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**Mukta G Sthavarmath**  
Ph.D., Department of Human  
Development and Family  
Studies, College of Community  
Science, UAS, Dharwad,  
Karnataka, India

**Lata Pujar**  
Professor and Head, Department  
of Human Development and  
Family Studies, College of  
Community Science, UAS,  
Dharwad, Karnataka, India

**Vinutha Muktamath**  
Assistant Professor, Department  
of Human Development and  
Family Studies, College of  
Community Science, UAS,  
Dharwad, Karnataka, India

**Corresponding Author:**  
**Mukta G Sthavarmath**  
Ph.D., Department of Human  
Development and Family  
Studies, College of Community  
Science, UAS, Dharwad,  
Karnataka, India

## Parent child relationship and social-cognition among pre-school children

**Mukta G Sthavarmath, Lata Pujar and Vinutha Muktamath**

### Abstract

Social cognition concerns young children's knowledge of themselves, other people and the groups to which they belong. A study was conducted to know the development of social-cognition among urban and rural pre-school children and influence of parent-child relationship on social-cognition among pre-school children. Total sample comprised of 180 pre-school children, 94 children from rural areas and 86 children from urban areas of Dharwad Taluk. Theory of Mind Inventory by Hutchin *et al.*, (2014) was used to assess the social-cognition among children and parent-child relationship was assessed by using Parenting Relationship Questionnaire (PRQ) by Kamphaus and Reynolds (2006). The Questionnaire of Parent-Child Conversations about Emotions (QPCCE) by Nader-Grosbois *et al.*, (2017) also used to measure, the emotion-related conversations between parents and their children. Results revealed that, urban pre-school children had better social-cognition as compared to rural. Children with good relationship with their parent and parent who used supportive strategies during conversation had better social-cognition than children with poor relationship with parents and parents who used non-supportive strategies. A study result indicates the positive involvement, attachment and conversation with children which in-turns development of social-cognition.

**Keywords:** Hernia, buffalo bull, umbilical, herniorrhaphy

### Introduction

Pre-school period offers a critical window of opportunity to shape the trajectory of a child's holistic development and build a foundation for their future. The development of important mile stones in the area of, emotional, language, behavioral and social-cognitive skills takes place primarily in early year of life. These foundational skills are not only important for a successful transition to school, but also for later social adjustment. Promoting and developing social-cognition skills along with strengthening families are important ways to improve long term outcomes for children. The process by which children understand their social worlds is a topic of increasing interest to developmental researchers. A central component of this developmental process is children's understanding of mental states and how they contribute to behavior known as 'social-cognition'. It relates to the emotional and cognitive processes required to assimilate the cognitive and behavioral patterns of other persons. Social cognition has been defined as the ability to construct representations of the relations between one-self and others and to flexibly use of those representations to guide social behavior. It can thus be considered as the sum of cognitive processes required for social interactions. Social cognition concerns young children's knowledge of themselves, other people and the groups to which they belongs. It encompasses a variety of interpersonal domains including an individual's knowledge, perception, attitudes, and behavior in relation to social situations.

Since children develop an early understanding of other people in terms of their internal psychological states during preschool years, it is not surprising that some features of parent-child relationship have been linked to children's advances in social cognition. Mother child communication plays a causal role in the development of children's social-cognition. Mothers' mental state utterances at earlier age consistently correlated with the children's later understanding of social-cognition. The frequency of mother's general talk about mental states helps children to learn about the mind, because each new utterance, including mental terms, draws the child's attention to mental processes. Mothers' mental talk may offer children frequent chances to learn about the tensed complements associated with remarkably mental verbs such as "think" and "know" (e.g., "I think that"). Increased interest has been observed in the last three decades in regard to the study of the social-cognition. There are only a handful of studies carried out in development of social-cognition and parent-child relationship among

pre-school children, hence the study was taken with the following objectives, to know the development of social-cognition among urban and rural pre-school children and to study the influence of parent-child relationship on development of social-cognition among pre-school children.

### Material and methods

The target population of the study were the mother-child dyads with children in age group of 2-6 years residing in Dharwad taluk of Karnataka. Out of 119 villages, four villages were randomly selected and one Anganvadi from each village was selected to form the rural sample. Total 96 children were randomly selected from four Anganwadis from rural area. The urban sample (86 children) collected from four Anganwadis from urban locality of Dharwad city.

The social-cognition was assessed using Theory of Mind Inventory (ToMI) developed by Hutchins *et al.*, (2014) [7], which consists of 42 items with 5 point likert scale, designed to tap a wide range of social cognitive understandings. It is care giver rated and used for the children's of age group 2-6 years. The scale format uses answering ranging from definitely not, probably not, undecided, probably and definitely with a score of 1,2,3,4 and 5 respectively. The respondent is asked to read the statement and tick the appropriate one. Higher the score indicates the higher social cognition. Based on score, categorized as low (42-70), average (71-140) and high (141-210).

Parenting Relationship Questionnaire (PRQ) by Kamphaus and Reynolds (2006) [8] was used to assesses the parent-child relationship in the dimensions such as attachment, involvement and parenting style, parenting confidence, stress and satisfaction. The questionnaire was administered to mothers/ fathers/ caregivers of children age ranged from 2 to 5 years. The Questionnaire of Parent-Child Conversations about Emotions (QPCCE) by Nader-Grosbois *et al.*, (2017) [9] used to measure, the emotion-related conversations between parents and their children. This consisted of 24 items which assessed on a 4- point scale and categorized as Non-supportive strategies (1-48) and supportive strategies (49-96). Frequency and percentages were used to interpret the age, gender, ordinal position and social-cognition among urban and rural high school students. t-test was used to know the differences in social-cognition among urban and rural areas and Chi-square was used to know the influence of age, gender, ordinal position on social-cognition among urban and rural pre-school children.

### Results and Discussion

#### Social-cognition among urban and rural pre-school children

The Association and difference between levels of social-cognition among urban and rural pre-school children was presented in Table 1. Result showed that, among both urban and rural locality majority of pre-school children were belonged to average level of social-cognition followed by low and high. The mean score of urban children with regard to levels of social-cognition was found to be high (98.17) compared to rural locality (81.97) and 't' value found to be significant between levels of social-cognition and locality. This situation may have originated from the fact that, poor social-skills and distractive peer-play behavior of rural children may hinder their social-cognition skills. Also parents in rural locality having poor knowledge on development of social-cognition. They were un-aware of methods and

strategies to improve the social-cognition. Such as, lack in using proper way of communication, use of mental states words and giving cause and effect relationship during conversation with their children. So, children might showed the poor social-cognition development. Astington and Edward (2010) [2] pointed out that, environmental factors such as disciplinary strategies and conversations with family influence the development of social-cognition. Aslan and Emen (2019) [1] also in-line with the same results that, there is significant difference found between the urban and rural locality on social-cognition. Rural children having low level of social-cognition compared to urban children. Children's social-cognition absolutely depend on reasoning is provided when correcting their misbehaviors during their conversations with their mothers about their thoughts, desires, and emotions. While social-cognition develops further in children whose mothers talk with them about causes and effects of behaviors and events, punishment behaviors without explanation have a negative impact on the development of children's social-cognition by causing insufficient stimulation. (Sigman *et al.*, 2013) [14].

#### Parent-child relationship and social-cognition

Table 2 clearly highlights that, with respect to components of parent-child relationship like attachment and involvement was significantly and positively associated with levels of social-cognition among urban and rural pre-school children. Parents with upper extreme attachment and involvement with their children had high level of social-cognition than lower extreme attached and involved parents (Table 2). This might be due to the fact that, Parent-child relationship assumes a primary role in children's evolving representations of their social cognition. Parents who involve highly with children's activity may allow the exchange of thoughts, ideas and feelings between parent and child might helped the pre-children to understand their own and from other's perspective. Similarly, Bowlby (1982) [3] suggested that, secure attachments enable children to learn about their caretaker's perspective, which then allows a child to recognize differences between his/her own and his/her caretaker's perspectives. Decreased parental engagement and disciplinary inconsistency increase the likelihood that children fail to socialize and are at risk for conduct and mood difficulties. Thompson and Ontai (2019) [17] opinioned that, the quality of the attachment relationship shapes children's understanding of themselves and others. The children's social-cognition is significantly co-related with their attachment with parents. The importance of a secure attachment to mental state understanding is in mothers' greater sensitivity and communication about, children's mental states. Securely attached children were stronger on social-cognition, but they also found that maternal conversational references to emotions mediated the predictive relation between attachment and social-cognition.

#### Parent-child conversation and social-cognition

Parent who used supportive strategies during their conversation with their children had high level of social-cognition than who used non-supportive strategies (Table 3). This might be due to the reason that, as social-cognition absolutely depends on the way of conversation between parent and child. The mental states used during conversation helps child to understand different emotions and feelings. The process of engaging in elaborative talk about a shared event encompasses many elements which is beneficial to children's

social-cognition. Moreover, because elaborative discourse is inherently interactive with the child’s utterances, it provides avenues for provoking deeper conceptual understanding of mental states by building on the child’s own conversational contributions. Some of the authors Hughes *et al.*, (2014) [6] and Sodian *et al.*, (2016) [15] in-line with result that, children whose mothers responded to their children’s utterances with an elaborative statement during conversations tended to do better social-cognition. Reese *et al.*, (2013) [11] stated that, unlike the use of mental state terms, elaborative discourse styles, marked by open-ended questions and expansion of information provided by children often provoke young children in developing social-cognition. As urban participants were educated compared to rural mothers and they and using better communication skills using mental state terms with children. During parent-child conversations, the parent might discuss causes and consequences of emotions, use emotional vocabulary and explain emotional events experienced by the child or other people would provoke the development of social-cognition among children. Some of authors Crowe *et al.*, (2002) [4] and Rieffe and Villanueva (2005) [12] expressed that, engaging in conversational interactions with children through highlighting, others have desires, thoughts, and beliefs that differ from one’s own gives children opportunities to expand their social-cognition through interactions that are

meaningful to them. Thompson and Ontai (2019) [17] also reported that, the interaction of elaborative discourse and attachment security at the age of three predicted children’s emotion understanding at the age of five. Adult-child conversations are contexts that allow for the transfer of knowledge by engaging in conversational interactions about shared experiences that enable children to discover that others may have different beliefs from their own. Such interactions are common in parent-child conversations where parents elaborate on children’s statements by presenting them with their own perspective or by challenging them when they present a memory that is inaccurate. These types of interactions actively engage children in the process of comparing and contrasting their own and others’ beliefs and perspectives, and are likely to contribute to the growth of social-cognition in this manner. Similarly, Hsu and Sung (2014) [5] expressed that, elaborative discourse may be an important avenue by which young children derive an appreciation of mental states and their influence on behavior. This can occur when, mothers explicitly or implicitly reflect on children’s perceptions of events while contrasting them with alternative accounts, or when the mother enhances the child’s understanding of an event by providing information about that person’s feelings, desires, thoughts, motives, or other mental states.

**Table 1:** Association and comparison between levels of social-cognition among urban and rural pre-school children N= 180

Locality	Levels of social-cognition				Modified $\chi^2$	Mean $\pm$ SD	t-Value
	Low	Average	High	Total			
	n (%)	n (%)	n (%)	n (%)			
Urban	21 (24.42)	46 (53.49)	19 (22.09)	86 (100)	11.36*	98.17 $\pm$ 7.64	2.97**
Rural	32 (34.04)	48 (51.06)	14 (14.89)	94 (100)		81.97 $\pm$ 6.48	
Total	53 (29.44)	94 (52.22)	33 (18.33)	180 (100)		124 $\pm$ 12.39	

Figures in the parenthesis indicates percentage

\*\* Significant at 1 percent level

\* Significant at 5 percent level

**Table 2:** Association and comparison between parenting relationship and levels of social-cognition among urban and rural pre-school children N=180

Components	Levels	Urban				Modified $\chi^2$	Mean SD	F-Value
		Levels of social cognition						
		Low	Average	High	Total			
n (%)	n (%)	n (%)	n (%)					
Attachment	Lower extreme	5 (55.55)	2 (22.22)	1 (11.11)	9 (100)	13.98**	64.29 $\pm$ 6.35	4.28**
	Significantly below average	6 (46.15)	5 (38.46)	2 (15.38)	13 (100)		60.19 $\pm$ 7.01	
	Average	4 (11.43)	19 (54.29)	12 (34.29)	35 (100)		69.46 $\pm$ 9.84	
	Significantly above average	3 (16.67)	12 (66.66)	3 (16.67)	18 (100)		77.07 $\pm$ 10.87	
	Upper extreme	1 (9.09)	8 (72.72)	3 (27.27)	11 (100)		79.19 $\pm$ 7.19	
Discipline practices	Lower extreme	6 (54.55)	3 (27.27)	2 (18.18)	11 (100)	1.25 <sup>NS</sup>	55.39 $\pm$ 8.42	0.28 <sup>NS</sup>
	Significantly below average	6 (46.15)	4 (30.77)	3 (23.08)	13 (100)		59.41 $\pm$ 6.84	
	Average	8 (22.86)	15 (42.86)	12 (34.29)	35 (100)		62.17 $\pm$ 7.45	
	Significantly above average	1 (5.00)	17 (85.00)	2 (10.00)	20 (100)		65.14 $\pm$ 8.10	

	Upper extreme	1 (11.11)	6 (66.67)	2 (22.22)	9 (100)		67.49±6.17	
Involvement	Lower extreme	7 (53.84)	4 (30.77)	2 (15.38)	13 (100)	14.89**	54.98±7.01	2.59*
	Significantly below average	6 (54.54)	3 (27.27)	2 (18.18)	11 (100)		50.01±7.41	
	Average	4 (14.29)	20 (71.43)	4 (14.29)	28 (100)		60.18±8.74	
	Significantly above average	2 (8.00)	16 (64.00)	7 (28.00)	25 (100)		64.78±9.84	
	Upper extreme	1 (9.09)	3 (27.27)	7 (63.63)	11 (100)		67.98±7.45	
Parenting Confidence	Lower extreme	5 (55.56)	2 (22.22)	2 (22.22)	9 (100)	0.25 <sup>NS</sup>	52.21±7.18	0.01 <sup>NS</sup>
	Significantly below average	7 (46.67)	5 (33.33)	3 (20.00)	15 (100)		54.39±7.57	
	Average	9 (32.14)	12 (42.86)	7 (25.00)	28 (100)		62.18±8.04	
	Significantly above average	2 (10.00)	14 (70.00)	4 (20.00)	20 (100)		60.78±9.56	
	Upper extreme	2 (12.50)	11 (68.75)	3 (18.75)	16 (100)		61.19±7.19	
Relational Frustration	Lower extreme	1 (10.00)	2 (20.00)	7 (70.00)	10 (100)	14.27**	55.39±7.21	0.85 <sup>NS</sup>
	Significantly below average	4 (16.67)	12 (50.00)	8 (33.33)	24 (100)		59.67±7.87	
	Average	9 (26.47)	22 (64.71)	3 (8.82)	34 (100)		63.98±9.41	
	Significantly above average	3 (30.00)	6 (60.00)	1 (10.00)	10 (100)		65.74±8.14	
	Upper extreme	3 (30.00)	6 (60.00)	1 (10.00)	10 (100)		69.85±6.75	

Components	Levels	Levels of social cognition				Modified $\chi^2$	Mean SD	F-Value
		Low	Average	High	Total			
		n (%)	n (%)	n (%)	n (%)			
<b>Rural</b>								
Attachment	Lower extreme	9 (73.33)	2 (16.67)	1 (10.12)	12 (100)	15.98**	54.18±7.28	0.28 <sup>NS</sup>
	Significantly below average	8 (23.33)	20 (66.67)	2 (9.21)	30 (100)		56.37±7.09	
	Average	8 (26.67)	16 (53.33)	6 (20.00)	30 (100)		59.64±8.54	
	Significantly above average	4 (36.36)	5 (45.45)	2 (18.18)	11 (100)		62.50±8.34	
	Upper extreme	2 (18.18)	5 (45.45)	4 (54.55)	11 (100)		61.25±6.98	
Discipline practices	Lower extreme	9 (42.86)	7 (33.33)	5 (23.81)	21 (100)	2.38 <sup>NS</sup>	59.64±7.45	0.96 <sup>NS</sup>
	Significantly below average	11 (35.48)	10 (32.26)	9 (29.03)	31 (100)		62.54±7.12	
	Average	8 (30.00)	10 (50.00)	2 (20.00)	20 (100)		66.87±8.95	
	Significantly above average	2 (15.38)	10 (76.92)	1 (7.69)	13 (100)		68.54±9.58	
	Upper extreme	1 (10.00)	7 (80.00)	1 (10.00)	9 (100)		71.28±6.03	
Involvement	Lower extreme	8 (20.00)	15 (60.00)	2 (20.00)	25 (100)	16.87**	52.69±7.02	1.20 <sup>NS</sup>
	Significantly below average	10 (35.71)	16 (57.14)	2 (7.14)	28 (100)		56.27±7.58	
	Average	12 (50.00)	10 (41.66)	2 (8.33)	24 (100)		61.74±8.54	
	Significantly above average	1 (11.11)	3 (33.33)	5 (55.55)	9 (100)		66.17±9.07	
	Upper extreme	1 (10.00)	1 (10.00)	6 (90.00)	8 (100)		71.28±8.01	
Parenting Confidence	Lower extreme	6	6	1	13	1.03 <sup>NS</sup>	71.54±8.14	0.95 <sup>NS</sup>



		(46.15)	(46.15)	(7.69)	(100)		62.03±8.01	
	Significantly below average	10 (35.71)	12 (42.86)	6 (21.43)	28 (100)			
	Average	10 (33.33)	12 (40.00)	8 (26.67)	30 (100)			
	Significantly above average	4 (30.77)	8 (61.53)	1 (7.69)	13 (100)			
	Upper extreme	2 (20.00)	7 (70.00)	1 (10.00)	10 (100)			
Relational Frustration	Lower extreme	4 (22.22)	6 (33.33)	8 (44.44)	18 (100)	2.35 <sup>NS</sup>	53.01±7.02	1.58 <sup>NS</sup>
	Significantly below average	12 (42.86)	13 (46.43)	3 (10.71)	28 (100)			
	Average	11 (44.00)	11 (44.00)	3 (12.00)	25 (100)			
	Significantly above average	3 (18.75)	12 (75.00)	1 (6.25)	16 (100)			
	Upper extreme	2 (28.57)	4 (57.14)	1 (14.28)	7 (100)			

Figures in the parenthesis indicates percentage  
NS- Non-significant

**Table 3:** Association and comparison between parent-child conversation on emotions and levels of social-cognition among urban and rural pre-school children N=180

Locality	Levels of PCCE	Levels of social cognition				Modified $\chi^2$	Mean ± SD	t-Value
		Low	Average	High	Total			
		n (%)	n (%)	n (%)	n (%)			
Urban n= 86	Supportive strategies	2 (6.67)	10 (33.33)	18 (60)	30 (100)	13.98*	79.41±8.94	2.43*
	Non- supportive strategies	19 (33.93)	36 (64.29)	1 (1.79)	56 (100)		70.34±8.09	
Rural n= 94	Supportive strategies	2 (10)	6 (30)	12 (60)	20 (100)	10.07*	75.39±9.12	3.65*
	Non- supportive strategies	30 (40.54)	42 (56.76)	2 (2.7)	74 (100)		64.19±9.47	

Figures in the parenthesis indicates percentage  
NS- Non-significant  
\* Significant at 5 percent level

**Conclusion**

The present study focused on influence of parent-child relationship on social-cognition among urban and rural pre-school children. Majority of urban and rural pre-school children belonged to average level followed by low and high level of social-cognition. Parents who had more attachment and involved in child’s activity had children with better social-cognition. Parents who used supportive strategies during their conversation with children had better social-cognition than parents who used non-supportive strategies. So, there is need to develop strong bonding between parent and children through involving in their activities and conversation as social-cognition is absolutely depends on parent-child relationship and conversation.

**References**

- Aslan D, Emen M. The relationship between perspective taking skills and language development in preschool children. *J Edu. Educational Deve.* 2019;6(1):25-42.
- Astington WJ, Edward A. Children's understanding of representational change and its relation to the understanding of false belief and the appearance-reality distinction. *J Child. Deve.,* 2010;59(1):26-37.
- Bowlby J. Attachment and loss. *J Experimental Child. Psy.* 1982;10(2):1-14.
- Crowe E, Slade L, Ruffman T. The relation between children's and mothers' mental state language and theory-

- of-mind understanding. *J Child. Dev.* 2002;73(3):734-751.
- Hsu CH, Sung J. Collaborative mother-toddler communication and theory of mind development at age 4. *J Applied. Deve. Psy.* 2014;35:3.
- Hughes C, Marks A, Devine TR, Ensor R. Mothers’ cognitive references to 2-year-olds predict theory of mind at ages 6 and 10. *J Child Deve.* 2014;85(3):1222-1235.
- Hutchins TL, Prelock PA, Laura BB. Technical manual for the theory of mind inventory and theory of mind task battery, 2014.
- Kamphaus RW, Reynolds CR. *BASC-2 Behavioral and Emotional Screening System.* Minneapolis, MN: Pearson Assessments; c2006.
- Nader-Grosbois N, Houssa M, Mazzone S. How could theory of mind contribute to the differentiation of social adjustment profiles of children with externalizing behavior disorders and children with intellectual disabilities? *J. Rese. Deve. Disabilities.* 2017;34(1):2642-2660.
- Petersen R, Snyder G, Guajardo RN. Relationships among parenting practices, parental stress, child behaviour, and children’s social cognitive development. *J. Inf. Child Deve.* 2009;6(4):37-60.
- Reese T, Nuttall KA, Comas M, Valentino K. Training maltreating parents in elaborative and emotion-rich reminiscing with their preschool-aged children. *J Child*

- Abuse and Neglect. 2013;7(4):1-11.
12. Rieffe C, Villanueva L. Parent-child picture-book reading, mothers' mental state language and children's theory of mind. *J Child. Language*. 2005;32(3):673-686.
  13. Ruffman T, Selcuk B, Slaughter V, Henry DJ, Imuta K. Theory of Mind and prosocial behavior in childhood: a meta-analytic review. *J Dev. Psy.*, 2016;10(1):42-57.
  14. Sigman M, Semelman M, Salles J, Calero C. Age and gender dependent development of theory of mind. *Frontiers in Human neuroscience*. 2013;7(1):1-7.
  15. Sodian B, Licata M, Susanne Killen M, Woodward A. Understanding of goals, beliefs, and desires predicts morally relevant theory of mind: a longitudinal investigation. *J Child. Dev*. 2016;6(1):1-12.
  16. Swartz R, Emery TH, Ravindran N, McElwain LN. Theory of mind as a mechanism linking mother-toddler relationship quality and child-friend interaction during the preschool years. *J Soc. Deve*. 2018;9(1):1-23.
  17. Thompson AR, Ontai LL. Attachment, parent-child discourse and Theory-of-Mind development. *J Soc. Deve*. 2019;12(4):1-21.