

# Effect of Yoga on Quality of Life on Orphan Girls Dwelling in Orphanage

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**Abstract:** An orphan is a child whose parents are dead or have abandoned them permanently. In India 20 million children are orphan. Quality Of Life (QOL) is a composite measure of physical mental and social well-being. Orphan's QOL is very low when compared to other children. Yoga is a cost-effective and safe method among complementary and alternative medicine which can have a good impact on QOL of orphan children. **Objective:** This study was done to assess how yoga can help in improving the QOL in orphan children. **Materials and Methods:** The participants, orphan girls aged 8 to 13 years were enrolled for this experimental study were enrolled from an orphanage in Bangalore. The subjects underwent Yogic intervention for one hour, 5 days a week for eight weeks prior to an upcoming test based on the questionnaire introduced by PEDS QOL 4. All the children were assessed at the beginning and end of the intervention. **Result:** Study shows that the QOL of the children improved significantly when compared to the beginning of the study. **Conclusion:** This pre-post single group study shows that regular practice of yoga has beneficial effect in managing the physical, mental, emotional and social health among female children in orphanage. This study could also be carried out across different age groups, gender, large sample size and a complex design, for future perspective.

**Keywords:** Orphan, quality of life, yoga, female children

## 1. Introduction

Quality of life is a composite measure of physical, mental and social well-being. An orphan is a child whose parents are dead or have abandoned them permanently. In India 20 million children, that's about 4% of the total population, are orphan who get inadequate care and suffer from poor health. A study conducted areas in Cambodia, Ethiopia, Kenya, India and Tanzania, using a two stage random sampling strategy to investigate relationship between the health of orphan and abandoned children showed 23% of OAC were reported to be in fair or poor health (1). Orphan children do not have any support from the parents, relatives and friends. Because of this they lack self-confidence and self-esteem. and therefore suffer with low quality of life, and also face problems such as malnutrition, lack of adequate space and lack of parental love which effect on their overall well-being (2). Children are the future of our country whether they are orphan or non- orphan. They need to be nurtured well to become part of the society in a better way. We need to guide them in the right direction so that they can take the country forward. For the non-orphan children parents, friends and relatives play an important role in their life to make their future better. At the same time orphan children too need the similar support from the society. Yoga is a process which brings about all round personality development by deep relaxation at muscular level, slowing down the breath and maintaining balance at vital level, increasing creative and will power at mental levels. Yoga also sharpens the intellect and calms down the mind at intellectual level. Yoga in all enhances the happiness in life and also brings the innate divinity in all aspects of life.

Yoga is a form of mind body fitness that involves a combination of muscular activity and an internally directed mindful focus on awareness of the self, the breath and energy (3). The discipline of yoga offers individuals a timeless and holistic model of health and healing and although it may not result in the complete elimination of

physical disease and/or adverse conditions from the body it offers a holistic path of healing. Yoga is designed to achieve a person's overall physical and mental health, inner peace and well-being (4). Yoga is one of the mind-body therapy that has emerged as an educational-based intervention and to improve various medical conditions for children, children in a group home can improve their sleep, appetite, and general well-being, as well as decrease in psychological arouses (5).

Various activities are suggested to improve the overall well-being of the children who stay in orphanage. Yoga is shown to play a very important role to bring improvement in the overall well-being of children who live in orphanage. Orphan children often suffer with much physical, psychological and mental disorders leading to the bad effect on their overall adjustment, emotional stability autonomy, security-insecurity, intelligence and self-concept. Yogic practices helps to achieve the good physical and mental health (6). Yoga helps to improve the physical health, general feelings and self-esteem and helps to reduces the stress and depressive symptoms (7)

There are very few studies that have been conducted to evaluate the effect of yoga as a complementary therapy to improve the quality of life of preadolescent children. Hence, this study was conducted to explore the effect of yoga on QOL of orphan girls.

## 2. Materials and Methods

The subjects for the study were obtained from an orphanage Navajeevan and Rainbow Home located in Bangalore, Karnataka. Fifty seven (57) subjects in the age group of 8 to 12 years (mean age= 10.4 years, SD=±1.6) were taken after screening. Single group pre-post design was applied, all subjects gave written informed consent before participating in the present study. The present study was approved by the ethical committee of SVYASA University, Bangalore, India. Across recruitment setting convenient sampling was used. A

uniform inclusion and exclusion criteria was followed, inclusion criteria was 8 to 13 years of normal healthy female children who would understand the instructions in Kannada and English and are willing to participate were included, exclusion criteria were Children who were physically disabled, who were suffering with mental illness and who were not willing to participate were excluded from the study.

### Intervention

Yoga intervention given to the children mainly included the PPH (Promotion Of Positive Health) card practices which includes Asana, Suryanamaskara, Pranayama, Relaxation techniques and Meditation, developed by SVYASA Yoga University for total wellbeing of an individual. It is an IAYT approach which addresses the individuals with panchkosha concept ie, all the layers of the human body physical, pranic, psychological, intellectual and spiritual. And kreeda yoga was introduced to motivate and to bring interest about yoga in children by making them play different types of yogic games which in turn could help improve their attention and concentration levels. All the children underwent yoga intervention for 8 weeks, 1 hour daily for 5 days/week. Yoga was taught by a qualified and experienced teacher.

### Outcome Measures

QOL was assessed at base line and after eight weeks of yoga intervention using PEDS QOL Version 4. It is a measurement model for the pediatric quality of life inventory to measure health related quality of life (HRQOL) in healthy children and adolescents and those with acute chronic health condition. This inventory has a total of 23 items which are scored in four domains, Physical functioning which includes the questions regarding problems with the health and daily activities (8 questions), Emotional functioning which includes the questions about problems with their personal feelings (5 questions), Social functioning which includes questions on problems with in relationship with others (5 questions), School functioning which includes the questions about problems with school activities (5 questions). This is a reliable scale, with Cronbach's alpha of 0.88(8)

### Data Analysis

Data analysis was conducted using SPSS (Statistical Package for Social Sciences, version 20) for Windows. All the analysis was based on raw scores. All the tests of significance wherever relevant were two tailed. The statistical significance level (alpha) was set at 0.05. As per the design of the study several approaches to analysis were possible. Test for normality was done and the data was not found to be normally distributed. Since the design is single group pre-post, it was decided to use Non-Parametric test for analysis.

### 3. Results

**Table 1:** Effect of yoga intervention after 8 weeks

Variable		Mean	SD	Significance
QOL Physical	Pre	289.2	88.75	.000*
	Post	200	26.43	

The above table shows there is a highly significant ( $p < .05$ ) improvement

In the QOL with respect to physical functioning.

**Table 2:** Effect of yoga intervention after 8 weeks

Variable		MEAN	SD	Significance
QOL Psychological	Pre	815.7	168.37	.000*
	Post	510.7	89.17	

The above table shows there is a highly significant ( $p < .05$ ) improvement.

In the QOL with respect to psychological functioning

### 4. Discussion

The study was aimed to test how 8 weeks of yoga intervention helps to improve the quality of life in preadolescent female children living in an orphanage. On post intervention assessment a significant improvement was observed in the level of both physical and psychological wellbeing. During the intervention time all the children were very enthusiastic and motivated. Children enjoyed the sessions and no adverse effect due to the practice was reported.

At the physical level, yoga helped the children to keep their body steady, flexible and strong; at the mental level it helped them in improving their self-confidence. Yoga also helped them overcome many other problems like anxiety, constipation, obesity, digestive disorders, respiratory problems and allergies. Practicing Suryanamaskara everyday helped them reduce lethargy and depression. Pranayama practices increased their energy level and reduced the anxiety level and helped them to calm down the mind, helped in improving clarity of the mind and better discrimination in dealing with situations in life. Kreeda yoga was very interesting for them; it helped to improve their concentration and attention level as they usually suffer with low concentration and attention level in their environment. Overall, yoga practices helped them to deal with situations in life with awareness, in a steady and calm manner, without reacting to situations and also helped to create a healthy relationship in the society

Future studies could also be carried out across different age groups and genders with a large sample size and complex design. As the study adopted an integrated approach to yoga practice, in future it would be worthwhile looking to assess the various practices of yoga separately on the quality of life of orphan children.

### 5. Conclusion

The experiments and the associated study that have been done and described here show that practicing yoga on a regular basis can definitely improve the quality of life of the female orphan children by boosting their self-confidence and self-esteem.

### 6. Financial support and sponsorship

Nil.

## 7. Conflicts of interest

There are no conflicts of interest

## 8. Acknowledgement

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