

Investigating Age Differences in Socio-emotional Development of Children Attending Different ECCE Centers

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(Received: 19 September 2023; Revised: 18 October 2023; Accepted: 24 November 2023; Published: 15 December 2023)

(Published by Research Trend)

ABSTRACT: The study was carried out in during the year 2018-20 in Dharwad taluk of Karnataka state. The aim of the study was to evaluate the emotional and social development of children in rural and urban settings and determine how age affects children' socio- emotional development in rural and urban setting. A total of 208 children aged three to six years, comprising 104 from rural and 104 from urban areas, were chosen for the study. The necessary information was gathered using a general information questionnaire. Children in preschool were assessed for their socio-emotional development using the Transdisciplinary Play Based Assessment-2 tool. The influence of play-based activities on socio-emotional development was observed, analyzed, and studied using a qualitative approach that employed the naturalistic observation method. A study involved combination of participant observation, which comprised taking field notes, and video capturing of children engaged in unstructured play allowed for the creation of naturalistic observations. Most of the children in both rural and urban anganwadis fell into the Socio-emotional development watch and concern category, according to the results. Age and children's Socio-emotional development were discovered to be significantly correlated and different. The results of the t-test analysis with regard to age indicated that, there was a significant difference at the 0.01 percent significance level in the socio-emotional development of children. Children in the 49–60month age group (37.17) and the 36–48 month age group (32.44) had considerably lower mean scores (39.05) than children in the 61–72 month age group, as indicated by the difference value.

Keywords: Socio-emotional development, preschoolers, play based activities, ECCE centres,

INTRODUCTION

Children's emotional well-being during their early years has a powerful impact on their social relationships. Children who are emotionally healthy are better able to establish and maintain positive relationships with adults and peers (Trawick-Smith *et al.*, 2014). Social-emotional development is essential to a young child's sense of well-being. The relationships they form early on help shape who they are, who they become, and their understanding of the world. Think about some of the children in your own life and the different social-emotional skills they display.

Preschool-age children are learning to talk about their feelings and the feelings of others. Social-emotional development, however, involves more than just expressing emotions. It involves taking turns, becoming independent in following routines, interacting more with peers, engaging in meaningful relationships with others, controlling emotions, and developing a positive self-image. These skills are crucial for children's successful participation in school and home experiences and for their overall growth.

Children learn social-emotional skills in the context of their relationships by watching, imitating, and responding to the social behaviors of others. Children also learn from the way others respond to their emotions. Social-emotional skills are closely connected

to a child's family, cultural background, and early experiences. Children learn by interacting and forming relationships with members of their families, schools, and communities (Calhoun, 2009).

Preschoolers learn to share toys and materials, play close to one another, converse with peers, take turns, and express their own and other people's feelings. They also start to autonomously follow schedules at home and in the classroom. Youngsters pick up social skills through talks with peers and adults as well as through observing others in action (Sajoerdsma, 2016).

Socio-emotional development teaches children appropriate responses to emotional situations, which helps mold them into the people they will become in the future. A child's capacity to cooperate, play with others, pay attention to adults and teachers, and transition from one activity to another in a fair manner are all parts of their social skills. The process of learning to recognize, regulate, and understand emotions is known as emotional development.

By the preschool years, children's feelings, ideas, and expectations of others are more fully developed. Their increasing language skills provide them with a valuable tool for expressing their emotions, managing their feelings of disappointment and aggravation, and resolving conflicts when situations do not go their way (Ortega *et al.*, 2009). The preschooler is more able to

display a wide range of emotions as well as convey empathy for others.

With support from her caregivers, she is able to anticipate how she may feel in various situations. She can use this skill to help her problem solve and develop solutions that promote a feeling of worth and confidence. Her social relationships are becoming more complex. She continues to benefit from the support of trusted adults who help her express herself, navigate conflicts, and enjoy her developing friendships.

In light of this, it was determined that research was necessary to determine how play-based activities affected the socio-emotional development of preschoolers in the area. The study's goals were as follows:

— To know the socio-emotional development of rural and urban children in different ECCE centers.

— To assess the effects of age on socio-emotional development of children in rural and urban setting.

MATERIAL AND METHODS

The purpose of the study was to ascertain the socio-emotional development of children enrolled in various ECCE programs in Dharwad taluk's rural districts. The influence of play-based activities on socio-emotional development was observed, analyzed, and studied using a qualitative approach that employed the naturalistic observation method. Naturalistic observations were made when children were engaged in free play through video recording, which was supplemented by participant observation, which included taking field notes.

The quantitative study approach was used to determine the difference and association between socio-emotional development of children attending different ECCE centers in rural and urban locations.

Population And Sample

Selection of ECCE centers:

— To enumerate the socio-emotional activities carried out in the ECCE centers, a total of eight anganwadis and two preschools in the rural Dharwad taluk and six anganwadis and six preschools in the urban areas were visited. Subsequently, an ECCE center that implemented comparable play-based activities was chosen for the study using a self-structured checklist.

— Eight early childhood care and education centers were chosen, two of which were from rural areas and two of which were from urban areas, based on the socio-emotional development activities that were conducted. Activities for Socio-emotional development (Fig. 1).

Tools Detail

Transdisciplinary Play-Based Assessment-2 (TPBA-2) developed by Linder (2008). It assess socio-emotional development of children between (0-6) years in different dimensions.

1. Emotional expression: Refers to the communication of reactions, feelings, or intentions to others through facial patterns, body posture and position of extremities, movements, gestures, and words. Includes overall disposition or mood.

2. Emotional/style/adaptability: Typical affective response to different situations including:

— Approach or withdrawal to new situations or stimuli and (2) adaptability to change

— Regulation of emotions & arousal states: Refers to the ability to regulate physiological states of awareness (sleeping, crying, etc.) and control emotional reactions to both internal and external stimuli, including being able to self-calm and inhibit impulsive actions and emotions.

3. Behavioral regulation: Refers to the ability to control impulses, monitor one's actions and interactions, and respond within the parameters of culturally accepted behavior, including compliance with adult request, self-control over behaviors perceived as wrong, and use of social conventions.

4. Sense of self: Assesses one's understanding of him/herself as a separate person capable of having an effect on his/her environment, including the desire to accomplish goals to be independent and competent.

5. Emotional themes in play: Refers to the expression of inner feelings, including worries, fears, and traumas through the actions of play – especially through the dramatic representations of self or dolls.

6. Social interactions: Assesses the ability to attend to social aspects of play, to read cues, to interpret and communicate social information, to get along with others, and to avoid negativity and conflict with others within isolated, parallel, associative, cooperative or complementary roles in play interactions.

Scoring pattern: During unstructured play, every aspect of the child's emotional and social growth is monitored. Videotape is utilized to capture observations of play activities, and the notes made in the observation note. The play activities that the children engage in are examined using the child abilities scale, which ranges from 1 to 9 for socio-emotional skill. Children were classified as above average, typical, watch and concern.

Range	Category
7-20	Concern
21-34	Watch
35-48	Typical
49-63	Above average

Early Childhood Home Environment: Developed by (HOME; Caldwell & Bradley, 1984, 2003) was used for evaluating the quality of the home environment. It has following subscale

(a) Learning Materials: This factor deals with the availability to the child of toys, books, and games that facilitate learning. It also contains items which characterize the adults as showing some commitment to their own learning.

(b) Language Stimulation: This factor describes overt attempts by the parents to encourage language development through conversation, modeling, and direct teaching.

(c) Physical Environment: This factor contains items which describe the physical environment as safe, sufficiently roomy, and perceptually appealing. All items are based on observation.

(d) Responsivity: This factor describes the caregiver's emotional and verbal responsivity to the child and gives a general picture of the warmth in the relationship.

(e) Academic Stimulation: This factor describes direct parental involvement with the child's learning and the encouragement of the acquisition of skills and knowledge.

(f) Modeling: This factor describes modeling by the parents of desirable and acceptable behavior, thereby communicating those expectations to the child.

(g) Variety: This factor essentially describes a family lifestyle that provides variety and experiential enrichment for the child.

(h) Acceptance: This factor describes parental ability to accept negative behavior from the child as something to be expected from young children rather than as an act demanding immediate harsh reprisal.

Early Childhood Home Inventory consist of 55 items, each item is scored either 1 or 0. Based on the total score quality of home environment is categorized as follows

Score	Category
0-17	Low quality
18-36	Medium quality
37-55	High quality

RESULTS

Percentage distribution of children attending different ECCE centre by child characteristics.

Table 1 displays the results of the distribution of children based on factors such as age, gender, socioeconomic position, and quality of home environment. In terms of age, 38.46 percent of children in the rural anganwadis belonged to the 36–48 month age group, 32.69 percent to the 49–60 month age group, and 28.85 percent to the 61–72 month age group. 34.62 percent of preschool-age children fell into the 36–48 month age group, 32.69 percent into the 49–60 month age group, and 32.69 percent into the 61–72 month age group.

Within urban areas, 34.62% of anganwadi children fall into the 36-48 month age group, 49.52% fall into the 49-60 month age group, and 30.76% fall into the 60-72 month age group. Preschoolers make up 40.38 percent of the 36–48 month age group, 32.69 percent of the 49–60 month age group, and 26.93 percent of the 61–72 month age group.

In terms of gender, 46.16 percent in rural anganwadis were males and 53.84 percent of children were girls. In rural preschools, boys made up 55.76 percent of the student body, while girls made up 44.24 percent. In the urban area, 40.38 percent of children in anganwadis were boys while the majority, 59.62 percent, were girls. 51.92 percent of preschool-aged children were males and 48.08 percent were girls.

In terms of socioeconomic status, the most (53.84%) of children in rural anganwadis have a low socioeconomic status, while 46.16 percent have a lower medium socioeconomic position. In preschools, 61.54% of children are from the upper middle class, while 38.46% are from the lower middle class. In metropolitan areas, the majority of children in anganwadis (67.30%) are from the lower middle class, while 32.70 percent are from the impoverished class. In preschools, 69.23% of children are from the upper middle socioeconomic

class, while 30.77% are from the lower middle socioeconomic class.

In terms of home environment quality, 46.16 percent of children in rural anganwadi and 53.84 percent of children in low quality home environment categories belonged to the moderate level category. In preschools, 40.38 percent of children belonged to moderate level quality homes, while 59.62 percent of children belonged to high level quality homes. 42.31 percent of children in anganwadis in metropolitan areas belonged to low quality home environments, whereas 56.79% of children in anganwadis belonged to moderate quality home environments. Preschoolers made up of 30.76 percent of those with moderately quality home environments and 69.24 percent of those with high quality home environments.

Socio-emotional development of anganwadi and preschool children in rural and urban setting. Table 2's findings emphasized the results of the link between type of school and socio-emotional development of children in rural and urban settings. It was discovered that in rural areas, the type of school and children's levels of socio-emotional development were strongly associated with each other ($\chi^2 = 60.48$) at the 1% level of significance. It was discovered that the majority of children in anganwadis fell into the watch (65.38%) category of socio-emotional development, 34.62 percent fell into the concern level of socio-emotional development, and none of the children in anganwadis fell into the typical level of socio-emotional development.

The majority of preschool-age children (69.23%) had typical levels of socio-emotional development, while 30.76 percent had levels of socio-emotional development.

At the one percent significance level, there was a significant correlation ($r = 0.3239$) between the types of schools in urban areas and the socio-emotional development of the students. According to observations, the majority of children in urban anganwadis came into the category of socio-emotional development under watch (59.62%), followed by concern (26.72%) and typical (13.46%). Preschool-age children fell into two categories: those with typical socio-emotional development (61.53%) and those with watch level (64.47%).

Table 2a results showed that, at the 0.01 percent significance level, there was a significant difference (18.84) and (9.19) between the socio-emotional development of children attending different types of schools in rural and urban locations. The differential value explained that preschool-age children scored much higher on socio-emotional development (36.13) than did children from anganwadis (22.04) in rural areas and (26.38) in urban areas.

Table 2b's results indicate that there are notable differences between the Socio-emotional development domains of children in rural and urban areas based on the type of school. These domains include emotional expression, emotional adaptability, regulating emotions and arousal states, behavioral regulation, sense of self, and emotional themes in play and social interaction. Under the domains of Socio-emotional development—that is, emotional expression (5.23), emotional

adaptability (5.19), regulation of emotions and arousal states (5.15), behavioral regulation (5.19), sense of self (4.90), emotional themes in play (5.00), and social interaction (5.46)—children attending preschools scored higher mean scores than children attending anganwadis, as explained by the difference value.

Under the domains of Socio-emotional development—emotional expression (5.28), emotional adaptability (5.29), regulation of emotions and arousal states (5.25), behavioral regulation (5.31), sense of self (4.89), emotional themes in play (5.05), and social interaction (5.65)—children attending preschools in urban areas scored higher mean scores than children attending anganwadis.

Influence of age on Socio-emotional development of children of anganwadi and preschool in rural areas.

The results of Table 3 demonstrated the relationship between children's age and their socio-emotional development in rural anganwadis. Children between the ages of 36 and 72 months were found to belong to the watch category in cent per cent terms; among children between the ages of 49 and 60 months, the majority (76.47%) belonged to the watch category and 23.52 percent to the concern category; among children between the ages of 36 and 42 months, the majority (70%) belonged to the concern category and thirty percent to the watch category. Not one of them fit into the typical socio-emotional development category. Age of the children was found to have a substantial association with social and emotional

Among preschool children, 76.48 percent of those aged 61-72 months belonged to the typical category of socio-emotional development, while 23.52 percent of those aged 49-60 months belonged to the watch category of socio-emotional development.

Table 3a found that comparing the socio-emotional development of children in rural anganwadi areas by age revealed a significant difference at the 0.01 percent level of significance. The difference value explained that children aged 60-72 months had significantly higher mean scores on socio-emotional development (25.13) than children aged 49-60 months (22.82) and 36-48 month children scored mean scores (19.05), with the difference between the children aged 36-72 months being significant.

In the case of preschool children, children aged 61-72 months had significantly higher mean scores (39.05) than children aged 49-60 months (37.17) and children aged 36-48 months (32.44).

Table 3b shows the results of domains of socio-emotional development of children by age in the rural area. Children aged 36-72 months demonstrated significant differences in domains of socio-emotional development, including emotional expression, emotional adaptability, regulation of emotions and arousal states, behavioral regulation, sense of self, emotional themes in play, and social interaction. The differential value explained that children aged 61-72 months outperformed their peers in all aspects of socio-emotional development.

Under the domains of socio-emotional development that is, emotional expression (5.29), emotional style/adaptability (6.05), regulation of emotions and arousal states (5.35), behavioral regulation (5.64), sense

of self (5.23), emotional themes in play (5.41), and social interaction (6.00)—children in the age group of 61-70 months scored significantly higher mean scores than children in the age groups of 49-60 month and 36-48 month.

Influence of age on Socio-emotional development of anganwadi and preschool children in urban areas.

Table 4 presents the relationship between children's age and their Socio-emotional development. Regarding rural preschool, it was discovered that, for children between the ages of 36 and 48 months, 95.24 percent of the observed children fell into the watch category, while only 4.76% of the children assessed fell into the typical category. In contrast, for children between the ages of 49 and 60 months and 61 and 72 months, the percentage of observed children fell into the typical category, and the correlation was found to be highly significant.

Results from table 4a depict the comparison of social and development by age cohorts. One-way ANOVA results revealed a significant difference in Socio-emotional development between age cohorts. Children in the 61-72 month age group had higher mean scores (42.14) than those in the 49-60 month and 36-48 month age groups (39.00). The age cohort differences were found to differ significantly at the 0.01 significance level.

Pertaining to the domains of socio-emotional development of children age cohorts 36-72 months are presented in the table 4b. One-way ANOVA results indicated a significant difference in Socio-emotional development domains between age cohorts. Under the domains of socio-emotional development, namely emotional expression (5.92), emotional style/adaptability (6.35), regulation of emotions (6.07), behavioral regulation (6.00), sense of self (5.64), emotional themes in play (5.71), and social interaction (6.42), children in the age group of 61-72 months scored higher mean scores than those in the age groups of 49-60 month and 61-2 month. At the 0.01 percent significance level, the significant difference was discovered.

DISCUSSION

The results (Tables 3 to 4b) show how age affects children's Socio-emotional development in preschools and anganwadis in both rural and urban settings. It was discovered that none of the children in the 61–72 month age group fit into the conventional category of Socio-emotional development in anganwadis, with 70% of the 36–48 month group falling into the "watch category" and 100% of the former group falling into the "concern category." Preschoolers comprised of 76.48% of the average category age group (49-60 months) and 61.4% of the children in the age range of 61-72 months. However, in both preschool and anganwadis, the Socio-emotional development improved with age.

The reason may be because most of the children in the preschools were little older (4-6 years) so maturation may have played the role in better social and emotional development of preschool children. Voigt *et al* (2011) in their explanation of stage of social and emotional development mentioned that children by 3 years of age initiate engaging in interactive play and learn to co-

operate, they can only with one or two peers, with turn taking play and joint goals (Saltali and Arslan 2011). However, children around 4-5 years can play with 3-4 peers with more complex themes and follow simple rules and directions.

The results clearly indicate that, more children were found to be in the lower age group were belonged to concern category in anganwadis compared to preschools. The reason may be that, the children of 3 to 6 years are mixed in single classroom in anganwadis while, younger children are new to the classroom setting and they take time to adjust with the new environment. It was also observed younger children in

such set up being passive and participating less frequently in the classroom activities.

When comparing anganwadis to preschools, the results unequivocally show that the majority of children in the lower age group belonged to the worry category. The reason could be because younger children are acclimating to a new classroom setting and require some time to adjust, whereas children aged three to six are housed in mixed classrooms in anganwadis. In a similar arrangement, it was also seen that younger children were more passive and didn't participate in class activities as much.

Activities	Rural								Urban							
	School 1		School 2		School 3		School 4		School 5		School 6		School 7		School 8	
	Daily	Weekly	Daily	Weekly	Daily	Weekly	Daily	Weekly	Daily	Weekly	Daily	Weekly	Daily	Weekly	Daily	Weekly
Rhymes	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Informal talk	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Dance		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes
Story telling		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes
Story book reading				Yes				Yes		Yes		Yes				Yes
Drawing				Yes				Yes				Yes				Yes
Painting				Yes				Yes				Yes				Yes
Arts and crafts				Yes				Yes				Yes				Yes
Passing the ball			Yes				Yes				Yes				Yes	
Circle time		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes
Total	05		10		05		10		05		10		05		10	

Fig. 1. Activities for Socio-emotional development.

Table 1: Demographic characteristics of anganwadi and preschool children in rural and urban areas.

Child characteristics	Categories	Rural (n=104)		Urban (n=104)	
		Anganwadi	Preschool	Anganwadi	Preschool
Age (months)	36-48	20 (38.46)	18 (34.62)	18 (34.62)	21 (40.38)
	49-60	17 (32.69)	17 (32.69)	18 (34.62)	17 (32.69)
	61-72	15 (28.85)	17 (32.69)	16 (30.76)	14 (26.93)
	Total	52 (100)	52 (100)	52 (100)	52 (100)
Gender	Boys	24 (46.16)	29 (55.76)	21 (40.38)	27 (51.92)
	Girls	28 (53.84)	23 (44.24)	31 (59.62)	25 (48.08)
	Total	52 (100)	52 (100)	52 (100)	52 (100)
SES	Upper high	-	-	-	-
	High	-	-	-	-
	Upper middle	-	32 (61.54)	-	36 (69.23)
	Lower middle	24 (46.16)	20 (38.46)	35 (67.30)	16 (30.77)
	Poor	28 (53.84)	-	17 (32.70)	-
	Very poor	-	-	-	-
Total	52 (100)	52 (100)	52 (100)	52 (100)	

Table 2: Association between type of ECCE and Socio-emotional development in rural and urban areas N=208.

Socio-emotional development	Rural (104)		Modified χ^2	Urban (104)		Modified χ^2
	Anganwadi (n=52)	Preschool (n=52)		Anganwadi (n=52)	Preschool (n=52)	
Typical	-	36 (69.23)	36.48**	-	32 (61.53)	32.39**
Watch	34 (65.38)	16 (30.76)		38 (73.07)	20 (38.47)	
Concern	18 (34.62)	-		14 (26.93)	-	
Total	52 (100)	52 (100)		52 (100)	52 (100)	

Table 2a: Mean scores of Socio-emotional development in rural and urban areas.

Locality	Type of ECCE centre	Mean \pm S.D	t-value
Rural	Anganwadi	22.04 \pm 3.44	12.84**
	Preschool	35.13 \pm 4.14	
Urban	Anganwadi	24.38 \pm 6.42	16.19**
	Preschool	36.13 \pm 4.14	

Table 2b: Mean scores of domains of Socio-emotional development in rural and urban areas N=208.

Domains	Rural (n=104)			Urban (n=104)		
	Anganwadi Mean ± S.D	Preschool Mean ± S.D	t-value	Anganwadi Mean ± S.D	Preschool Mean± S.D	t-value
Emotional expression	3.09 ± 0.77	5.23 ± 0.87	13.16**	3.76 ± 0.94	5.28 ± 0.87	8.19**
Emotional style/adaptability	3.92 ± 0.62	5.19 ± 0.97	14.19**	3.61 ± 1.08	5.29 ± 0.97	7.80**
Regulations of emotions and arousal states	3.11 ± 0.61	5.15 ± 0.99	12.54**	3.75 ± 0.83	5.25 ± 0.99	7.77**
Behavioral Regulation	3.19 ± 0.56	5.19 ± 0.86	13.99**	3.80 ± 0.92	5.31 ± 0.86	7.86**
Sense of Self	3.00 ± 0.65	4.90 ± 0.77	13.52**	3.73 ± 1.01	4.89 ± 0.77	6.64**
Emotional Themes in Play	3.00 ± 0.56	5.00 ± 0.65	16.70**	3.55 ± 1.16	5.05 ± 0.65	7.79**
Social interaction	3.71 ± 1.03	5.46 ± 0.93	9.03**	4.15 ± 1.25	5.65 ± 0.93	6.00**

*Significant at 0.05 level

Table 3: Association between age and Socio-emotional development in rural area N=104.

Socio-emotional development	Child age (months)							
	Anganwadi (n=52)			Modifiedχ ²	Preschool (n=52)			Modifiedχ ²
	36-48	49-60	61-72		36-48	49-60	61-72	
Typical (Average)	-	-	-	19.92**	06 (33.33)	13 (76.47)	17 (100)	18.86**
Watch (Below Average)	06 (30.00)	13 (76.47)	15 (100)		12 (66.66)	04 (23.52)	-	
Concern (Poor)	14 (70.00)	04 (23.52)	-		-	-	-	
Total	20 (100)	17 (100)	15 (100)		18 (100)	17 (100)	17 (100)	

Figure in parentheses indicates percentage; **Significant at 0.01 level

Table 3a: Mean scores of Socio-emotional development by age in rural area.

Age (months)	Anganwadi		Preschool	
	Mean ± S.D	t-value	Mean ± S.D	t-value
36-48	19.05 ± 2.92	29.84**	32.44 ± 3.56	20.79**
49-60	22.82 ± 2.27		37.17 ± 3.24	
61-72	25.13 ± 1.40		39.05 ± 2.38	

**Significant at 0.01 level

Table 3b: Mean scores of domains of Socio-emotional development by age in rural area N=104.

Domains	Child age (months)							
	Anganwadi (n=52)				Preschool (n=52)			
	36-48 (20) Mean ± S.D	49-60 (17) Mean ± S.D	61-72 (15) Mean ± S.D	f-value	36-48 (18) Mean ± S.D	49-60 (17) Mean ± S.D	61-70 (17) Mean ± S.D	f-value
Emotional expression	2.50 ± 0.51	3.29 ± 0.46	3.66 ± 0.81	17.35**	4.66 ± 0.48	5.76 ± 1.14	5.29 ± 0.46	9.12**
Emotional style/adaptability	2.55 ± 0.51	3.00 ± 0.61	3.33 ± 0.48	9.27**	4.66 ± 0.68	4.88 ± 0.48	6.05 ± 1.02	16.53**
Regulations of emotions and arousal states	2.75 ± 0.55	3.23 ± 0.56	3.46 ± 0.51	8.02**	4.66 ± 0.76	5.47 ± 1.23	5.35 ± 0.78	3.69*
Behavioral Regulation	3.100 ± 0.55	3.55 ± 0.56	3.46 ± 0.54	4.712*	4.77 ± 0.87	5.17 ± 0.63	5.64 ± 0.86	5.14*
Sense of Self	2.55 ± 0.68	3.29 ± 0.46	3.266 ± 0.45	10.47**	4.33 ± 0.90	5.17 ± 0.52	5.23 ± 0.43	10.23**
Emotional Themes in Play	2.80 ± 0.52	2.82 ± 0.39	3.46 ± 0.51	9.87**	4.61 ± 0.50	5.00 ± 0.50	5.41 ± 0.71	8.37**
Social interaction	2.80 ± 0.69	4.11 ± 0.85	4.46 ± 0.63	25.67**	4.72 ± 0.75	5.70 ± 0.68	6.00 ± 0.86	13.26**

**Significant at 0.01 level; *Significant at 0.05 level

Table 4: Association between age and Socio-emotional development in urban area N=104.

Socio-emotional development	Child age (months)							
	Anganwadi (n=52)				Preschool (n=52)			
	36-48	49-60	61-72	Modifiedχ ²	36-48	49-60	61-70	Modifiedχ ²
Typical (Average)	-	-	-	43.58**	01 (4.76)	17 (100)	14 (100)	47.97**
Watch (Below Average)	06 (33.33)	16 (88.88)	16 (100)		20 (95.24)	-	-	
Concern (Poor)	12 (66.67)	02 (11.12)	-					
Total	18 (100)	18 (100)	16 (100)		21 (100)	17 (100)	14 (100)	

Figure in parentheses indicates percentage; **Significant at 0.01 level

Table 4a: Mean scores of Socio-emotional development by age in urban area.

Age (months)	Anganwadi		Preschool	
	Mean ± S.D	f-value	Mean ± S.D	f-value
36-48	20.44 ± 2.30	142.89**	29.42 ± 2.71	100.05**
49-60	24.88 ± 2.78		39.00 ± 3.33	
61-72	34.81 ± 2.42		42.14 ± 2.21	

**Significant at 0.01 level

Table 4b: Mean scores of domains of Socio-emotional development by age in urban area N=104

Domains	Child age (months)							
	Anganwadi (n=52)				Preschool (n=52)			
	36-48 (18)	49-60 (18)	61-72 (16)	f-value	36-48 (21)	49-60 (17)	61-70 (14)	f-value
Emotional expression	2.88 ± 0.58	3.72 ± 0.57	4.81 ± 0.40	55.64**	4.28 ± 0.78	5.47 ± 0.79	5.92 ± 0.73	21.51**
Emotional style/adaptability	2.66 ± 0.59	3.55 ± 0.70	4.75 ± 0.77	38.52**	4.04 ± 0.66	5.17 ± 0.72	6.35 ± 0.84	41.65**
Regulations of emotions and arousal states	3.11 ± 0.32	3.55 ± 0.61	4.68 ± 0.60	39.62**	4.09 ± 0.70	5.29 ± 0.84	6.07 ± 0.73	30.08**
Behavioral Regulation	3.11 ± 0.32	3.38 ± 0.50	5.06 ± 0.25	29.92**	4.23 ± 0.62	5.41 ± 0.93	6.00 ± 0.67	25.08**
Sense of Self	2.88 ± 0.58	3.61 ± 0.60	4.81 ± 0.75	37.94**	4.14 ± 0.65	5.47 ± 0.94	5.64 ± 0.63	21.82**
Emotional Themes in Play	2.61 ± 0.69	3.33 ± 0.68	4.87 ± 0.71	45.68**	3.80 ± 0.6	5.70 ± 0.84	5.71 ± 0.61	43.21**
Social interaction	3.16 ± 0.38	3.72 ± 0.57	5.75 ± 0.85	79.04**	4.80 ± 0.60	6.47 ± 0.62	6.42 ± 0.64	43.77**

**Significant at 0.01 level; *Significant at 0.05 level

CONCLUSIONS

In terms of their socio-emotional development, the majority of children in both rural and urban anganwadis fell into the watch and concern group. A noteworthy correlation was discovered between the kind of early childhood education facilities and the socio-emotional development of kids. Age and children's socio-emotional development were found to be significantly correlated. The socio-emotional development of children was found to be highly correlated with age, with older children (5–6 years old) scoring significantly higher on these domains.

REFERENCES

- Calhoun, J. A. (2009). Facilitating social emotional skills in preschool children. *Ph.D. Thesis*, Univ. Vermont, Burlington (United States).
- Ortega, R., Romera, E. M. and Monks, C. P. (2009). The impact of group activities on social relations in an early education setting in Spain. *European Early Childhood Edu. Res. J.*, 17(3), 343-361.
- Saltali, N. D. and Arslan, E. (2011). An investigation of emotional skills of six-year-old children attending nursery school according to some variables. *Edu. Res. Rev.*, 6(7), 536-541.
- Sajoerdsma, S. (2016). Importance of play: play-based instruction within a preschool learning environment. *M.Ed. (Thesis)*, Northeast Univ, Iowa (United States).
- Trawick-Smith, J., Wolff, J. and Koschel, M. (2015). Effects of Toys on the Play Quality of Preschool Children: Influence of Gender, Ethnicity, and Socioeconomic Status. *Early Childhood Educ J.*, 43, 249–256.

How to cite this article: Soumya Hirelingannavar and Manjula Patil (2023). Investigating Age Differences in Socio-emotional Development of Children Attending Different ECCE Centers. *Biological Forum – An International Journal*, 15(12): 378-384.