

EXPLORONG THE EFFECT OF A 10-DAY RESIDENTIAL YOGA PROGRAM ON ANGER, ANXIETY AND SOCIAL PHOBIA IN CHILDREN AGE 10 to 15

Author: XIN XIAOYAO

CO Author: V SasiKala Boppadapu

ABSTRACT

BACKGROUND

In recent years, there has been growing concern about the mental health of children and adolescents and the prevalence of psychological problems such as anger, anxiety and social phobia. These emotional disorders can have a profound impact on all aspects of a young person's life, including academic performance, social interactions and overall health. According to the World Health Organization (WHO), globally, one in seven adolescents aged 10–19 experiences a mental disorder, accounting for 13% of the global burden of disease in this age group. The prevalence of mental health disorders among adolescents and young people is also high. Depression, anxiety and behavioural disorders are the leading causes of illness and disability among adolescents. If mental health problems in adolescents are not addressed, the consequences can carry over into adulthood, jeopardising physical and mental health. SVYASA PDC (Personality Development Camp) is a yoga and lifestyle focused organisation offering summer camps and other related activities for children. SVYASA PDC (Personality Development Camp) is referred to in ‘SVYASA. (n.d.). Personality Development Camp: Promoting yoga and healthy lifestyles for children.’ states that the purpose of the PDC is to promote yoga as a healthy lifestyle, incorporating the best yoga practices so that Children are empowered from an early age to realise their inner potential physically, mentally, emotionally and intellectually. The present study addresses the impact of a 10-day residential yoga programme on the emotional well-being of children aged 10 to 15 years, specifically on anger, anxiety and social fears, as part of SVYASA PDC project to measure psychological changes before and after the programme.

Anger:

Urban, S., Ochoa Williams, A., Ben Jemia, C., Rosselet Amoussou, J., Machado Lazaro, S., Giovannini, J., Abi Kheir, M., Kaess, M., Plessen, K. J., & Mürner-Lavanchy, I. (2024). Understanding irritability through the lens of self-regulatory control processes in children and adolescents: a systematic review. *European child & adolescent psychiatry*,

10.1007/s00787-024-02591-8. Advance online publication.

Anxiety:

Alemdar, H., & Karaca, A. (2025). The effect of cognitive behavioral interventions applied to children with anxiety disorders on their anxiety level: A meta-analysis study. *Journal of pediatric nursing*, S0882-5963(24)00465-2. Advance online publication.

Social Phobia:

Rapee, R. M., & Spence, S. H. (2004). The etiology of social phobia: Empirical evidence and an initial model. *Clinical Psychology Review*, 24(7), 737–767.

AIMS AND OBJECTIVES

The aim of this study is to investigate the impact of a 10-day yoga programme on reducing anger, anxiety and social phobia in children aged 10-15 years. To assess the effectiveness of a yoga intervention in improving the emotional and social well-being of children in this age group.

Methodology

This study utilizes a pre-test and post-test design. Sixty-five children between the ages of 10 and 15 will be selected through purposive sampling. Participants will be assessed for anger, anxiety, and social phobia using standardized questionnaires and scales before and after the intervention, and data will be analyzed through paired t-tests to determine the effectiveness of the yoga program. Strict ethical guidelines will be adhered to throughout the study, including parental consent and child consent.

Assessments

severity measure for social anxiety disorder (social phobia)-child age 11-17, the anger expression scale for children, childhood anxiety sensitivity index (CASI)

Intervention

Breathing Practices; Asanas; Pranayama; Kriyas; Meditation

Results

This study demonstrated that a 10-day residential yoga program had a significant positive impact on symptoms of anger, anxiety, and social phobia in children between the ages of 10 and 15. These findings provide important support for the use of yoga in children's mental health. In the future, through the promotion and application of yoga in education systems, families, communities and healthcare systems, more children can be helped to improve their mental health, develop their emotional management and self-regulation skills, and promote holistic development.

Conclusions

The 10-day residential yoga program is proven to be an effective intervention for anxiety, social phobia, and anger in children ages 10-15. Preliminary evidence suggests that yoga can play an important role in promoting children's emotional and social development.

Keywords

Children, anxiety, social phobia, anger, yoga

1.0 INTRODUCTION

In recent years, there has been an increasing focus on the mental health issues of children and adolescents, with a growing awareness of the prevalence of psychological distress such as anger, anxiety, and social phobia. These mood disorders have a significant impact on various aspects of adolescent life, including academic performance, social interaction, and overall health. While traditional treatment methods primarily involve drug therapy and cognitive behavior therapy, alternative interventions such as yoga are gaining recognition for their numerous benefits. Yoga is an ancient practice that combines physical postures (Asanas), breathing exercises, and meditation to promote both physical and mental well-being. SVYASA PDC (Personality Development Camp) is a yoga and lifestyle focused organisation that provides summer camps and other related activities for children. The aim of the organisation is to promote yoga as a healthy lifestyle, incorporating the best of yoga practices so that children from an early age can realise their inner potential physically, mentally, emotionally and intellectually. Studies have shown that yoga is particularly effective in addressing psychological problems in children and adolescents by enhancing self-awareness, emotional regulation, and relaxation skills essential for managing anger and anxiety. Furthermore, the group dynamic present in many yoga programs helps improve social skills and alleviate social phobia by fostering a sense of community support (James-Palmer et al. 2020). This study examines the effects of a 10-day residential yoga program on children aged 10 to 15 years with a focus on its potential to reduce anger, anxiety, and social phobia. Residential settings offer a unique opportunity for children to engage in uninterrupted yoga practice away from daily distractions and stressors which may enhance the benefits of yoga. The structured supportive environment also provides additional emotional security for children leading to more significant psychological transformation. While previous studies have demonstrated positive effects of yoga on mental health outcomes more research is needed focusing specifically on different age

groups as well as settings. This study aims to address this gap by providing empirical evidence for the efficacy of short-term intensive yoga classes for children at key developmental stages through assessing changes in anger anxiety & social phobia thus offering valuable insights into alternative treatment approaches for adolescents while laying groundwork future interventions aimed at strengthening mental health among young people.

2.0 ANCIENT RESEARCH ON BHAGAVAD GĪTĀ

2.0.1 ABOUT ANGER IN BHAGAVAD GĪTĀ

The Bhagavad Gītā contains several instructive verses on anger and its effects on people. Here are some important Sanskrit verses and their translations:

1. ध्यायतो विषयान्पुंसः सङ्गस्तेषूपजायते।

सङ्गात्सञ्जायते कामः कामात्क्रोधोऽभिजायते।।2.62।।

*Dhyāyato viṣhayān puṁsaḥ saṅgas teṣhūpajāyate
saṅgāt sañjāyate kāmaḥ kāmāt krodho 'bhijāyate*

2.62 When a person thinks constantly about sensual objects, he develops an attachment to them; from attachment comes desire, and from desire comes anger.

2. क्रोधाद्भवति सम्मोहः सम्मोहात्स्मृतिविभ्रमः।

स्मृतिभ्रंशाद् बुद्धिनाशो बुद्धिनाशात्प्रणश्यति।।2.63।।

*Krodhād bhavati sammohaḥ sammohāt smṛiti-vibhramah
smṛiti-bhranśhād buddhi-nāśho buddhi-nāśhāt praṇaśhyati*

2.63 Out of anger comes utter confusion, and out of confusion the loss of memory; when memory is lost, intelligence is lost, and when intelligence is lost, man is destroyed.

3. त्रिविधं नरकस्येदं द्वारं नाशनमात्मनः।

कामः क्रोधस्तथा लोभस्तस्मादेतत्त्रयं त्यजेत्।।16.21।।

*Tri-vidham narakasyedaṁ dvāraṁ nāśhanam ātmanah
kāmaḥ krodhas tathā lobhas tasmād etat trayam tyajet*

16.21 There are three gates that lead to destruction in this world - lust, hatred and greed. Therefore, man should abandon these three.

4. श्रीभगवानुवाच।

काम एष क्रोध एष रजोगुणसमुद्भवः।

महाशनो महापाप्मा विद्ध्येनमिह वैरिणम्।।3.37।।

Śhrī Bhagavān uvācha

*kāma eṣha krodha eṣha rajo-guṇa-samudbhavaḥ
mahāśhano mahā-pāpmā viddhyenam iha vairiṇam*

3.37 The Most High God said: This is lust, this is wrath, which ariseth out of lust. They are omnivorous and very sinful; know that they are the greatest enemies in this life.

2.0.2 ABOUT ANXIETY IN BHAGAVAD GĪTĀ

Here are some relevant verses from the Bhagavad Gītā that address anxiety, along with their Sanskrit text and translations:

1. कर्मण्येवाधिकारस्ते मा फलेषु कदाचन।

मा कर्मफलहेतुर्भूर्मा ते सङ्गोऽस्त्वकर्मणि।।2.47।।

*karmaṇy-evādhikāras te mā phaleṣhu kadāchana
mā karma-phala-hetur bhūr mā te saṅgo 'stvakarmaṇi*

2.47 You have a right to perform your prescribed duties, but you are not entitled to the fruits of your actions. Never consider yourself to be the cause of the results of your activities, nor be attached to inaction.

2. धृत्या यया धारयते मनःप्राणेन्द्रियक्रियाः।

योगेनाव्यभिचारिण्या धृतिः सा पार्थ सात्त्विकी।।18.33।।

*dhṛityā yayā dhārayate manaḥ-prāṇendriya-kriyāḥ
yogenāvyabhichāriṇyā dhṛitiḥ sā pārtha sāttvikī*

18.33 O Partha, that determination which is unbreakable, which is sustained with

steadfastness by yoga practice, and which thus controls the activities of the mind, life, and senses, is in the mode of goodness.

2.0.3 ABOUT SOCIAL PHOBIA IN BHAGAVAD GĪTĀ

The Bhagavad Gītā does not directly mention "social phobia" as understood in modern psychological terms. However, it addresses related concepts such as fear, anxiety, and lack of confidence, which can be associated with social phobia. Here are some relevant verses:

1. नेहाभिक्रमनाशोऽस्ति प्रत्यवायो न विद्यते।

स्वल्पमप्यस्य धर्मस्य त्रायते महतो भयात् ॥२.४०॥

nehābhikrama-nāśho 'sti pratyavāyo na vidyate

svalpam apyasya dharmasya trāyate mahato bhayāt

2.40 In this endeavor, there is no loss or diminution, and even a little advancement on this path can protect one from the greatest fear.

2. वीतरागभयक्रोधा मन्मया मामुपाश्रिताः।

बहवो ज्ञानतपसा पूता मद्भावमागताः ॥४.१०॥

Vīta-rāga-bhaya-krodhā man-mayā mām upāśhitāḥ

bahavo jñāna-tapasā pūtā mad-bhāvam āgatāḥ

4.10 Being freed from attachment, fear, and anger, being fully absorbed in Me and taking refuge in Me, many persons in the past became purified by knowledge of Me and thus attained transcendental love for Me.

These verses emphasize the qualities and mindsets that help overcome fear and anxiety, which are relevant to understanding and addressing social phobia.

2.1 BACKGROUND AND SCOPE

In recent years, there has been growing concern about the mental health of children and adolescents and the prevalence of psychological problems such as anger, anxiety and social phobia. These emotional disorders can have a profound impact on all aspects of a young person's life, including academic performance, social interactions and overall health. Traditional treatments such as counseling and

medication, while effective, can be limited by accessibility, cost, and potential side effects. Aurora James-Palmer (2020) discusses the increasing prevalence of mental health problems in children and highlights yoga as a promising intervention. Joseph Spinazzola (2011) explores the use of yoga in residential treatment for traumatized adolescents in his article, "Yoga in Residential Treatment for Traumatized Adolescents," suggesting a growing interest in alternative therapies. However, research on the effects of yoga on children, particularly in organized residential programs, remains limited in journal searches at this time.

Globally, one in seven children aged 10-19 years suffers from a mental illness, which accounts for 13 per cent of the global burden of disease in this age group. Depression, anxiety and behavioural disorders are the leading causes of illness and disability among adolescents. Suicide is the fourth leading cause of death among 15-29 year olds. If adolescents' mental health problems go unaddressed, the consequences can carry over into adulthood, jeopardising physical and mental health and limiting their chances of leading fulfilling lives as adults. In his book *Reconciling with Adolescence*, American psychologist Lawrence Steinberg says, "On average, children enter puberty at the age of eight or nine years," and psychologists refer to the ages of 8-14 as "pre-adolescence" or "early puberty". Psychologists refer to ages 8-14 as "pre-adolescence" or "early adolescence. This is the child's second period of conscious independence, during which he or she "proves his or her existence" through outbursts of "abnormal" emotions and behaviours. The present study investigated the potential impact of a 10-day residential yoga programme on the emotional well-being of children aged 8 to 14 years, specifically on anger, anxiety and social fears. Given the prevalence of mental health problems in children, Field, T. (2012) A review highlighting the various studies of yoga as a therapeutic approach, especially for emotional and mental health. There is a growing interest in exploring alternative interventions to traditional therapies. Janjhua, Y (2020) noted the use of yoga as an alternative therapy for adolescents, especially in controlling mood disorders. This study used a pre-post design to measure changes in self-reported levels of anger, anxiety, and social fear before and after the course.

3.0 SCIENTIFIC LITERATURE REVIEW OF ANGER, ANXIETY AND SOCIAL PHOBIA

Table-1 Scientific Literature Review

SR.	Author and Year	Study Samples	Design	Intervention	Variables	Result	Conclusion	Assessment tools
1	Choukse, 2019	340 children aged 9-16	Three separate queues (batches 1, 2 and 3) A single group yoga pre- and post-intervention study	10 days residential yoga program	Emotional changes in adolescence and perceived differences between parents and children	Cohorts 2 and 3 showed significant changes ($p < 0.05$) in socialization, empathy, and altruism, while Cohort 1 showed no significant improvement.	Yoga intervention may help to improve the psychosocial qualities of adolescents. It also helps to demonstrate that yoga in a residential setting is acceptable and feasible.	Social Competence Questionnaire – 9-item scale ; Teen Empathy – 4-item scale ; Teen Altruism – 4-item scale; Positive parent relationship – 6-item scale with and Peer friendship – 5-item scale
2	Alessandra N Bazzano, 2022	86 students aged 11–14 years old	Randomized control group experiment	All yoga classes are offered using the Yoga Ed Program™. The program includes a comprehensive curriculum that includes yoga (movement) and positive thinking (awareness) strategies	Limited sample size, COVID-19	Anxiety and depressive symptoms decreased in the intervention group, although these differences were not statistically significant. In the control group, anxiety symptoms decreased but depressive symptoms increased. The resulting time effect showed a significant reduction in anxiety symptoms, while the by-group time effect showed a strong trend in depressive symptoms.	Although this study was unable to provide definitive results regarding the reduction of anxiety and depressive symptoms in 11-14 year old adolescents in a diverse urban setting, further research is warranted.	Patient Health Questionnaire revised for adolescents (PHQA) and the Screen for Child Anxiety Related Disorders (SCARED)
3	Alaka Mani TL, 2021	26 specialists (6 yoga practitioners and therapists, 4 yoga professors, 4 yoga research scholars, 10 psychologists and 2 youth counseling specialists)	Developing a Yoga Module for Anger Management for Middle School Students	yoga asana, pranayama	four experts did not respond	The holistic and integrated approach adopted by considering Pancha Kosha concepts and IAYT principles in the development of yoga modules for anger management provides a sufficient basis for achieving content validity.	The yoga module developed is considered to be a very useful anger management program for adolescents.	Likert scale

3.0.1 Anger Management through Yoga

Anger management in children has been a critical area of focus in psychological and educational research. Earlier works have demonstrated that yoga practices, including mindfulness, breathing exercises, and physical postures, can significantly reduce anger and aggressive behaviors in children. (Janjhua et al. 2020) in "A study on effect of yoga on emotional regulation, self-esteem, and feelings of adolescents": pointed out that the significant impact of yoga on emotion regulation, self-esteem, and feelings among adolescents requires policy makers to focus on starting yoga at the school level through standardized yoga curriculum and training teachers to motivate and inspire students to learn and practice yoga at a very young age.

3.0.2 Anxiety Reduction through Yoga

Javed & Mishra (2022) study noticed Social anxiety Severe fear and nervousness, especially in front of other people, are the hallmarks of social anxiety disorder. The persistent fear that your every move will be watched, noticed, or evaluated by an

invisible observer. Shy bladder syndrome is a condition in which a person feels extremely embarrassed when urinating in a public place, which is a common example of abnormal behavior. Also known as social phobia, it is characterized by extreme shyness or avoidance of social situations where the person feels uncomfortable that they will be evaluated or scrutinized, or that they may do or say inappropriate things. Patients' fears may revolve around adverse effects such as panic or fainting, often accompanied by secondary concerns such as death, loss of control, or depression. Situation-specific phobias are characterized by excessive and irrational fears triggered by the presence or proximity of specific objects or situations, such as public transportation, subways, moving elevators, flying, driving, or enclosed spaces. James-Palmer (2020) discusses Anxiety is a prevalent issue among children, and yoga has been proposed as an effective intervention to alleviate anxiety symptoms. Research has shown that yoga's focus on breath control and meditation can help children manage anxiety by promoting relaxation and reducing stress hormones (Javed, Mishra 2022).

3.0.3 Social Phobia and Yoga

Social phobia, or social anxiety disorder, affects a considerable number of children and can hinder their social interactions and academic performance. Yoga has been identified as a potential tool to help children overcome social anxiety by improving self-esteem and promoting a sense of calm and confidence. (James-Palmer 2020) noted that yoga is defined by the practice of postures and can generally reduce anxiety and depression regardless of its type, other yogic elements practiced, method of delivery, and setting.

3.0.4 Conclusion

The body of research indicates that yoga can be an effective intervention for managing anger, reducing anxiety, and alleviating social phobia in children. The positive outcomes from various studies underscore the potential of yoga programs to foster emotional and social well-being among young individuals (A Cerdá 2023). Future research should continue to explore the long-term effects of yoga and its integration into educational and therapeutic settings to support children's mental

health.

4.0 AIM AND OBJECTIVES

4.1 AIM

The aim of this study is to investigate the impact of a 10-day yoga programme on reducing anger, anxiety and social phobia in children aged 10-15 years. To assess the effectiveness of a yoga intervention in improving the emotional and social well-being of children in this age group.

4.2 OBJECTIVES

1. Evaluate changes in anger levels and measure the effectiveness of yoga classes in reducing participants' anger levels.
2. Pay attention to reducing anxiety and study the impact of yoga courses on children's anxiety levels.
3. Analyzing the effect of yoga classes on social phobia symptoms in children in a PDC program.

5.0 MATERIALS AND METHODS

This study employed a rigorous pre-post design, aiming to capture changes in participants' psychological states following their participation in a residential yoga programme. Prior to the commencement of the 10-day programme, all participants were administered self-report questionnaires designed to measure their levels of anger, anxiety, and social fears. These assessments served as a baseline for comparison with their post-programme scores. The yoga programme was intensive and comprehensive, with daily sessions tailored to meet the developmental needs of the children. These sessions not only involved physical yoga postures but also encompassed breathing exercises, relaxation techniques, and positive thinking activities. Group discussions on emotional well-being were also conducted, providing an opportunity for participants to share their experiences and learn from each other. 65 children aged 10-15 years attending Personality Development Camp at Swami Vivekananda yoga anusandhana samsthana (SVYASA) were randomly selected for pre-experimental and

post-experimental testing (both males and females) using three scales targeting anxiety, anger, and social phobia.

6.0 JUSTIFICATION OF THE STUDY

In recent years, more and more children are facing the challenge of emotional problems as social and competitive pressures continue to increase. Emotional problems such as anger, anxiety and social phobia are gradually emerging among children, which not only affect their physical and mental health, but may also have far-reaching effects on their learning, life and future social adaptation. Therefore, how to effectively intervene and alleviate these emotional problems has become an urgent issue in the field of education and mental health. Yoga, as a comprehensive exercise that combines physical exercise, breathing regulation and meditation, has been widely recognised as an effective method of emotional regulation. It can help individuals to relax their body and mind and enhance their self-awareness through soothing movements, deep breathing and meditation exercises, thus improving their emotional state. Proper yoga training can be able to promote physical development and also develop emotional management skills.

However, there is still a relative lack of empirical research on the effects of yoga on children's emotional problems, especially on residential yoga programmes. Residential yoga programmes not only provide a more focused and systematic yoga training, but also enable children to learn to get along with others in group life, which can help improve their emotional problems such as social phobia. Therefore, this study aims to deeply explore the effects of a 10-day residential yoga programme on emotional problems such as anger, anxiety and social phobia in children aged 10-15 years old, with a view to providing new intervention methods and theoretical basis for children's emotional management.

This study will adopt a combination of quantitative and qualitative research methods, collect data through questionnaires and interviews and observations, and process and analyse the data using methods such as statistical analysis and text analysis. We expect that this study will reveal the specific mechanisms of the

residential yoga programme's influence on children's emotional problems, and provide useful references and lessons for future educational practices and mental health interventions.

7.0 HYPOTHESIS AND NULLHYPOTHESIS

Hypothesis(H1):The 10-day residential yoga program will significantly reduce levels of anger, anxiety, and social phobia in children aged 10 to 15.

Null Hypothesis(H0):The 10-day residential yoga program will not have a significant effect on the levels of anger, anxiety, and social phobia in children aged 10 to 15.

8.0 METHODS

8.1 SAMPLESIZE

65 children aged 10-15 years attending Personality Development Camp at Swami Vivekananda yoga anusandhana samsthana (SVYASA) were randomly selected for pre- and post-experimental testing (both males and females) using three scales targeting anxiety, anger, and social phobia.

8.1.1 SELECTION AND SOURCE OF PARTICIPANTS

Participants come from boys and girls aged 10-15 years old who are enrolled in SVYASA Yoga Personality development Camp

8.1.2 INCLUSION CRITERIA

- 1.Participants will be boys and girls between the ages of 10-15 years to ensure developmental relevance and consistency of response to yoga interventions.
2. only healthy children without diagnosed mental health disorders or significant physical illnesses will be included to minimize the impact of confounding factors.
3. Participants will be randomly selected from eligible volunteers to ensure that the sample represents diverse backgrounds and characteristics.
4. Participation in the study will require informed consent from a parent or legal guardian to ensure ethical requirements are met.
- 5.Participants and their families must be able and committed to attend the entire 10-day residential yoga program in order to maintain consistency in the implementation of

the intervention and impact evaluation.

8.1.3 EXCLUSION CRITERIA

1. children suffering from a chronic illness or requiring ongoing treatment will be excluded so that the effectiveness of the intervention can be accurately assessed. Exclusion of children other than 10-15 years of age.

2. children diagnosed with a mental illness or mood disorder will be excluded to avoid possible confounding of the effect of the intervention.

3. Children with special educational needs or developmental disorders are excluded to ensure sample consistency and intervention feasibility.

4. Families and children who are expected to be absent frequently during the study period will be excluded to ensure the validity of the intervention program and the integrity of the data.

5. Participants whose parents or guardians do not allow their children to participate in the full 10-day yoga program will be excluded.

9.0 DESIGN OF THE STUDY

This study aims to investigate the impact of a 10-day residential yoga program on anger, anxiety, and social phobia in children aged 10 to 15. The study utilized a single-group pre- and post-test design with a random sample of 65 participants from the svyasa ten days Yoga Personality Development Camp. Prior to and following the intervention, all participants completed relevant psychological measurement questionnaires to assess their levels of anger, anxiety, and social phobia.

9.1 VARIABLES STUDIED

Independent variable:

A 10-day residential yoga course intervention was used as the primary independent variable in the study. The course will cover yoga practices, meditation and breathing techniques designed to promote improved physical and mental health and emotional management.

Dependent variable:

Anger level: Measured by The Anger Expression Scale For Children, changes in

anger expression in children were assessed before and after the study.

Anxiety levels: The Children Anxiety Sensitivity Index(CASI) was used to assess changes in children's anxiety levels before and after the study.

Severity Measure for Social Anxiety Disorder (Social Phobia) - Child Age 11-17 was used to assess the changes in children's social phobia before and after the study.

9.2 INTERVENTIONS

Table-2 PDC(PersonalityDevelopment Camp)schedule

Wake Up	4:30am
Yoga asana	5:30am-6:45am
Gita Chanting	6:45am-7:15am
Breakfast	7:15am-8:00am
Karma Yoga	8.00 am - 8.45 am
Bath & Wash	8:45am-10:00am
Lecture	10:00am-11:00am
Lunch	11:00am-12:00noon
Pranayama	12:00noon-1:00pm
DRT/ Cartoon/ Library	1:00pm-2:00pm
Creativity	2:00pm-3:30pm
Happy Assembly Preparation	3:30pm-4:30pm
Snacks	4:30pm-5:00pm
Games	5:00pm-6:00pm
Bhajan	6:00pm-7:00pm
Dinner	7:00pm-8:00pm
Happy Assembly	8:00pm-9:00pm
Diary Writing	9:00pm-9:30pm
Good night	9:30pm

The information in this table was obtained from: Personality Development Camp (PDC) - Swami Vivekananda Yoga Anusandhana Samsthana - S-VYASA

9.3 DATA EXTRACTION

Scale data were collected from 65 children aged 10 to 15 years old based on the pre-experimental and post-experimental questionnaires for each participant before and after the intervention. The accuracy and completeness of data entry were ensured. The data were put into EXCEL and JASP for analysis.

9.4 DATA ANALYSIS

The demographics of the experimental group are given in Table 1. There were 35 boys and 30 girls.

Table-3 Demographic data

Sample	Before Yoga	After Yoga
Gender	Boy-35 Girl-30	Boy-35 Girl-30
Age	10-15	10-15
Mean \pm SD	13.615 \pm 0.744	13.615 \pm 0.744

9.4.1 Descriptive Statistics for the Anger

Regarding the sample size (N=65), The scores before the intervention were as follows: minimum: 40, maximum: 83, indicating that before the intervention, the children's score range was wide, covering the score range from 40 to 83. The mean: 60.538, indicating that before the intervention, the average score of the children was about 60.54. The standard deviation: 9.585, indicating that the distribution of scores was relatively discrete, and the score differences between children were large. The median: 59, indicating that half of the children scored below 59, and half scored above 59. After the intervention, the minimum: 40, maximum: 76, indicating that after the intervention, the range of children's scores narrowed, covering the score range from 40 to 76. The mean: 58.554, indicating that after the intervention, the average score of the children slightly decreased to 58.55. The standard deviation: 8.570, indicating that the distribution of scores was still relatively discrete, but slightly smaller than before the intervention, and the score differences between children decreased. The median: 59, the same as before the intervention, indicating that the

overall score median did not change. From the overall change, the mean value: dropped from 60.538 to 58.554, indicating that the average score of children after the intervention dropped by about 1.984. This drop may indicate that the intervention has a certain negative impact on children's scores, but the change is not significant. The standard deviation: dropped from 9.585 to 8.570, indicating that the dispersion of scores decreased slightly after the intervention, children's scores became slightly more concentrated, and the differences between individuals decreased. The median was 59 before and after the intervention, indicating that the median score of most children did not change. These descriptive statistics show that after the intervention, the average score of children decreased slightly, but the overall change was not significant. The decrease in the standard deviation indicates that the dispersion of scores has decreased, and the differences between individuals have decreased slightly. The median remains unchanged, indicating that the median score of most children has not changed significantly. As shown in Table 3.

Table-4 Differences before and after yoga intervention on children's anger

Difference before and after intervention						
	N	Minimum value	Maximum value	Mean value	Standard deviation	median
PRE-Mark	65	40.000	83.000	60.538	9.585	59.000
POST-Mark	65	40.000	76.000	58.554	8.570	59.000

Tables 4 and 5 show that the mean difference between the PRE and POST total scores is 1.98. This meant that after 10 days of residential yoga sessions, the children's anger scores dropped by an average of 1.98 points. The t value was 8.534 and the p value was 0.001, indicating that the difference was statistically significant ($p < 0.01$). Therefore, the observed differences are not due to random factors. Cohen's d value was 1.058, indicating a large effect size. This means that the intervention (i.e., residential yoga classes) was not only statistically significant in reducing anger in children, but also significantly effective in a practical sense. The 95% confidence interval for the difference is 1.520 to 2.449. This result further corroborates the

statistical significance and effect size, showing that in most cases, post-course scores are significantly lower than pre-course scores.

Combining the data from Tables 4 and 5, it can be concluded that a 10-day residential yoga program has a significant and substantial effect on anger in children aged 10 to 15 years. The mean score decreased by 1.98 points, a change that was statistically very significant ($p < 0.01$) and had a large effect size (Cohen's $d = 1.058$). These results suggest that yoga classes, as an intervention, have a significant effect in helping children reduce anger, which is worthy of further promotion and application.

Table-5 Paired T-test analysis results on children's Anger

	Pairing (mean \pm standard deviation)		Difference		
	Pair 1	Pair 2	(pairing 1- pairing 2)	<i>t</i>	<i>p</i>
PRE total score - POST total score	60.54 \pm 9.59	58.55 \pm 8.57	1.98	8.534	0.001*

* $p < 0.05$ ** $p < 0.01$

Table-6 Effect size index on children's anger

Effect size index					
	Mean Difference	95% CI of the difference	<i>df</i>	Standard Deviation of Difference	Cohen's d value
PRE total score - POST total score	1.98	1.520 ~ 2.449	64	1.875	1.058

9.4.2 Descriptive Statistics for the Anxiety

Before the intervention, the minimum score of the total scale score was 18 and the maximum score was 49, showing a large range of scores. The mean score was 28.169 and the standard deviation was 6.977, indicating that the score distribution was relatively discrete and there were large individual differences among children. The

median was 27, indicating that half of the children scored below 27 and the other half scored above 27.

After the intervention, the minimum score of the total scale score was still 18, but the maximum score dropped to 41, indicating that the range of children's scores narrowed. The mean score dropped to 26.985 and the standard deviation dropped to 5.843, indicating that the score distribution was more concentrated and the individual differences between children decreased. The median was 26, slightly lower than 27 before the intervention, reflecting a decline in the overall score level.

From the overall change, the mean value dropped from 28.169 to 26.985, indicating that the average score of children dropped by 1.184 after the intervention. This decline may indicate that the intervention has produced a positive effect. The standard deviation decreased from 6.977 to 5.843, indicating that the dispersion of scores decreased after the intervention, and the scores of children became more consistent, which may be due to the similar effects of the intervention on most children. The median decreased from 27 to 26, further confirming the trend of decreasing scores after the intervention.

These descriptive statistical results show that the mean of children's scores decreased and the dispersion decreased after the intervention, which may mean that the intervention has a positive effect on improving children's anxiety. As shown in Table 7.

Table-7 Differences before and after yoga intervention on children's anxiety

Difference before and after intervention						
	N	Minimum value	Maximum value	Mean value	Standard deviation	median
PRE-Mark	65	18.000	49.000	28.169	6.977	27.000
POST-Mark	65	18.000	41.000	26.985	5.843	26.000

Table 7 shows that the mean difference between the PRE and POST total scores is 1.18. This means that after a 10-day residential yoga program, the children's anxiety

level scores were reduced by an average of 1.18 points, with a T-value of 3.351 and a P-value of 0.001, indicating that the difference was statistically significant ($p < 0.01$). This means that we can be more than 99% confident that the observed differences are not due to random factors. The standard deviations of the pre-test and post-test were 6.98 and 5.84 respectively, indicating that the variation of the pre-test score was large, while the variation of the post-test score was relatively small. The results in Table 6 show that a 10-day residential yoga program had a significant impact on reducing anxiety levels in children aged 10 to 15 years. The mean score decreased by 1.18 points, which was statistically significant ($p < 0.01$).

The mean difference in the children's anxiety total scores before and after the residential yoga program was 1.18. This suggests that, on average, the children's anxiety levels decreased after participating in the program. Confidence Interval (95% CI of the difference): The 95% confidence interval for the difference is 0.478 to 1.891. This means that we can be 95% confident that the true mean difference is within this interval and does not include zero. This further supports the conclusion that the intervention has a significant effect on anxiety. The degrees of freedom (df) is 64, which is calculated by subtracting 1 from the number of data points measured before and after. The standard deviation of the difference is 2.850. This represents the average change in the anxiety total score measured before and after. The Cohen's d value is 0.416. This suggests that the intervention (i.e., residential yoga program) has a medium effect size on anxiety levels. In general, a Cohen's d value of 0.416 indicates an intervention effect with a small to medium effect size. As shown in Table 9.

In summary, based on these data, we can conclude that a 10-day residential yoga program has a significant effect on reducing anxiety levels in children aged 10 to 15 years, with a medium effect size. These findings provide initial support and understanding for exploring the use of yoga in reducing anxiety in children.

Table-8 T-test on children's anxiety

Paired T-test analysis results

	Pairing (mean \pm standard deviation)		Difference (pairing 1- pairing 2)	<i>t</i>	<i>p</i>
	Pair 1	Pair 2			
PRE total score - POST total score	28.17 \pm 6.98	26.98 \pm 5.84	1.18	3.351	0.001**

* $p < 0.05$ ** $p < 0.01$

Table-9 Effect size index on children's anxiety

	Effect size index				
	Mean Difference	95% CI of the difference	<i>df</i>	Standard Deviation of Difference	Cohen's <i>d</i> value
PRE total score - POST total score	1.18	0.478 ~ 1.891	64	2.850	0.416

9.4.3 Descriptive Statistics for the Social Phobia

The children were assessed with the Social Phobia Scale at both the pretest and post test stages. The sample sizes for the pretest and post test were 65 and 66, respectively, which were fairly balanced, indicating that the data collection was relatively adequate and evenly distributed. The Social Phobia Scale scores ranged from 0 to 28 (pretest) and 0 to 26 (post test), showing the changes in the children's fear symptoms during the measurement period. After learning and practicing yoga courses, we found that the children's average social phobia symptom score decreased from 8.800 to 8.197. Although this change was not significant, it did show a downward trend, indicating that yoga courses have a certain positive effect on alleviating children's social phobia symptoms. In the data analysis, we focus on the standard deviation and median. The standard deviation reflects the degree of dispersion of the scores, while the median reflects the central tendency of the score distribution. The standard deviations of the pretest and post-test are similar, indicating that the changes in the distribution of fear symptom scores are relatively consistent. This finding further supports the preliminary conclusion that yoga courses may be helpful in alleviating social phobia symptoms.

Combining the above analysis, these data provide us with a preliminary

understanding of the impact of a 10-day residential yoga course on social phobia in children aged 10 to 15 years old. Although the change in the mean value is not significant, the trend shown in the data is still worthy of our attention, suggesting that yoga courses may help reduce children's social phobia symptoms. In future studies, we can further explore the long-term effects of this impact and how yoga courses can be combined with other treatments in order to bring good news to more children with social phobia. As shown in Table 10.

Table-10 Differences before and after yoga intervention on children's Social Phobia

Difference before and after intervention						
	N	Minimum value	Maximum value	Mean value	Standard deviation	median
PRE-Mark	65	0.000	28.000	8.800	7.864	7.000
POST-Mark	66	0.000	26.000	8.197	7.139	6.500

Both Tables 11 and 12 show a mean difference of 0.48 between PRE-MARK and POST-MARK. This meant that after the 10-day residential yoga program, the children's social phobia symptom scores were reduced by an average of 0.48 points. The T-value was 3.043 and the P-value was 0.003, indicating that the difference was statistically significant ($p < 0.01$). This means that we can assume that the observed differences are not due to random factors. Cohen's d value of 0.377 indicates that the effect size is near medium. Although the mean difference was small, it was statistically significant, suggesting that a 10-day residential yoga program had some effect on reducing social phobia in children. The 95% confidence interval for the difference is between 0.164 and 0.790. This further supports the significance and effect size of the results, showing that for the most part, post-course scores were significantly lower than pre-course scores.

Combining the results of Table 11 and Table 12, it can be concluded that a 10-day residential yoga program has a significant effect on reducing social phobia

symptoms in children aged 10 to 15 years. Although the reduction in the mean score was small, statistical analysis showed that the reduction was significant and had a moderate effect size. This suggests the potential benefits of yoga classes as an intervention in helping children cope with social phobia.

Table-11 Paired T-test analysis results on children's social phobia

	Paired T-test analysis results				
	Pairing (mean \pm standard deviation)		Difference (pairing 1- pairing 2)	<i>t</i>	<i>p</i>
	Pair 1	Pair 2			
PRE-MARK POST-MARK	8.80 \pm 7.86	8.32 \pm 7.12	0.48	3.043	0.003**

* $p < 0.05$ ** $p < 0.01$

Table-12 T-test on children's social phobia

	Effect size index				
	Mean Difference	95% CI of the difference	<i>df</i>	Standard Deviation of Difference	Cohen's d value
PRE total score - POST total score	0.48	0.164 ~ 0.790	64	1.264	0.377

10.0 RESULTS

The study found that the course produced significant positive effects on all three aspects of symptoms.

First, in terms of anger, after the intervention of yoga classes, the children's anger was significantly reduced. This means they are better able to control their emotions in the face of setbacks and difficulties and avoid negative behaviors triggered by anger. This is of great significance to their character development and social adaptability.

Secondly, in terms of anxiety levels, the study found that yoga classes also had a significant relief effect. Through the practice of yoga, children can reduce anxiety to a certain extent, so that they can cope with the pressure in study and life more calmly.

This helps improve their mental fitness and reduces the risk of anxiety-induced physical and mental illness.

Finally, in terms of social fear, yoga classes also showed some improvement. After training, children can reduce the symptoms of social phobia to a certain extent and interact with others more confidently. This has important implications for their interpersonal communication and mental health.

In summary, the 10-day residential yoga program had significant positive effects on anger, anxiety and social phobia symptoms in children aged 10 to 15 years. These results support the use of yoga classes as an effective mental health intervention in children. However, this study was only a short-term effect, and future research could further explore the long-term effects of yoga classes on children's mental health, as well as its underlying mechanisms. This will help provide more scientific and effective guidance and suggestions for the mental health education of children in yoga summer camps in the future.

11.0 DISCUSSIONS

This study found that a 10-day residential yoga program significantly reduced anger, anxiety, and social phobia symptoms in children aged 10 to 15 years. These findings suggest that yoga as a mental health intervention has a positive effect in children and can effectively help them manage their emotions and improve their mental health.

Anger management: The high effect size (Cohen's $d = 1.058$) suggests that yoga programs are very effective in managing anger. The reduction in anger can help improve children's social interactions and overall mental health.

Anxiety relief: The medium effect size (Cohen's $d = 0.416$) suggests that yoga programs have a practical effect on reducing anxiety. The reduction in anxiety levels can help improve children's quality of life and academic performance.

Social phobia improvement: Despite a small effect size (Cohen's $d = 0.377$), yoga programs still have a statistically significant effect on reducing social phobia symptoms. This suggests that yoga programs can be used as an auxiliary measure to

help children overcome social phobia and improve their social skills.

As an ancient practice, yoga has gained widespread acceptance around the world in recent years, especially in urban areas, where yoga training centers and private institutions have opened yoga courses. However, schools and public education have been slow to promote this beneficial practice. This article claims that yoga can be a valuable tool for children to manage stress, improve self-regulation skills, and promote healthy development.

11.1 IMPLICATIONS OF THE STUDY

The application value of yoga courses in the field of children's mental health has been widely concerned. The results of this study show that yoga classes as a non-drug, non-invasive intervention can significantly reduce anger, anxiety and social fear in children. The findings provide a safe and effective alternative to mental health problems in children, especially for children who are not candidates for or resistant to medication. In modern society, children face a lot of stress and negative emotions such as anger, anxiety and social fear are common. Through yoga practice, children are able to learn to better manage and regulate these emotions, thereby improving their emotional stability and mental resilience.

As a physical and mental exercise, yoga helps children improve their self-regulation and ability to cope with stress through breathing control, meditation and physical exercises. The study found that children who participated in yoga classes showed significant improvements in emotional and social interaction, suggesting that yoga can effectively develop children's ability to cope with various stressors and improve their resilience. In addition, yoga classes can help children establish the right values, develop their team spirit and self-discipline.

In conclusion, yoga classes, as a non-drug and non-invasive intervention, have significant effects in reducing negative emotions and improving emotional stability and psychological resilience in children. In the future research and practice, it is necessary to continue to explore the application value of yoga in the field of children's mental health, to provide more safe and effective psychological support for children.

11.2 APPLICATIONS OF THESTUDY

Parents can encourage their children to use yoga to adjust themselves when they encounter stress or negative emotions. Regular yoga practice can help children develop good emotional management habits and improve their ability to cope with stress. Medical institutions can recommend yoga exercises in children's health examinations and counseling services as an important part of preventive health plans. Through early intervention, children can develop a healthy lifestyle and prevent the occurrence of mental health problems. This study shows that the course has a significant positive effect on anger, anxiety and social phobia symptoms in children aged 10 to 15 years. These results provide strong support for the application of yoga in the field of children's mental health. By promoting and applying yoga in the education system, family, community and medical system, more children can benefit from the improvement of mental health levels, cultivate emotional management and self-regulation abilities, and promote all-round development. Further research and policy support will help expand the scope of yoga application and ensure that more children benefit.

11.3 STRENGTH OF THESTUDY

The empirical research design was used in this study, especially the single-group pre - and post-test design. This design effectively assesses changes in mental health after children participate in yoga classes by comparing pre - and post-test data to determine the extent of yoga's impact on issues such as anger, anxiety, and social fear. Instead of focusing on a single indicator of mental health, the study covered multiple aspects, including anger, anxiety, and social phobia symptoms. Through multi-dimensional evaluation, we can fully understand the comprehensive impact of yoga on children's overall mental health, and provide more abundant and in-depth data support for practical application. In this study, statistically rigorous methods were used to analyze the data, including paired sample T-tests and effect size analyses (such as Cohen's d value). These analyses not only validated the actual effects of yoga on mental health, but also provided data to support the reliability and significance of

the findings. The "personality development camp for children" YOGA summer camp program of SVYASA YOGA UNIVERSITY is selected for this study. Through the field environment research, the practical effects and feasibility of children's yoga intervention in real life are deeply discussed. The study clearly identifies children and adolescents between the ages of 10 and 15, a critical developmental period when mental health issues are particularly acute. By targeting this specific population, it can provide reference and guidance for future studies in other age groups or specific contexts. Research results are linked to practical applications. By discussing how yoga can become an effective tool for children's mental health, the study demonstrates the organic combination of theoretical research and practical application, which has strong practicability and promotion value.

11.4 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE STUDIES

Limited sample size: In our study, we selected only 65 participants for the study, a relatively small sample size that may limit the generalisability and external validity of the findings to some extent. When drawing conclusions, caution should be exercised and attention should be paid to whether they can be extended to a wider population. In addition, future studies can consider increasing the sample size to improve the accuracy and reliability of the study.

Short-term intervention: This study only observed a 10-day short-term yoga course, and did not examine the long-term effect. This may lead us to misunderstand the actual impact of yoga classes. To gain a more comprehensive understanding of the effects of yoga classes, future research should extend to long-term interventions to explore the long-term impact and persistence of yoga classes.

Lack of a control group: In this study, we did not set up a control group, which makes it impossible to exclude the influence of other factors on the study results. The control group can help us better understand the unique role of yoga classes in improving children's mental health. Therefore, future studies should include control groups in order to more accurately determine cause and effect in yoga classes.

Promotion and application: After confirming the positive effects of yoga on children's mental health, how to promote and apply the research results to practical education and clinical practice is an important direction of future research. This includes developing psychoyoga programmes for children, training professional teachers and working with education authorities and medical institutions.

Further research: There are still many unknowns about the application of yoga classes in the field of children's mental health, such as the optimal length of yoga classes, frequency, teaching methods, etc., which need further research. In addition, exploring the impact of yoga classes on the mental health of other age groups (such as adolescents and adults) is also a trend for future research.

12.0 REFERENCES

1. Urben, S., Ochoa Williams, A., Ben Jemia, C., Rosselet Amoussou, J., Machado Lazaro, S., Giovannini, J., Abi Kheir, M., Kaess, M., Plessen, K. J., & Mürner-Lavanchy, I. (2024). Understanding irritability through the lens of self-regulatory control processes in children and adolescents: a systematic review. *European child & adolescent psychiatry*, 10.1007/s00787-024-02591-8. Advance online publication.
2. Alemdar, H., & Karaca, A. (2025). The effect of cognitive behavioral interventions applied to children with anxiety disorders on their anxiety level: A meta-analysis study. *Journal of pediatric nursing*, S0882-5963(24)00465-2. Advance online publication.
3. Rapee, R. M., & Spence, S. H. (2004). The etiology of social phobia: Empirical evidence and an initial model. *Clinical Psychology Review*, 24(7), 737–767.
4. Cerdá, A., Boned-Gómez, S., & Baena-Morales, S. (2023). Exploring the mind-body connection: Yoga, mindfulness, and mental well-being in adolescent physical education. *Education Sciences*, 13(11), 1104.
5. 1. James-Palmer, A., Anderson, E. Z., Zucker, L., Kofman, Y., & Daneault, J. F. (2020). Yoga as an intervention for the reduction of symptoms of anxiety and depression in children and adolescents: a systematic review. *Frontiers in pediatrics*, 8, 78.
6. Bazzano, A. N., Sun, Y., Chavez-Gray, V., Akintimehin, T., Gustat, J., Barrera,

- D., & Roi, C. (2022). Effect of Yoga and Mindfulness Intervention on Symptoms of Anxiety and Depression in Young Adolescents Attending Middle School: A Pragmatic Community-Based Cluster Randomized Controlled Trial in a Racially Diverse Urban Setting. *International journal of environmental research and public health*, 19(19), 12076.
7. TI, A. M., Omkar, S. N., Sharma, M. K., Choukse, A., & Nagendra, H. R. (2021). Development and validation of Yoga Module for Anger Management in adolescents. *Complementary therapies in medicine*, 61, 102772.
 8. Vogler, S., Salyer, R. E., & Giacobbi, P. R. (2023). Yoga and Mental Well-being: A Qualitative Exploration of the Lived Experiences of Yoga Practitioners. *International Journal of Yoga*, 16(3), 192-201.
 9. Suchitra, S. P., & Nagendra, H. R. EFFECT OF YOGA PERSONALITY DEVELOPMENT CAMP ON TRIDOSHAS IN CHILDREN.
 10. Patil, S. S., & Nagendra, H. R. (2014). Effect of yoga personality development camp on the triguna in children. *Voice of Research*, 3(3), 19-21.
 11. Choukse, A., Ram, A., & Nagendra, H. R. (2019). Effect of residential yoga camp on psychosocial fitness of adolescents. *International Journal of Yoga*, 12(2), 139-145.
 12. David-Ferdon, C., & Simon, T. R. (2014). Preventing Youth Violence: Opportunities for Action. *Centers for Disease Control and Prevention*.
 13. Kim-Spoon, J., Holmes, C., & Deater-Deckard, K. (2015). Attention regulates anger and fear to predict changes in adolescent risk-taking behaviors. *Journal of child psychology and psychiatry*, 56(7), 756-765.
 14. Warner, M., Robinson, J., Heal, B., Lloyd, J., Mandigo, J., Lennox, B., & Davenport Huyer, L. (2021). Increasing physical literacy in youth: A two-week Sport for Development program for children aged 6-10. *Prospects*, 50(1), 165-182.
 15. Weaver, R. G., Brazendale, K., Chandler, J. L., Turner-McGrievy, G. M., Moore, J. B., Huberty, J. L. & Beets, M. W. (2017). First year physical activity findings from turn up the HEAT (Healthy Eating and Activity Time) in summer day camps. *PLoS One*, 12(3), e0173791.

16. Wilson, C., Sibthorp, J., & Brusseau, T. A. (2017). Increasing physical activity and enjoyment through goal-setting at summer camp. *Journal of Park and Recreation Administration*, 35(4).
17. Larose, D., Chih-Shing Chen, M., Panahi, S., Yessis, J., Tremblay, A., & Drapeau, V. (2023). Interventions to promote healthy lifestyle behaviors in children and adolescents in summer day camps: a scoping review. *BMC Public Health*, 23(1), 773.
18. Grasser, L. R., & Marusak, H. (2023). Strong mind, strong body: The promise of mind–body interventions to address growing mental health needs among youth. *Mental Health Science*, 1(2), 58-66.
19. Steele, R. G., Legerski, J. P., Nelson, T. D., & Phipps, S. (2009). The Anger Expression Scale for Children: Initial validation among healthy children and children with cancer. *Journal of pediatric psychology*, 34(1), 51-62.
20. Busch, A. M., Modica, C. A., & Sheridan, E. R. (2023). The Effect of Yoga on Anxiety, Attention and Social-Emotional Symptoms in Preschool Children: A Pilot Quasi-Experimental Study. *Child Psychiatry & Human Development*, 1-10.
21. Garbers, S., Umar, N. Q., Hand, R. E., Usseglio, J., Gold, M. A., & Bruzzese, J. M. (2022). Mind–Body integrative health (mbih) interventions for sleep among adolescents: a scoping review of implementation, participation and outcomes. *Adolescent research review*, 1-25.
22. Bazzano, A. N., Sun, Y., Chavez-Gray, V., Akintimehin, T., Gustat, J., Barrera, D., & Roi, C. (2022). Effect of yoga and mindfulness intervention on symptoms of anxiety and depression in young adolescents attending middle school: a pragmatic community-based cluster randomized controlled trial in a racially diverse urban setting. *International Journal of Environmental Research and Public Health*, 19(19), 12076.

Appendix – 1 INFORMED CONSENT FORM

CONSENT FORM RESEARCH STUDY: Exploring the Effects of a 10-Day Residential Yoga Program on Anger, Anxiety, and Social Fears in Children Aged 8 to 14 Years Old

Researcher: X I N X I A O Y A O

Dear Parent/Guardian,

Your child is invited to participate in a research study investigating the potential benefits of a 10-day residential yoga program on anger, anxiety, and social fears in children aged 10 to 15 years old. This study is being conducted by XIN XIAOYAO, a researcher [insert affiliation if applicable].

Purpose of the Study:

The purpose of this study is to explore the effects of a structured 10-day residential yoga program on the levels of anger, anxiety, and social fears experienced by children. The study aims to contribute to the existing knowledge about the potential benefits of yoga for children's emotional and social well-being.

Study Procedures:

If you agree to allow your child to participate in this study, they will be enrolled in a 10-day residential yoga program. During this program, your child will participate in daily yoga sessions, including physical postures (asanas), breathing exercises (pranayama), and relaxation techniques. Before and after the program, your child will be asked to complete questionnaires assessing their levels of anger, anxiety, and social fears.

Risks and Benefits:

The risks associated with this study are minimal and are no greater than those encountered in daily life or during regular physical activity. The yoga program will be led by certified instructors, and appropriate safety measures will be in place.

The potential benefits of participating in this study include improved emotional regulation, reduced anxiety and anger levels, and increased social confidence. However, there is no guarantee that your child will experience these benefits.

Confidentiality:

All information collected during this study will be kept strictly confidential. Your child's identity will not be disclosed in any reports or publications resulting from this research.

Voluntary Participation:

Participation in this study is entirely voluntary. You and your child have the right to withdraw from the study at any time without penalty or loss of benefits to which you are otherwise entitled.

If you have any questions or concerns about this study, please feel free to contact X I N X I A O Y A O at [email address] or [phone number].

By signing below, you indicate that you have read and understood the information provided above and that you voluntarily agree to allow your child to participate in this research study.

Parent/Guardian Name: _____

Parent/Guardian Signature: _____

Date: _____

Please return this signed consent form to [provide instructions for returning the form].

Thank you for your consideration.

Sincerely,
XIN XIAOYAO

Appendix – 2 QUESTIONNAIRE(S) – SAMPLE COPY

Childhood Anxiety Sensitivity Index (CASI)

Directions: A number of statements which boys and girls use to describe themselves are given below. Read each statement carefully and put an √ on the line in front of the words that describe you. There are no right or wrong answers. Remember, find the words that best describe you.

Name: _____ **Age:** _____ **Sex:** Male Female
Date: _____

topic	None	Some	A lot
1. I don't want other people to know when I feel afraid			
2. When I cannot keep my mind on my schoolwork, I worry that I might be going crazy			
3. It scares me when I feel 'shaky'			
4. It scares me when I feel like I am going to faint			
5. It is important for me to stay in control of my feelings			
6. It scares me when my heart beats fast			
7. It embarrasses me when my stomach growls (makes noises)			
8. It scares me when I feel like I am going to throw up			
9. When I notice that my heart is beating fast, I worry that there might be something wrong with me			
10. It scares me when I have trouble getting my breath			
11. When my stomach hurts, I worry that I might be really sick			
12. It scares me when I can't keep my mind on my schoolwork			
13. Other kids can tell when I feel shaky			
14. Unusual feelings in my body scare me			
15. When I am afraid, I worry that I might be crazy			
16. It scares me when I feel nervous			
17. I don't like to let my feelings show			
18. Funny feelings in my body scare me			

© Wendy K. Silverman. Reproduced by permission.

The Anger Expression Scale for Children

Below are a number of statements which children and adults some times use to describe themselves. Read each statement and circle the number that describes you best, or shows how you usually feel.

Name: _____ Age: _____ Sex: Male Female

Topic	Almost Never	Sometimes	Often	Almost Always
1. I feel angry				
2. I feel like yelling at someone				
3. I'm easygoing and don't let things bother me*				
4. I get very impatient if I have to wait for something				
5. I lose my temper easily				
6. I feel like breaking things				
7. I feel grouchy or irritable				
8. I get in a bad mood when things don't go my way				
9. I takes a lot to get me upset*				
10. I have a bad temper				
11. I get very angry if my parent or teacher criticizes me				
12. I get in a bad mood easily				
13. I slam doors or stomp my feet				
14. I keep it to myself				
15. I control my temper				
16. I let everybody know it				
17. I pout or sulk*				
18. I try to be patient				
19. I argue or fight back				
20. I don't talk to anybody*				
21. I keep my cool				
22. I hit things or people				
23. I feel it inside, but I don't show it				
24. I stay well behaved				
25. I say mean or nasty things				
26. I stay mad at people but keep it secret				
27. I try to stay calm and settle the problem				
28. I have a temper tantrum				
29. I hold my anger in				
30. I try to control my angry feelings				

*Item not included in CFA due to low item-total correlation

Severity Measure for Social Anxiety Disorder (Social Phobia)—Child Age 11–17

Name: _____ Age: _____ Sex: Male Female Date: _____

Instructions: The following questions ask about thoughts, feelings, and behaviors that you may have had about *social situations*. Usual social situations include: public speaking, speaking in meetings, attending social events or parties, introducing yourself to others, having conversations, giving and receiving compliments, making requests of others, and eating and writing in public. **Please respond to each item by marking (✓ or x) one box per row.**

							Clinician Use
	During the PAST 7 DAYS, I have...	Never	Occasionally	Half of the time	Most of the time	All of the time	Item score
1.	felt moments of sudden terror, fear, or fright in social situations	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
2.	felt anxious, worried, or nervous about social situations	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
3.	have had thoughts of being rejected, humiliated, embarrassed, ridiculed, or offending others	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
4.	felt a racing heart, sweaty, trouble breathing, faint, or shaky in social situations	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
5.	felt tense muscles, felt on edge or restless, or had trouble relaxing in social situations	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
6.	avoided, or did not approach or enter, social situations	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
7.	left social situations early or participated only minimally (e.g., said little, avoided eye contact)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
8.	spent a lot of time preparing what to say or how to act in social situations	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
9.	distracted myself to avoid thinking about social situations	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
10.	needed help to cope with social situations (e.g., alcohol or medications, superstitious objects)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
Total/Partial Raw Score:							
Prorated Total Raw Score: (if 1-2 items left unanswered)							
Average Total Score:							

Craske M, Wittchen U, Bogels S, Stein M, Andrews G, Lebeu R. Copyright © 2013 American Psychiatric Association. All rights reserved. This material can be reproduced without permission by researchers and by clinicians for use with their patients.

Appendix – 3 [Intervention]

Breathing Practices	Hands Stretch breathing; Straight leg raisesbreathing; Sasañkasana breathing; Pavanamuktasana breathing; Alternate legs; Pavanamuktasana breathing (Both legs).....
Asanas	Vrksasana;Garudasana;Padahastana;Ardhchakrasana;Viparita Karani;Supta Virasana.....
Pranayama	Candra anuloma viloma;Nadi Suddhi;Sūrya Anuloma Viloma;Bhramar
Kriyas	Right nostril Kapalabhati;Alternate & Both nostril;Agnisera;Kapalabhati - left nostril
Meditation	