

The Impact of Yoga Children on The Development of Toddlers

Budi Astyandini, Khobibah Khobibah, Septalia Isharyati

Universitas Negeri Semarang, Semarang, Indonesia

*Corresponding Author: budiastyandini@poltekkes-smg.ac.id

Abstract. Child growth and development is an important task in preparing for human life. The incidence rate of fine motor disorders in preschoolers in the United States ranges from 12-16%, Thailand 24%, Argentina 22%, and in Indonesia between 13%-18%. Objective: To test the influence of yoga children on fine motor development and gross motor skills in toddlers in Patebon and Kendal Districts by 2024. Methods: This study used a quasi-experiment method with a Pretest-Post test with a control group design. The population in this study is all early childhood aged 3 years in Patebon and Kendal Districts. Sampling using purposive sampling amounted to 40 children, with 20 respondents in the intervention group and 20 respondents in the control group. The research location was conducted in early childhood in Patebon and Kendal Regencies. The research was conducted in October – December 2024. Results: The Mann-Whitney test was performed on both groups and the result was $P \text{ Value} = 0.010$ meaning $p < 0.05$, meaning H_0 was rejected, and H_a was accepted. Conclusion: There is an effect of yoga on fine motor and gross motor development in 3-year-olds in Patebon and Kendal Districts in 2024. It is hoped that midwives will socialize the effectiveness of the Yoga method to improve the Development of Fine Motor and Gross Motor in Toddlers.

Keywords: yoga kids; rough motor; fine motor

INTRODUCTION

Preschool is the golden age period of child development. Preschool is included in the category of toddlers who are in a critical period that requires food with better quantity and quality compared to adults. As a foundation it guarantees long-term health, as well as its strength and ability to develop intellectually. The impact of optimal child development conditions will grow into a quality human being (Davidson, 2018) in (Munawaroh et al., 2022). The consequences of lack of stimulation of children's development and growth can lead to stunting. Stunting in toddlers who do not receive attention will lead to four aspects, namely low cognitive ability, low motor ability, low language skills, low social development and child independence (Sukmawati & Rowa, 2020). The physical growth of the majority of toddlers does not have a good ability to perform movements and body postures that involve large muscles such as sitting, standing, walking, as a motor indicator. In line with research by Kartika (2020) which states that children with stunted nutritional status have five times the likelihood of suspecting gross motor development disorders compared to non-stuntin childreng.(Paramesti & Indarjo, 2024).

According to the WHO in 2016, more than 25% of children under the age of five were

stunted. In the Asian region, in the period of 2010-2016 Indonesia ranked fifth highest in stunting prevalence. Based on the results of Riskesdas 2016, on a national scale, the prevalence of stunting children under five in Indonesia is 37.2%, the stunting problem is still above 20% becoming a public health problem (Maharani et al., 2018).

The growth and development of preschool children can be optimized with various interventions. One of the activities to optimize the use of all children's senses is Yoga Kids. Yoga Kids is an alternative to one of the creative ways to provide children's exercises to regulate breathing patterns and physical activities that can have many benefits for growth and development as well as fun activities for the whole family (Maladi, 2018). (Fitrianiingtyas et al., 2022). Yoga is a holistic health system formed from ancient Indian culture dating back to 300 BC. Yoga is a holistic science for both physical, mental, and spiritual development. Yoga encompasses both physical exercise (asana) and mind (meditation). Children's yoga has a lot manfaat(Fitriana et al., 2022) yoga kids merupakan terapi Complementary in the form of the art of processing the body and breathing. Yoga can affect mental, emotional, intellectual, and physical balance. Yoga can be learned by children to build endurance and strength, and can train flexibility so that children's bodies become more flexible. This

can be trained in children who are weak or stiff.(Fitrianingtyas et al., 2022)

Research on the implementation of yoga kids for gross motor stimulation in early childhood was seen on children's non-locomotor movement skills. Kids yoga activities are divided into 3 parts, namely warm-up and breathing movements (5 minutes), core movements (20 minutes), and relaxation (5 minutes). The core movement in yoga kids is carried out through fun activities, namely by telling stories accompanied by music by imitating various kinds of animal and natural movements, including hands to feet pose, butterfly pose, mountain pose, cobra pose, swan pose, dog looks down pose. The movement is packaged in stories that are interesting for children. Yoga kids have benefits, one of which is to improve children's balance in doing motor movements. Because by doing various kinds of yoga positions, it can help stimulate the work of the body's pentasbil muscles.(Fitrianingtyas et al., 2022) in literature review research. (Fitriana et al., 2022) Article search was carried out on Google Scholar and Pubmed with the keywords children's yoga for preschoolers. The selected articles were Indonesian and English articles published from 2017 to 2022 The results of the study showed that the benefits of children's yoga were to increase learning concentration, cognitive ability, gross motor skills, emotional intelligence, and body balance. Research (Arthyka Palifiana et al., 2022) In facing learning, students must be prepared physically and mentally in order to be able to participate in learning and get good learning achievements. A fit body can affect a child's concentration in learning. Children with healthy bodies will more easily receive information (concentrate) in learning. The method used to increase student concentration in addition to the conventional method with the teaching and learning process can be by doing yoga kids. Yoga kids is an activity that directs children to concentrate, regulate their breath, calm the mind with certain poses.

This study aims to see the impact of yoga on the development of toddlers. Yoga in children is a constructive and creative way to train children to regulate breathing patterns and physical activities that are beneficial in growth and development in stimulation in children.

METHODS

The method used in this study is a quasi experiment with a Pretest-Post test with control

group design with the aim of determining the Effect of Yoga on Fine Motor Development and Gross Motor in Toddlers in the Patebon and Kendal Districts in 2024. The population used is a population of 3-year-old toddlers brought by their mothers to visit the Posyandu in Patebon and Kendal Districts The number of visits from October to December averages 45 every month. In this study, the sampling method uses purposive sampling where sampling is based on certain criteria. So the sample in this study amounted to 40 toddlers who were brought by their mothers to visit the posyandu. 20 respondents became the intervention group and 20 respondents became the control group. In the intervention group, yoga was carried out with a duration of 30-40 minutes twice a week for 1 month. The type of data used in this study is primary data. The measuring instrument used is KPSP.

RESULTS AND DISCUSSION

The period of the first 1000 days of life (HPK), which is from the beginning of pregnancy to the second year of the child, is a critical period to determine the health, success and welfare of children in the future. Malnutrition during this period will cause irreversible (irreplaceable) damage (Berawi, 2021) in (Astyandini et al., 2024), According to Simbolon (2019) the anthropometric standard of the Indonesian Ministry of Health, stunted children are toddlers with a z-score index of PB/U of less than -2SD and very short when the z-core index of PB/U is less than -3SD (Fitriana et al., 2022). Factors that affect the physical development and growth of children under five are factors that fulfill the nutritional height of parents and parents' work also affect the nutritional status of children. Parents have a role in providing the right education when children choose and determine makanan serta aktifitas agar perkembangan motorik halus dan kasar optimal (Munawaroh et al., 2022)

The results of this study are in line with the researcher's assumption that yoga is a series of simple movements that are fun and used to improve the developmental abilities of toddlers, both fine motor and gross motor. The benefits of yoga are very felt by toddlers because with the use of the yoga method, toddlers will feel more relaxed, comfortable, and do not feel tension so as to support the child's growth and development process. The results of this study were obtained by the intervention group, namely children under five who were given intervention in the form of yoga

kids, there was an increase in development in the fine motor development and gross motor both groups following each session (Field et al., 2013).

Tabel 1. Distribution of Frequency of Fine Motor Development and Gross Motor Development in Toddlers In the Control Group in the Patebon and Kendal Districts

No.	Variable Developmental	F	P(%)	Mean	Variable Developments	F	P(%)	Mean
1	Good	8	40.9	1.59	Good	10	50	1.50
2	Poor	12	59.1		Poor	10	50	
		20	100			20	100	

Tabel 2. Distribution of Frequency of Fine Motor Development and Gross Motor Development in Toddlers In the intervention group I in the Patebon and Sub-district Areas Kendal

No.	Variable Developmental	F	P(%)	Mean	Variable Developments	F	P(%)	Mean
1	Good	8	40.9	1.59	Good	18	84.4	1.14
2	Poor	12	59.1		Poor	2	13.6	
		20	100			20	100	

Tabel 3. The Effect of Yoga on Fine Motor Development and Gross Motor in Toddlers in Patebon and Kendal Sub-districts

Yoga	N	Mean Rank	Sum of Rank	P value
Control Group	20	18.50	407.00	0.010
Intervention Group	20	26.50	583.00	

development sectors. In line with Nyolinda (2016's research), she explained that yoga for children is different from yoga for adults. Here are seven examples of yoga poses, Hands to feet poses, butterfly poses, mountain poses, cobra poses, swan poses, and dog looks down poses.(Fitrianingtyas et al., 2022).

Fine and gross motor development in toddlers is affected by several interventions. In accordance with the Ministry of Health (2006) explained that carrying out adequate psychosocial stimulation means stimulating the brain of toddlers so that the development of movement skills (gross and fine motor), speech and language, socialization and independence in children under five takes place optimally according to the age of the child (Sukmawati & Rowa, 2020).

Didukung pendapat (Fitriana et al., 2022) At the end of the first and last sessions the yoga group reported less depression, anxiety, anger, back and leg pain as compared to the social support group. At the end of the last session the yoga group and the support group did not differ. They both had lower depression (CES-D), anxiety (STAI), and anger (STAXI) scores and improved relationship scores. In addition, cortisol levels decreased for

Results from the direct assessments indicated significant effects of the intervention across all three indices of self-regulation. There was also some evidence that the children who were most at risk of self-regulation dysfunction benefited the most from the intervention. Implications of this study for current practice in early childhood education are discussed along with possibilities for future research in this area (Razza et al., 2015). Treatment and control participants completed evaluations that assessed multiple indices of children's self-regulation (i.e., attention, delay of gratification and inhibitory control) using a combination of parent report and direct assessments. Results from the direct assessments indicated significant effects of the intervention across all three indices of self-regulation. There was also some evidence that the children who were most at risk of self-regulation dysfunction benefited the most from the intervention. Implications of this study for current practice in early childhood education are discussed along with possibilities for future research in this area.(Khunti et al., 2023).

The results of the study were in accordance with the findings that there was a relationship

between the incidence of stunting and the development of children aged 3-5 years in the working area of the Sungai Tutung Health Center. It is recommended for health workers to provide support to mothers under five and provide stimulation to children so that child development is optimal (Rahayu et al., 2024).

Based on the results of research and based on previous research, yoga kids is one of the interventions for child development.

CONCLUSION

Yoga kids activities for toddlers have been proven to have an impact on optimizing the development of toddlers on the fine motor and gross motor of toddlers which are very important for the future of toddlers. There is an effect of yoga on fine motor and gross motor development in 3-year-olds in Patebon and Kendal Districts in 2024. It is hoped that midwives will socialize the effectiveness of the Yoga method to improve the Development of Fine Motor and Gross Motor in Toddlers

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mks.ac.id