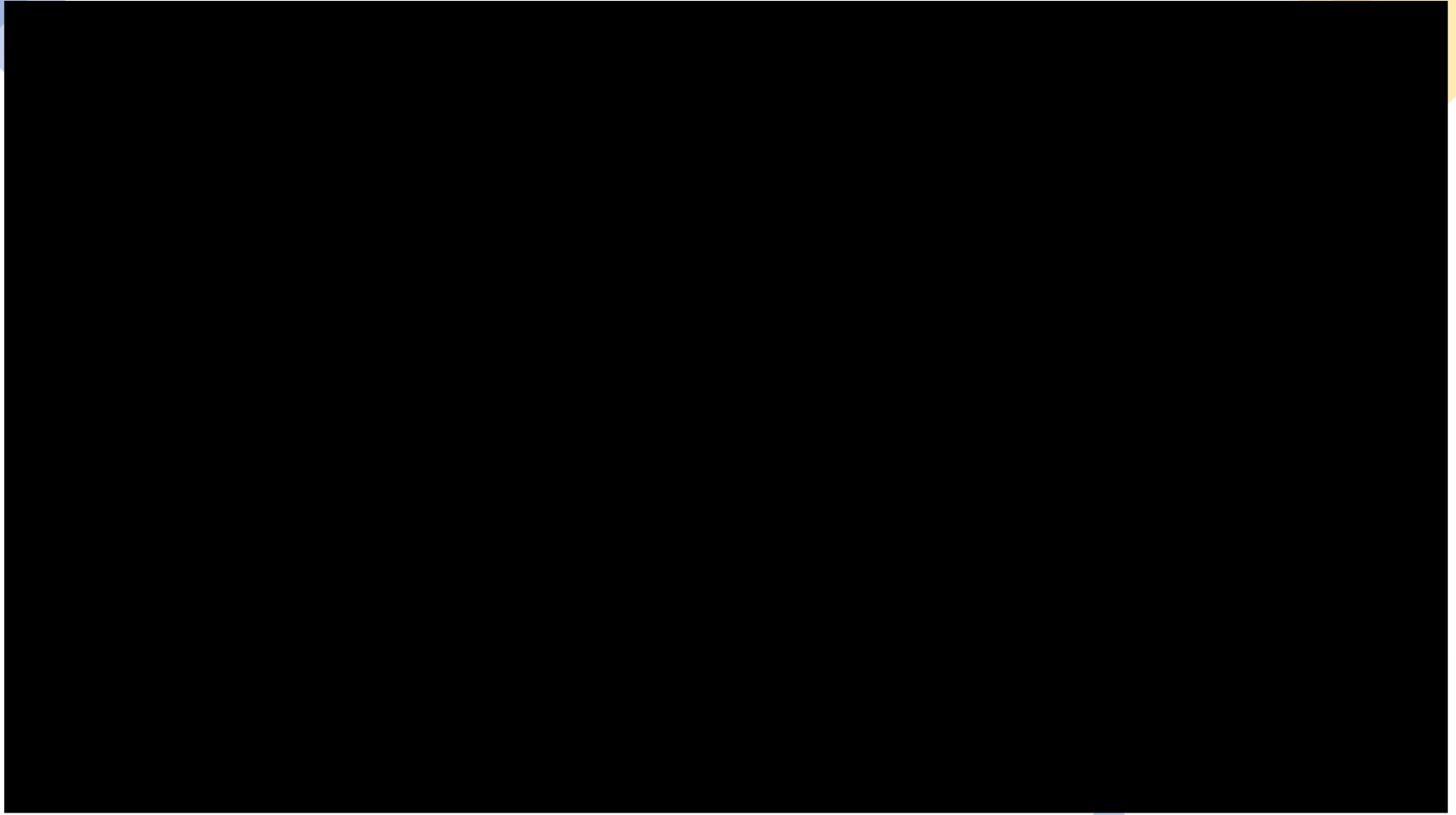


## Join me for 1 minute of Bhastrika Pranayama (Breathing exercise)

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- It is optional
- Inhale through the nose
- Exhale from the nose
- Or whatever works for you...







**Thank You**