

## Developmental Outcomes of Anganwadi Children in Tribal Areas of Visakhapatnam District

Mosya Aruna Kumari\*

Department of Human Development and Family Studies  
College of Community Science, Acharya N.G. Ranga Agricultural University, Lam, Guntur

\*Corresponding Author E-mail: [mosyaarunakumari31@gmail.com](mailto:mosyaarunakumari31@gmail.com)

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### ABSTRACT

*The study aimed to assess the developmental outcomes of Anganwadi children in tribal areas of Visakhapatnam district. The sample consists of 120 Anganwadi children were selected from thirty Anganwadi centres. From each Anganwadi centre, four boys and four girls in the age group of 3-6 years were randomly selected. The findings revealed that most of the Anganwadi children were in the age group of 4 - 6 years and maximum percentages (42%) of children were found in the class of UKG (Upper Kindergarten). The majority of the children (67%) belong to the nuclear type family. More than half (65.9%) of the children are able to complete the task on overall developmental outcomes of children based on child assessment cards (3-6 years). Boys and girls performed almost equally in all areas of development. Girls performed better than boys in the area of physical (40%), cognitive (12.5%), socio-emotional development (39.1%) and creativity (36.7 %). Boys performed better than girls in the area of language development (20 %) only. The present study's findings showed a gap in the implementation of the preschool curriculum by Anganwadi workers based on their knowledge levels of curriculum and children's developmental outcomes. Hence measures should be taken by the Integrated Child Development Service (ICDS) to improve the implementation status of preschool curriculum by Anganwadi workers. Majorly, more focus should be provided on preschool education (PSE) programmes along with other services such as nutrition, growth monitoring, referral services, parent education programme and health services provided at Anganwadi centres. As the Anganwadi workers have more additional workloads, it is difficult for them to focus on the implementation of the curriculum. So, one more helper can be recruited by the government to carry out additional duties of the Anganwadi worker. More preschool education training or Early Childhood Care & Education (ECCE) training should be conducted to enhance the growth & developmental need of children in an effective manner.*

**Keywords:** Anganwadi children, Anganwadies, Developmental outcomes, ICDS.

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## INTRODUCTION

Early Childhood Education (ECE) contributes to the universalization of primary education by providing necessary preparation for primary schooling. Early Childhood Education (ECE) for children aged 3-8 years is one of the services provided under the Integrated Child Development Services (ICDS). Its emphasis is on necessary inputs directed towards providing a natural, joyful & stimulating environment for the growth and development of children. Integrated Child Development Services (ICDS) scheme was initiated in 1975 and continues to be the world's most unique early childhood development Programme. It has comprehensively offered an integrated package of services to address the basic needs of children below 6 years, adolescent girls and mothers from disadvantaged communities for the last three decades. Government of India in the Ministry of Women and Child Development and Social Welfare has initiated the process of redesigning the programme for the reimplementation of ICDS with the objectives of "ICDS universalization of quality in the 11th planning"(Akhil et al., 2010).

Early childhood education (ECE) is an important component of child development, which consists of child care, child education and child development. The Non-formal preschool education (PSE) component of the ICDS may well be considered as the backbone of the ICDS programme. The Anganwadi worker (AWW) is the most important functionary of the ICDS scheme, who is a front-line voluntary worker. AWW should have the knowledge on organizing preschool educational activities based on the given curriculum to promote children's physical, social and emotional development through songs, games, exercises, and creative activities like art. The philosophy of preschool education is largely child-centered education and it should focus on play as it is a nature of the child. Play allows the child to experiment with the world around him and the emotional world inside him. Play provides children the opportunity to actively explore, manipulate and interact with the environment. Preschool

period is a time of significant transition in a child's life. Children learn and master motor abilities that help them interact and communicate with their social environment (Mia Masnjak, 2017).

Developmental outcomes are defined as short and medium-term changes and impacts as longer-term changes resulting from a development intervention. Developmental outcomes are the act or process of growing, progressing, or developing. The developmental milestones act as checkpoints in a child's development to determine what the average child can do at a particular age. The main categories of developmental milestones include the physical, mental, social and communication skills learned at each stage in the child's growth. Holistic development sees the child in the round, as a whole person - physically, emotionally, intellectually, socially, morally, culturally and spiritually.

In India, Andhra Pradesh is one of the states with the highest number of tribal populations. Among the districts of Andhra Pradesh, Visakhapatnam has the highest number of tribe's that make up (14.4%) of Andhra Pradesh population. The ground survey shows that schools with less than 20 students have been merged with nearby schools, which lead the tribal population to travel for a longer distance from home to the schools, discouraging academic pursuit. (*The news Indian Express* 05.03.2019).

## MATERIALS AND METHODS

The study was conducted in Araku valley Mandal of tribal area in Visakhapatnam district of Andhra Pradesh state in the year of 2020. One twenty tribal preschool children were purposive randomly selected for the study and the Child Assessment card developed by Department of Women Development & Child Welfare, Government of Andhra Pradesh was used for the study to know the developmental outcomes of preschool children (3-6 years) on overall Growth & Development. For every three months Anganwadi worker should assess the growth & development of the child in all

developmental areas and to inform the child's progress to their parents regularly for better improvement. This card is divided into four stages as 1<sup>st</sup> assessment, 2<sup>nd</sup> assessment, 3<sup>rd</sup> assessment and 4<sup>th</sup> assessment. The children are assessed four times in a year, i.e. once every three months to get the progress of the child's overall development. The questions were based on five developmental areas like Physical development, Cognitive development, Language development, socio-emotional development and Creative activity, respectively. This Assessment card is categorized into three age groups of preschool children as 3-4 years, 4-5 years and 5-6 years; this assessment card contains 25 questions. Each statement has two options. The two options include Independent (as able to complete the task/doing good performance) and Dependent (as not able to complete the task/help is needed in doing activities). Choosing the correct answer as independent was given one mark, and for the wrong answer as a dependent, it was given zero mark respectively. The investigator assessed the preschool children (3-6 years) based on their

age in all areas of development preschool curriculum activities, observed their achievements based on activities performed under each area of development, and scored their responses. Hence, Frequency and percentages were used as a statistical tool to study the data.

## RESULTS AND DISCUSSION

The data was collected from Anganwadi Children was analyzed, tabulated and presented as below. Table no: 1 represents overall development outcomes of preschool children (3-6 years) were analyzed using the Child Assessment Card developed by the Department of Women and Child welfare, which comprised of five areas, namely, Physical, Cognitive, Language, Socio-emotional development and creativity. The data was obtained based on the observation whether the child was able to complete the task or not able to complete the task. Frequencies and percentages were calculated to describe tribal preschool children's developmental outcomes.

**Table No: 1 Overall Development outcomes of children (N=120)**

S. No.	Developmental outcomes	Not Able to complete task		Able to complete task	
		N	Percentage	n	Percentage
1	Physical	30	25	90	75
2	Cognitive	91	75.9	29	24.1
3	Language	75	62.5	45	37.5
4	Socio-emotional	32	26.7	88	73.3
5	Creativity	34	28.3	86	71.7
6	Overall development	41	34.1	79	65.9

The results revealed that most of the children could perform the task related to physical development (75%). This might be due to the "outdoor activity" conducted at the Anganwadi centre. Play is the nature of children, and they like to spend most of the time in indoor & outdoor play. Another aspect is that children were provided with nutritious food as lunch at the Anganwadi centres, which impacts physical development. Regarding cognitive development and language development of 75.9percent and 62.5 per cent of children were

unable to achieve the task. This might be due lack of activities that improve cognitive and language development, such as identification, matching, sequencing, classification etc. which were not conducted in the Anganwadi centre. Even lack of play materials like puzzles, blocks and books that improve cognitive and language skills in children might be the reason.

Anganwadi workers expressed that they could not focus much on providing activities that aid in optimum cognitive and language development of children. As they

have additional responsibilities other than conducting preschool activities. It was also found that there is a need of training programmes to Anganwadi workers regarding the development of preschool children. According to Hulya et al. (2015), in terms of supporting the social and cognitive development of children, portfolio and project studies should be conducted, and drama, language activities and materials (jigsaw puzzle, toy blocks, etc.) supporting creativity and cooperation should be utilized.

Results revealed that most children could achieve the task given in socio-emotional development (88%) and creativity activity (86%). This indicates that children of Anganwadi centres are given enough opportunities to play indoor and outdoor games and tell stories that lead to developing socio-emotional skills. Social-emotional development is the process of learning skills that need to make and maintain relationships, feel good about ourselves and function within society. Many of these skills are learned during play. These skills include communication, co-operation, recognizing and managing emotions, and controlling behaviour.

Results revealed that most children could achieve the task given in the creativity activity (86%). This is because, at Anganwadi centres, children are given plenty of time and space given for children to play and boost his/her confidence with descriptive praise about his/her creative activities using household items, recycled objects and natural materials that spark child's creative play. According to Akshatha and Surekha, (2019)

knowledge level statements regarding the overall development of children revealed that AWWs had high knowledge regarding immunization (92.67%) and medium knowledge about nutrition and growth monitoring. AWWs had good knowledge about developmental activities like physical, cognitive, emotional, language and social development. Mean Development Quotient (DQ) and Intelligence Quotient (IQ) values were higher among children in intervention Anganwadi centres (16.2 points for DQ and 10.2 points for IQ) and the difference was found to be statistically significant ( $p < 0.01$ ). Mean DQ among boys was found 10.1 points higher than that among the girls in the control arm; this was statistically significant (Anju Ade et al., 2010).

#### Gender based development outcomes

Results related to developmental outcomes of children based on gender are given in fig. No: 2. According to the graph boys (20%) were able to do better tasks in language development than girls (17.5%). Where as in physical development, cognitive development, socio-emotional development and creativity, girls were able to do better in than boys. The lower levels of performance in both boys and girls in cognitive and language development indicates the need for improvement in the preschool activities, which are to be conducted in an effective manner by Anganwadi workers to ensure the holistic developmental needs of the child. The mean scores of gender based development of boys and girls were described below.

**Table No: 2 Gender based Development outcomes of children (N=120)**

Developmental outcomes of children	BOYS				GIRLS			
	able to do		Not able to do		able to do		Not Able to do	
	n	%	N	%	n	%	n	%
Physical	42	35	18	15	42	40	18	10
Cognitive	14	11.7	46	38.3	14	12.5	46	37.5
Language	24	20	36	30	24	17.5	36	32.5
Socio-emotional	41	34.1	19	15.9	41	39.1	19	10.9
Creativity	42	35	18	15	42	36.7	18	13.3

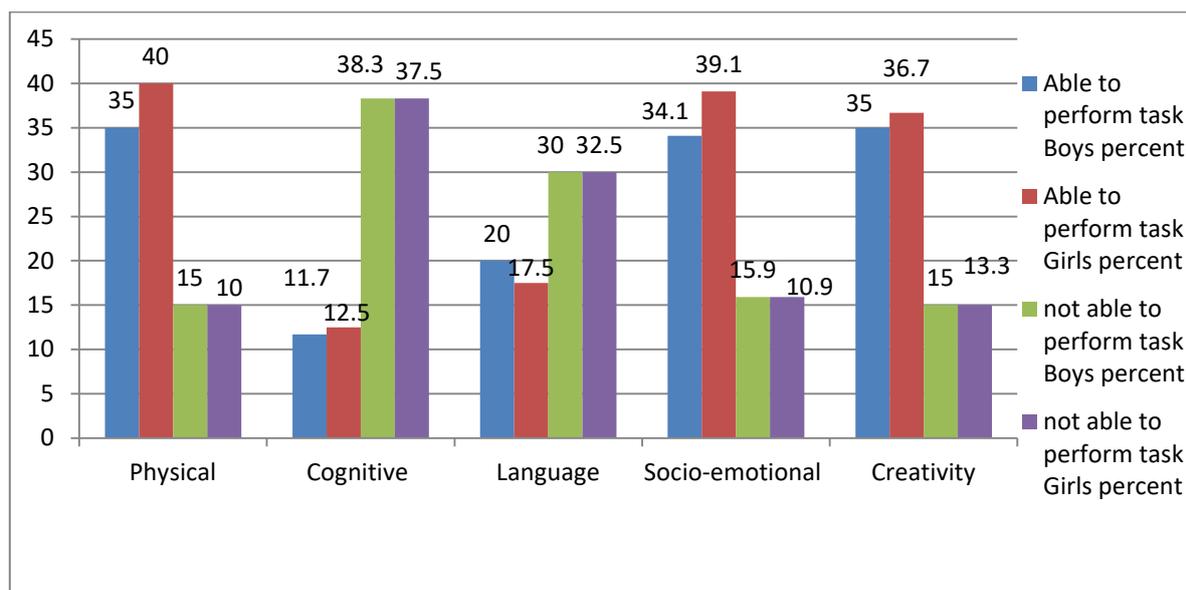


Fig.1 Gender based development outcomes of children

Table no. 3 Developmental mean scores of Boys and Girls (N=120)

S. No.	Developmental outcomes	Boys (n=60)	Girls(n=60)
1	Physical	15.93	16.36
2	Cognitive	13.24	13.31
3	Language	14.52	14.32
4	Socio-emotional	17.14	17.77
5	Creativity	16.03	16.09

According to study conducted by Mia Masnjak, (2017) physical activity in general, was in favour of boys, who are more physically active than girls, but higher level of socio-emotional development was observed in girls than boys, which supports the results obtained. The performance of girls and boys in certain developmental areas may be because of maturational differences during preschool age. The study conducted by Sarbjit Singh (2013) revealed that no child was capable to count up to 100, and a few (3.33%) children might identify 3 or 4 of the colours by name, only a few (8.33%) children could identify 5-6 pictures of vegetables and majority of children unsuccessful in holding the crayon and colouring the shape.

#### SUMMARY & CONCLUSIONS

The study concluded most of the preschool children were in the age ranges from 4-6 Years. The maximum percentage (42%) of

children were found in the class of UKG (Upper Kindergarten). More than half (65.9%) of the children are able to complete the task on overall developmental outcomes of children based on child assessment cards (3-6 years). Boys and girls performed almost equally on all areas of development. Girls performed better than boys in the area of physical (40%), cognitive (12.5%), socio-emotional development (39.1%) and creativity (36.7 %). Boys performed better than girls in the area of language development (20 %) only. The present study's findings showed a gap in the implementation of preschool curriculum by Anganwadi workers based on their knowledge levels on curriculum and developmental outcomes of children. Hence measures should be taken by the Integrated Child Development Service (ICDS) to improve the implementation status of preschool curriculum by Anganwadi workers. Majorly, more focus should be provided on preschool education (PSE) programmes and other services such as

nutrition, growth monitoring, referral services, parent education programme and health services provided at Anganwadi centres. As the Anganwadi workers have more additional workloads, it is difficult for them to focus on implementing the curriculum. So, one more helper can be recruited by the government to carry out additional duties of the Anganwadi worker. More preschool education trainings or Early Childhood Care & Education (ECCE) training should be conducted to enhance the growth & developmental need of children in an effective manner.

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#### Conflict of Interest:

The author declares no conflict of interest.

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