

## Effectiveness of Yoga on Children with Psychiatric Problems:

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### Abstract

Parents' perspectives play an important role in planning therapeutic treatment for children, as they are the ultimate decision makers. With this in mind, this study was undertaken to assess parents' opinions about the effects of yoga on children with psychiatric problems. A mixed method research design was adopted to assess parents' opinions about the effects of yoga on children with psychiatric problems. A researcher designed a questionnaire which was validated by experts. This questionnaire had two sections: firstly, the socio-demographic details of participants, and secondly, the parent's opinion regarding the effects of yoga. Parents of children with psychiatric problems, admitted to an inpatient department, were selected using the total enumeration method. Onetime assessment was done by conducting a semi structured interview. Data was collected from parents, after the child had practiced yoga for 7 days, through a semi structured interview. The data was analyzed using descriptive statistics for the basic socio-demographic data, whereas the qualitative data obtained was coded, categorised and then findings were interpreted. This study found, according to parents, that yoga has a significant beneficial impact on child psychiatric problems and should be used in treatment. In conclusion, the study demonstrates that, according to parents, yoga

contributed to several issues of children with psychiatric problems, such as, regularity of daily routine, increased self-organization, reduction in various problem behaviours, etc. Hence it should be used in regular treatment of children with psychiatric problems.

**Keywords :** yoga, psychiatric problems, parent's perspectives.

### Introduction

Many children undergo a variety of stressors during their childhood. Childhood and adolescence pose more and more stressors in today's society (Mc Cance, Forshee & Shelby, 2006). These stressors may be due to developmental changes, new learning experiences, poor child parent relationships, socialization problems, etc. Under stress, many young people resort to unhealthy ways of coping, such as overeating and use of drugs, resulting in health crises (Kottler & Chen, 2011). A variety of complimentary therapies are found beneficial in the management of these stress related problems; yoga therapy is one of them. Yoga is an ancient Indian way of life aimed at physical, mental, and spiritual development. The word "Yoga" has its origins from the Sanskrit root, "yuj" meaning to bind, join, or yoke. This reflection of the union of the body, mind, and spirit is what is inher-

ently unique to yoga and other eastern forms of meditation. The most commonly performed practices of Hatha yoga are physical postures also called asana, breathing exercises known as pranayama, and meditation called dhyana (Arora & Bhattacharjee, 2008). Yoga is being used by a growing number of youth and adults as a means of improving overall health and fitness. There is also a progressive trend toward use of yoga as a mind-body complementary and alternative medicine intervention to improve specific physical and mental health conditions (Kaley, Peterson, Fischer, & Peterson, 2010). Yoga administered to inpatients in a psychiatric hospital helped reduce depression, tension, and anxiety scores (Lavey, Sherman, Mueser, Osborne, Currier, & Wolfe, 2005). Engagement in compassion meditation may reduce stress-induced immune and behavioral responses when exposed to laboratory stressors (Pace, Negi, Adame, Cole, Sivilli, Brown, et al, 2009). In addition, Yoga has been beneficial in post-traumatic stress disorder and depression in survivors of the 2004 Asian tsunami (Descilo, Vedamurtachar, Gerbarg, Nagaraja, Gangadhar & Damodaran, 2010). The ultimate aim of yoga is to prepare the body to achieve tranquility of the mind. It has generally been shown to improve physical, mental and emotional well-being and, by extension, the quality of one's life. Although yoga has been proved to be beneficial for many stress related problems in adults, only a few studies are available for children with psychiatric problems.

Most decisions for children are made by their parents, hence parents' perceptions about the effectiveness of yoga will have a huge impact on the use of yoga as a treatment, and its performance by children either at school, at home, or any other setting.

## Objectives

To assess parents' opinions about the effects of yoga on children with psychiatric problems.

## Methods

### *Study Design*

Mixed method research was adopted to assess parents' opinions about the effects of yoga on children with psychiatric problems. Fifty parents of children with psychiatric problems were recruited using the total enumeration method. A researcher designed a semi structured questionnaire which was validated by experts. This semi structured questionnaire had two sections: first, socio-demographic details of participants, and second, the parent's opinion regarding the effects of yoga using semi structured interviews.

Yoga sessions were conducted every morning for one hour by staff nurses and a yoga expert at the Child and Adolescent Psychiatry Department. It focused on pranayama, simple asanas and dhyana (meditation). Data was collected from parents after their children had practiced yoga for 7 days, through semi structured interviews. Parents were allowed to verbalize the changes they noticed and experienced while interacting with their children. Onetime assessment was conducted for all patients admitted, in a data collection period of two months. Quantitative data was analyzed by using descriptive statistics, and qualitative data was analyzed by transcribing, coding, categorizing and bringing out emerging themes.

## Results

The findings of the current study are discussed under two headings

- Socio-demographic findings of study subjects
- Qualitative analysis regarding the effects of yoga from parents' perspectives

**Table 1:** Socio-demographic findings of study subjects:

Socio-demographic variable	Categories	f	%
Father's age	25 to 50 years	41	82.0
	more than 50 years	6	12.0
	Father deceased	3	6.0
Mother's age	less than 25 years	1	2.0
	25 to 50 years	47	94.0
	more than 50 years	2	4.0
Mother's occupation	Employed	8	16.0
	Business	4	8.0
	Labourer	2	4.0
	Housewife	35	70.0
	Student	1	2.0
Father's occupation	Employed	18	36.0
	Unemployed	1	2.0
	Business	24	48.0
	Labourer	4	8.0
Mother's education	Illiterate	3	6.0
	Secondary Education	29	58.0
	Undergraduate	8	16.0
	Graduate	6	12.0
	Post Graduate	4	8.0
Father's education	Illiterate	3	6.0
	Primary Education	1	2.0
	Secondary Education	24	48.0
	Under Graduate	7	14.0
	Graduate	6	12.0
	Post Graduate	6	12.0
Child's age	less than 7 years	3	6.0
	8 to 12 years	19	38.0
	12 + years	28	56.0
Child's gender	Male	31	62.0
	Female	19	38.0
Religion	Hinduism	39	78.0
	Islam	9	18.0
	Christianity	2	4.0

Socio-demographic variable	Categories	f	%
Type of Family	Nuclear Family	32	64.0
	Joint Family/ Extended Family	18	36.0
Locality of residence	Urban	30	60.0
	Rural	20	40.0

The majority of parents belonged to the 25 - 50 years age group, and were educated up to secondary education. The majority of mothers were housewives who spent maximum time with their children, whereas the majority of fathers were either businessmen or employed. The majority of children were male and older than 12 years of age. The majority of participants were Hindu, from urban areas, and from a nuclear family. The children studied had different medical diagnoses such as Bipolar Affective Disorder, Depression, Social Anxiety, Obsessive Compulsive Disorders, Attention Deficit Hyperactivity Disorders, Oppositional Defiant Disorders, ODD with Seizures, Specific Learning Disorders, Expressive Speech Delay, Dissociative Disorders and Asperger's Syndrome.

#### Statistical analysis

#### Qualitative analysis regarding the effects of yoga, from parents' perspectives:

The qualitative analysis of parents' perspectives regarding the effects of yoga focused on parents' previous yoga experiences, and details in the children: positive & negative events linked with yoga, how these changes were attributable to yoga. Previous yoga experience in parents of children with psychiatric problems: 72% of parents had no earlier experience of yoga. 28% of parents had learnt and practiced yoga before; detailed analysis showed 14% of parents had learnt yoga in school, 8% of parents had attended a regular yoga course, 6% of parents learnt it through mass media

(art of living, yoga CD, television shows, etc.) and educational books related to yoga.

#### Positive events linked with yoga

Parents observed some positive changes in their children, which were recorded and then the data was coded and categorized as follows:

1. Symptom relief: 60% of parents reported a reduction in symptoms such as anger, improvement in low mood, improved attention and concentration, improved sitting tolerance, reduced impulsive behaviour and head banging, decreased disruptive behaviour and hyperactivity, child appeared happy and cheerful, stabilized with routine activities, decreased suicidal ideas, reduced tension and increased appetite.

*A: These days his anger has decreased to some extent*

*B: My child's mood has improved and he/she appears cheerful, he/she enjoys playing with other children.*

2. Self-organisation: 56% of parents reported that, due to yoga, their child had learnt to be self-organised, which was evident from regularity in activities of daily life, the child woke early to attend yoga activities, showed interest not only in yoga but also in activities such as play and self-care, performed work sincerely without much prompting, laziness decreased.

*A: She is getting up early, because she wants to go to yoga and does things like brushing, bathing, and self-grooming without any instructions from us.*

*B: Daily routine improved*

3. Communication, interpersonal relationships and socialization: 36% of parents reported improvements in communication, IPR and socialisation. After performing yoga in a group, the child started interacting with other children/people, responded to others, initiated play activities, attitude towards others and relationships with others improved, enhanced cooperation and group work, mingled with other children and people around him/her, tried to make friends with other children, good IPR with parents too.

*A: During yoga my child started talking with others and enjoyed their company. After yoga she now also enjoys being with other children. She comes and shares new things with us that she has learnt in yoga and how her other friends taught her new things.*

*B: He is trying to imitate what others are doing and tries to interact with other children around him.*

4. Physical changes: 30% of parents reported a decrease in the child's physical problems, such as decreased complaints of backache and constipation, improved appetite, physical strength and muscle movements, the child is physically fit, decreased weight/obesity, decreased laziness, and increased energy levels.

*A: Earlier she used to get up late and everything, such as eating breakfast and other meals, was changed because of her low mood. Now the child is getting up early and eating her breakfast, lunch and dinner in time.*

*B: After Yoga sessions, the child appears relaxed and does not complain about backache.*

5. Psychiatric Changes: 22% of parents reported their child appeared to be fresh minded,

relaxed, decreased in tension, had mind control, peaceful, had mental satisfaction, and their body and mind appeared to be free

*A: After yoga sessions, the child appears relaxed and calmer than before.*

*B: She has started to talk about her problems, sharing her difficulties and how she can overcome them. She appears relaxed now.*

#### **Negative events linked with yoga:**

Parental observations of negative changes in children were recorded and then the data was coded and categorized as follows:

A majority of parents (70%) did not report any negative events linked with yoga. 30% of parents reported negative events linked with yoga.

1. Physical problems: Loss of appetite, sometimes complains of pain after performing asanas, inability to perform many things due to increased leg pain, gets tired, feels weak.

*A: She says she is feeling tired after performing yoga or feels too weak to perform it.*

*B: Performing some asanas is not difficult!! But he is not able to do it. While struggling to do it, he complains of pain.*

2. Worsening of disease symptoms: 8% of parents reported mood fluctuations during yoga, if someone teased during the session, the child cried and got frustrated, spat in public places, screamed, shouted, felt that others would laugh at him, and disturbed other children.

*A: One day when my child was not able to perform some asanas, others laughed at him, so he didn't want to attend, and started feeling low.*

*B: When my child gets angry she has a habit of spitting. When others do things properly and she is unable to, then she spits. I saw her spitting on*

*two or three occasions.*

A majority of parents (86%) were not sure that these changes were attributed to yoga alone, but 14% of parents strongly insisted that the changes were attributed to yoga activities.

According to these parents, the changes were attributable to yoga because it was not practiced regularly at home, whereas other treatments were continuous, but changes were only seen now in the hospital, after starting to practice yoga.

**Table 2:** : Parents' opinions related to yoga

Yoga Related Questions	Category	f	%
Does the parent have previous yoga experience?	Yes	14	28.0
	No	36	72.0
Did the child cooperate during yoga activities?	Yes	37	74.0
	No	13	26.0
Were any changes noticed by parents in the child's level of participation in yoga sessions during the hospital stay?	Yes	26	52.0
	No	24	48.0
Were there any changes in the child's behavior after yoga sessions, during the hospital stay?	Yes	36	72.0
	No	14	28.0
Is yoga beneficial for your child?	Somewhat useful	28	56.0
	Very useful	22	44.0

A majority of parents did not have previous experience with yoga. They reported initially, that their child was reluctant to participate in yoga sessions, but over a period of time (2-3 days after admission) the child developed an interest and started cooperating during yoga activities. These changes in the child's activities were due to improved interaction during yoga and due to some changes witnessed by parents after yoga. All parents reported that yoga is beneficial for children as well as for adults.

## Discussions

The current study assessed parents' perceptions about the effects of yoga on their child's psychiatric problems. Data was obtained from parents of children who were admitted to the Child and Adolescent Psychiatry Centre. Results of the study showed that parents' perceptions of their child's participation in yoga

were viewed as instrumental in reducing disease symptoms, improving physical and mental well-being, enhancing communication with family and friends, and enhancing emotional resilience and joy. These findings are consistent with a previous study that found benefits of yoga practice with children who had attention problems (Abadi, Madgaonkar, & Venkateshan, 2008; Harrison, Manocha, & Rubia, 2004; Peck, Kehle, Johnson, Pedersen, Bachman, & Parcel, 2005). Parents' opinions play a pivotal role in compliance of their child's treatment. Awareness of yoga and its benefits, help parents to encourage their child to participate in it. The current study has clearly shown that almost all parents of children with psychiatric problems have a positive opinion regarding yoga and found it to be beneficial for their children. Strengthening of parents' levels of knowledge regarding yoga and its benefits can further enhance yoga practices and improve the child's health to its maximum level.

## Suggestions

Further studies can be conducted in order to assess the effectiveness of parental education/ training on the child's emotional/ behavioral problems, while many more variables can be explored. Independent experimental studies can be conducted to evaluate the effect of different yoga techniques on different psychiatric problems.

## Conclusion

The study demonstrates that, according to parents, yoga is a remedial measure for several

issues of children with psychiatric problems, such as regularity of daily routine, self-organization, reducing disease symptoms, and various problem behaviours such as whining, inattention, hyperactivity, physical problems, anger control, and improvement in communication, interpersonal relationships, socialization, etc. Parents' positive attitudes towards yoga help to motivate their child. A motivated child learns and performs all these activities at hospital, as well as at home, which has direct impact on their physical, mental, social & spiritual wellbeing.

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