

Early Childhood Play Materials: A Study on Parental Awareness, Attitude and Practices towards Child Development in LMIC

¹Dr. Vinuta Deshpande, ²Priyanka Shetty, ³Minoshka Teles

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¹Assistant Professor

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KAHER Institute of Physiotherapy, Belagavi-590010

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Mob No.: +918754466612

Email id: vinuta.gangvatikar@gmail.com

²Tirth Park Ridge, Tarabai Park , Kolhapur

416003

Mob No.: +918830936365

Email ID: priyankashetty951@gmail.com

³Mpt Colony, D-Type , Qtr No 152/B ,Headland Sada , Vasco Da Gama ,Goa

403804

Mob No.: +919637253360

Email ID: minoshkateles13@gmail.com

ABSTRACT

Play is an essential aspect of early childhood development that promotes cognitive, motor, social and emotional development. In Low and Middle-income countries (LMICs), children's access to play may be limited due to poverty, lack of resources and inadequate knowledge among parents about their importance. The aim of the study was to explore the knowledge, attitude, and practice of parents towards early childhood play materials in LMICs and their impact on child development. 300 parent-infants (less than 7 months of age) dyad were recruited from a well baby clinic at a tertiary care hospital. The parents were interviewed using a structured questionnaire. The questionnaire consisted of question under three domains, knowledge, attitude, and practice. A positive linear correlation was found between Knowledge and Attitude, Knowledge and Practice and Attitude and Practice in this study. The parents of infants have a good knowledge regarding the role of early exposure of play materials and also had a better attitude and practice to encourage their infants and engage themselves during play with different types of play materials. The good knowledge in parents might lead to positive attitude and a good practice in parents regarding the early exposure of play materials in children.

Keywords – Child Development, Developmental disorder, Play Material, Parent's Knowledge

INTRODUCTION

Child development refers to the maturation of function and the acquisition of various skills to function of an individual. The maturation and myelination of the nervous system is reflected in the sequential completion of developmental stages through the learning of increasingly complex skills, compatible with the formation of new synapses in the brain¹. Milestones are important and recognizable events in the ongoing development process. The first few years of life are a critical time when the brain grows and develops rapidly, as large neural networks are formed and areas of development are at their peak.¹ Play is essential for the optimal development of children because it contributes to the cognitive, social, physical, and emotional well-being of children. It also offers an opportunity for parent and child interaction using toys as a tool for play and interaction.² The main factors affecting the development of the child are of various types such as genetic and maternal factors (mother's education and depression), neonatal factors such as intrauterine growth retardation, premature babies and asphyxia. perinatal and postnatal factors such as cerebral damage (trauma or infection), associated degradations, in particular those of sensory input^{1,3,4,5}. In addition, psychosocial factors such as perceived parental stimulation, poverty, lack of social and emotional stimulation, violence and abuse, and parental knowledge^{1,3}. In India, research shows that mothers' lack of knowledge regarding their child's developmental stages is a major contributing factor.⁶ A toy is defined as an object (whether made, purchased or found in nature) intended for play by children. Studies show that toys are important for child development in a number of ways such as the role play plays in promoting development in all areas (including cognition, language, social, emotional and physical).² Changing society's perception of toys from children's toys to essentials for brain and infant development challenged parents to decide which toys

would be best suited for your child.²

DATA COLLECTION METHOD AND ANALYTICAL APPROACHES

A hospital based observational study was conducted from May to August 2021. An ethical clearance was obtained from the KLE Institute of Physiotherapy Institutional Ethical Committee (KAHER/IPT/IEC/783). Data was collected from the participants visiting well baby clinic at the tertiary care hospital. Sample size of 300 was determined based on finite population (Yamane's formula) $n = \frac{N}{1 + N(e^2)}$ where N is the finite population (3 month cumulative frequency of patients visiting the Well Baby Clinic (N=1200) and $e = 0.05^2$ is the margin of error/ level of precision. With the consecutive sampling design the participants were recruited if Parents of infants visited Well Baby Clinic at Tertiary Care Hospital, Belagavi, Parents with Infants less than 7 months of age, Pediatrician declaring that the infant is developing normally and age of infants mother should be above the age of 18years. The infants were excluded if parents were having children with disability, infants diagnosed with chromosomal abnormality, congenital anomalies, metabolic diseases, neuro motor disorders or were unwilling to participate in the study. Purpose and procedure of the study was explained to the parents of the recruited participants followed by obtaining a written informed consent from parents. A structured questionnaire was used for recording the knowledge (16 questions), attitude (13 questions) and practice (13 questions) among parents regarding the role of early exposure to play materials in child development. The validation of the questionnaire involved pediatricians, pediatric physiotherapist, and developmental psychologist. face-to-face interview was conducted between parents of the infants and the principal investigators. Due to the pandemic situation, the ICMR guidelines were followed during the interview. Standard descriptive statistics were used for the data mean and standard deviation for continuous variables whereas frequencies and percentage for categorical variables and a multivariate analysis was applied.

FINDINGS

Out of 300 participants, the socioeconomic status of the family was assessed using Modified BG Prasad Socioeconomic Classification update – 2019, wherein most of the parents (n= 185, 61 %) were under class I, 22.5% (n = 68) of them were in class II, 7.3% (n=22) in Class III, whereas 5.3% (n=16) and 3.6% (n=11) belonged to Class IV and Class V respectively. According to Modified Uday Pareek Scale update – 2019, the education status of most of the mothers (n= 96, 31.3 %) was up to middle school, around 30.5% (n=92) were educated till the high school level, (n=64, 21.2%) were graduate and above category, 11.6% (n=35) were primary and 2.6% (n=8) could read and write, whereas the rest 2.3% (n=7) could just read. Most of the fathers belonged to the category graduate and above 38.7% (n=117), followed by n = 100, 33.1 % high school, n = 56, 18.5% middle school, 5.6% up till primary (n = 17, 3.3%) can read & write (n = 10, 0.3%) can just read (n = 1) and the remaining (n=1, 0.3%) are illiterate. The occupational status of the maximum number of fathers was (n= 94, 31.1%) were involved in business, around 20.2%, n=61 were in Independent Profession, n=46, 15.2%, were a part of Service (11.6%, n= cultivation 11.6%, caste occupation 10.9%, and labourer 1% belonged to the category none. Whereas majority of the mothers fell into the category none 50.3% (n=152), 21.9% (n=66) in independent profession, 8.3% (n=25) in Cultivation, and the ones under Caste occupation, service and business were 5.6% (n=17), 5% (n=15) and 4% (n= 12) respectively. (Table 1)

Distribution of participants response to evaluate knowledge regarding the role of early exposure of play material

To determine the current level of knowledge 16 questions were interviewed and the responses of

the participants was categorised as strongly disagree, disagree, undecided, agreed and strongly agreed. When asked questions regarding whether it is good to let the children explore and experiment 47.7% of parents agreed where else 43.3% of parents strongly agreed. 50% of parents strongly agreed that children learn a lot just by playing. 34.7% of parents felt that a good toy need not be expensive, while 32% of parents could not decide about the same. More than 50% of parents strongly agreed that it is good to expose the child at an early age to a variety of toys, encouraging the child to hold onto toys while playing and it does further promote in skill development. 50% of parents were aware of different types of play materials available. 63.3% of parents felt that the child should be left to play all by itself. More than 60% of parents strongly agreed that allowing child to play as early as 1-2 months of age in an environment enriched with play materials like textual toys logical toys, toys which help in improving social and communication skills is essential and further promotes child development. Although 24% of parents agreed that children should be given gender specific toys, 34% of parents could not decide on the same. (Table 2)

Distribution of participants response to evaluate attitude regarding the role of early exposure of play material

To identify the current level of attitude, 13 questions were interviewed and the responses off the participants was categorised has never, sometimes often and always. 40% of the parents sometimes felt that they were too busy to be with your child when he or she wanted them to play in contrast 238.3% who are never busy. 31.3% parents never encouraged their children to play alone, barrels 33% sometimes 20.7% off and did so that they could complete the other job. Only 30% of parents sometimes stopped what they were doing and played with their children. Almost 50% of parents never felt that some days go without them having anytime to play with their children. 42.7% of parents never avoid playing with your children when they've had a long day. 16.6% always, 11.3% often and 28% sometimes feel that playing with their child can be a chore. 36% sometimes 28% never 22.3% often and 13.3% always felt that it is more important when their child enjoys playing on his or her own without having them they need to play with them. 48.3% of parents always felt that they could take every opportunity to play with their children. 50% of the parents always encouraged their children in a new game. 43.3% of parents always decided how and with what play materials their child should play more than 50% of parents always provided toys that challenge their children. Only 47.3% of parents always scheduled time to play with their children. 31.3 often 11% sometimes let their child decide how and what play material he or she should play with.(Table 3)

Distribution of participants response to evaluate practice regarding the role of early exposure of play material

More than 40% of parents practice either always or most of the time in general physical play activities such as tickling and moving limbs. 43% always 39.7% most of the time, 14.3% about half the time and 2.7% seldom played finger games like “ Anna Saaru thuppa...”, “ Ithe Ithe bass re mora” with children. 41% of parents always to most of the time engaged themselves in active physical play with their children always and 34% of children most of the time played alone with the toys or played with their siblings. 49.7% always and 36% most of the time engaged in fine motor activities like holding or grasping a toy. On the contrary 13.3% of children engaged half the time to 1% of children who seldom did. 32.3% to 50.7% of parents allowed their children to experiment with toys, most of them to always respectively. The children engaged in push and pull activities ranging from 10.3% of the time, 37.7% most of the time to 52% always. 35.7% most of the time to 54% always children played with noise making toys such as rattles and bells. 34.3% to 55.3% of children played with colourful toys. Only n= 2 to 9 parents seldom engage the children in the play activities.(Table 4)

A positive linear correlation found between Knowledge and Attitude ($r=0.336, p<0.001$), Knowledge and Practice ($r=0.202, p<0.001$) and Attitude and Practice ($r=0.375, p<0.001$) in this study. (Table 5). A Pearson correlation test was used to model the relation between knowledge, attitude and practice and found that for every unit increase in attitude, the practices was found to be increased by 0.16.

TABLES

Table 1: Sociodemographic Characteristics of 300 respondents

Sociodemographic Characteristics	No. of Participants(N=300) Frequency (Percentage)	No. of Participants(N=300) Numbers (Figures)
Relationship between respondent and the child		
Mother	85%	225
Father	15%	45
Socioeconomic status: According to modified BG Prasad Scale		
Class I [7533 and above]	61.3%	183.9
Class II [3766 – 7532]	22.5%	67.5

Class III [2260-3765]	7.3%		21.9	
Class IV [1130- 2259]	5.3%		15.9	
Class V [1129 and below]	3.6%		10.8	
Mothers and Fathers Education level	Mothers	Fathers	Mothers	Fathers
ILLITERATE	0%	0.3%	0	1
CAN JUST READ	2.3%	0.3%	7	1
CAN JUST READ AND WRITE	2.6%	3.3%	8	10
PRIMARY	11.6%	5.8%	35	17
MIDDLE	31.1%	18.5%	93	56
HIGH SCHOOL	30.5%	33.1%	91	99
GRADUATE AND ABOVE	21.9%	38.7%	66	116
Mothers and Fathers Occupational level	Mothers	Fathers	Mothers	Fathers
None	50.3%	2.6%	151	8
Labourer	5%	9.6%	15	29
Caste Occupation	5.6%	10.6%	17	32
Business	4%	30.9%	12	92
Independent Profession	21.9%	20%	66	60
Cultivation	8.2%	11.3%	24	34
Service	5%	15.0%	15	45

Table 2: Knowledge of the parents regarding the role of early exposure of playmaterials in child development.

Sr no	Questions	Strongly (disagree)		(Disagree)		Undecided		Agree		Strongly (Agree)	
1.	IT IS GOOD TO LET CHILDREN EXPLORE AND EXPERIMENT	0.7%	2	0.3%	1	8.6%	26	50.7%	153	39.7%	118
2.	CHILDREN LEARN A LOT BY JUST PLAYING	2%	6	0.7%	2	6.6%	20	44.7%	134	46%	138
3	A GOOD TOY NEED NOT BE EXPENSIVE	7%	21	8.3%	25	35.1%	105	18.5%	56	31.1%	93
4	IT IS GOOD TO EXPOSE THE CHILD AT AN EARLY AGE TO A VARIETY OF TOYS	1.3%	4	1.3%	4	7%	21	41.1%	123	49.3%	148
5	PARENTS CAN HELP THE CHILD BY	0%	0	0.3%	1	8.3%	25	26.5%	80	64.9%	194

	HOLDING A TOY TO ENCOURAGE THE CHILD TO HOLD, THROW OR FEEL THE TOY										
6	PARENT IS AWARE OF THE DIFFERENT TYPES OF PLAY MATERIALS AVAILABLE	2.6%	8	2.3%	7	13.9%	41	32.5%	98	48.7%	146
7	PARENT GIVES A RESPONSE TO YOUR CHILD, WHEN HE/SHE IS PLAYING OR MAKING NOISE	0%	0	1.3%	4	6.3%	19	29.1%	87	63.3%	190
8	PLAY CAN PROMOTE SKILL DEVELOPMENT	0.7%	2	1.3%	4	5.6%	17	34.5%	103	57.9%	174
9	PLAY IS ESSENTIAL FOR CHILD DEVELOPMENT AND PROMOTES AN EXPERIENCE TO BUILD THE FOUNDATION	0.7%	2	1.3%	4	3.6%	11	33.8%	101	60.6%	182
10	AN ENVIRONMENT ENRICHED WITH PLAY MATERIALS AROUND IS IMPORTANT FOR THE CHILD'S DEVELOPMENT	0.3%	1	0.7%	2	5.3%	16	32.8%	98	60.9%	183
11	EARLY PLAYING IS ASSOCIATED WITH HIGH INTELLIGENCE LATER IN LIFE	0.3%	1	0.3%	1	7%	21	34.5%	104	57.9%	173
12	PLAYING CAN ENHANCE CHILD'S TEXTUAL, LOGICAL, SOCIAL AND COMMUNICATION SKILLS	0.3%	1	0.3%	1	6%	18	33.1%	99	60.3%	181
13	PLAYING CAN STRENGTHEN RELATIONSHIPS WITH CARETAKERS AND PEERS	0.7%	2	0%	0	5%	15	19.8%	59	74.5%	224
14	PLAY SHOULD ALWAYS INVOLVE	0.7%	2	3.6%	11	15.9%	48	29.5%	88	50.3%	151

	ADULTS										
15	CHILDREN START TO LEARN, WHILE PLAYING AS EARLY AS 1-2 MONTHS OF AGE	0.3%	1	0%	0	8.6%	26	31.8%	95	59.3%	178
16	A CHILD SHOULD BE GIVEN GENDER SPECIFIC TOYS. FOR EG – GIRLS CAN BE GIVEN DOLLS.AND KITCHEN SET BOYS SHOULD BE GIVEN CARS AND BIKES.	17.2%	52	15.2%	46	32.5%	98	27.8%	82	7.3%	22

Table 3: Attitude of the parents regarding the role of early exposure of play materials in child development.

SR NO	Questions	NEVER	SOMETIMES	OFTEN	ALWAYS				
1	I AM TOO BUSY TO PLAY WITH MY CHILD, WHEN HE/SHE WANTS TO PLAY WITH ME (INVOLVEMENT)	40.7%	122	38%	114	16%	48	5.3%	16
2	IF MY CHILD WANTS TO PLAY WITH ME, I STOP WHAT I AM DOING AND PLAY WITH MY CHILD	32.8%	98	28.2%	85	15.2%	46	23.8%	71
3	WHEN MY CHILD WANTS TO PLAY WITH ME, I ENCOURAGE HIM/HER TO PLAY TOYS ALONE SO THAT I CAN GET WITH OTHER JOBS	33.2%	100	30.1%	90	21.5%	65	15.2%	45
4	SOME DAYS GO WITHOUT ME HAVING ANY TIME TO PLAY WITH MY CHILD	51%	153	19.5%	59	13.6%	41	15.9%	47
5	I AVOID PLAYING WITH	44%	132	26.8%	80	14.6%	44	14.6%	44

	MY CHILD, WHEN I'VE HAD A LONG DAY (ENJOYMENT)								
6	PLAYING WITH MY CHILD CAN BE A CHORE	42%	126	29%	87	12.5%	38	16.5%	49
7	IT IS MORE CONVINIENTWHEN MY CHILD ENJOYS PLAYING ON HIS/HER OWN, WITHOUT ME HAVING THE NEED TO PLAY WITH THEM	31.8%	95	33.1%	99	21.5%	65	13.6%	41
8	I TAKE THE OPPURUNITY TO PLAY WITH MY CHILD	0%	0	7.9%	24	48.4%	145	43.7%	131
9	WHEN MY CHILD LOSES INTEREST IN A GAME OR PLAY MATERIAL, I ENGAGE HIM/HER IN A NEW GAME	0.3%	1	17.5%	53	33.4%	100	48.8%	146
10	I DECIDE HOW AND WITH WHAT PLAY MATERIAL MY CHILDPPLAYS WITH (STRUCTURED)	0.7%	2	14.6%	44	41.7%	125	43%	129
11	I PROVIDE TOYS THAT CHALLENGE MY CHILD TO DEVELOP SKILLS	0%	0	14.2%	43	36.4%	109	49.4%	148
12	I SCHEDULE TIME TO PLAY WITH MY CHILD	0.7%	2	7%	21	47%	141	45.3%	136
13	I LET MY CHILD DECIDEWHAT PLAY MATERIALHE/ SHE SHOULD PLAY WITH AND HOW WE PLAY WITH IT	1%	3	10.2%	30	37.6%	113	51.2%	154

Table 4: Practice of the parents regarding the role of early exposure of play materials in child development.

Srno	Questions	NO		IF YES, SEL DOM		ABOUT THE HALFOF TIME		MOST OF THE TIME		ALWAYS	
		%		%		%		%		%	
1	DOES YOUR CHILD TAKE PART IN GENTLE PHYSICAL PLAY SUCH AS TICKLING AND MOVING LIMBS	0%	0	0.7%	2	17.5%	53	42.1%	126	39.7%	119
2	DOES YOUR CHILD PLAY FINGER GAMES LIKE "ITHE ITHE BASS RE MORA", "ANNA SAARU TUPPA"	0%	0	2.6%	8	14.6%	44	39.8%	119	43%	129

3	DO YOU ENGAGE YOURSELF IN ACTIVE PHYSICAL PLAY WITH YOUR CHILD LIKE SWINGING YOUR CHILD, ROUGH AND TUMBLE, CLAPPING GAMES? (GROSS MOTOR)	0%	0	2%	6	13%	39	40%	120	45%	135
4	DOES YOUR CHILD PLAY ALONE WITH THE TOYS OR PLAYS WITH THE SIBLINGS? (SOLITARY/PARALLEL PLAY)	0.3%	1	0.3%	1	15.9%	48	34.1%	102	49.4%	148
5	DOES YOUR CHILD PLAY BY HOLDING, GRASPING (A TOY, PENCIL, SPOON) SHAKING, THROWING THE TOY? (FM)	0%	0	1.5%	5	13.8%	41	35.8%	107	48.9%	147
6	DO YOU ALLOW YOUR CHILD TO EXPERIMENT WITH TOYS?	0%	0	2.1%	6	13.5%	41	35%	105	49.4%	148
7	DOES YOUR CHILD ENGAGE IN PULL AND PUSH ACTIVITIES? FOR EG – CLOTH AND STRINGS	0%	0	0%	0	10.9%	33	39.1%	117	50%	150
8	DOES YOUR CHILD PLAY WITH NOISE MAKING TOYS? FOR EG – RATTLES AND BELLS. (NOISE)	0%	0	0%	0	10.6%	32	36.1%	108	53.3%	160
9	DOES YOUR CHILD LIKE TO PLAY WITH COLOURFUL TOYS? (COGNITIVE)	0%	0	0.7%	2	10.6%	32	34.4%	103	54.3%	163
10	DO YOU ENCOURAGE YOUR CHILD TO PLAY WITH DIFFERENT SHAPED AND TEXTURED TOY? (COGNITIVE)	0%	0	0.3%	1	9.3%	28	41.4%	124	49%	147

11	DOES YOUR CHILD TRY TO REPEAT THE WORDS(MONOSYLLABLES /BISYLLABLES) WHEN YOU RECITE A POEM ORSING ALOUD? (LANGUAGE)	0%	0	1.5%	5	12.5%	37	35%	105	51%	153
12	DOES YOUR CHILD PLAY TURN TAKING GAMES SUCH AS “WHERE’S THE BABY”, “PEEK-A-BOO”?	0%	0	0.7%	2	9.9%	30	34.1 %	102	55.3%	166
13	DO YOU MAKE DIFFERENT FACIAL EXPRESSIONS FOR THECHILD TO IMITATE OR WAVE AT THE BABY? (SOCIO-EMOTIONAL)	0%	0	0.7%	2	12.3%	37	32%	96	55%	165

TABLE 5: Relation between knowledge, attitude, and practice

	Pearson correlation	p value
Knowledge & Attitude	0.336	< 0.001*
Knowledge & Practice	0.202	< 0.001*
Attitude & Practice	0.375	< 0.001*

Pearson Correlation Test (* Significant p<0.05)

DISCUSSION

In this study a structured questionnaires were interviewed with parents who visited at Well Baby Clinic and at tertiary care hospital Belagavi. This study focused on knowledge, attitude, and practice among parents regarding the role of early exposure to play materials in child development.

In the present study, parents did have a good knowledge regarding allowing the children to explore and experiment during play. The findings could be related to the parent's education levels and occupation status. The parents in the present study mostly had middle school education and belonged to higher socio-economic status. In support with our findings, a study found that the key influencing elements include the educational level of the mother and father, the mother's employment status, and the wealth index which influences the quality of home environment which is responsible for exposing the child to different play materials.⁷ Parents with better socio-economic status can provide more play materials, better infrastructure and a good physical environment to their children.⁸ According to a study, families with lesser socio-economic status assume that the most expensive toys are the best ones, or preschool readiness for children only comes from exposure to a variety of enrichment materials.⁹ But children's development is enhanced with the most basic and least expensive toys such as blocks, dolls, art supplies or any other available toys at home. On the contrary to this, our study revealed that most of the parents still believed toys should be expensive and gender specific.

In our study parents agreed that play materials can enhance the textual, logical, social and communication skills and promotes an experience to build the foundation for the infants development. A study done where play serves multiple functions in social and emotional domains such as providing opportunities for the involved participants to share emotions.¹⁰ A study also showed that for children, concrete visual cues (toy

touch, manipulation of toys) reinforce a goal and sustains attention¹¹ which can also be associated with a study which showed that children behaviors might include touching or handling objects, thereby contributing to toddlers socio-emotional skills. However, our research shows that parents always involved themselves in playing with the infants and encouraged them to play with more play materials and often planned a structured play by deciding with what play material the infant can play.

According to studies, infants who play with toys without any visual clues may have fewer opportunities to develop important socioemotional abilities which includes sharing of toys, turn-taking, controlling impulses and focusing on tasks.¹² Our study showed that majority of the parents decide the play material with which their child plays.

While the Attitude of the parents regarding the same was seen in our study, our results showed that parents engaged themselves with their children in active physical play, gentle physical play, finger games (“Ithe Ithe bass re more”, “Anna Saaru tuppā”, Turn taking games (“Where’s the baby? “Peek-a-boo”), push and pull activities. Parents also encouraged their children to play with different textured and colorful toys. A study which proved that cognitive development is facilitated through the use of different toys in children by manipulating and exploring the toys, they learn about the stimulus, how it might be used, to solve problems related to it, and how it might interrelate to other aspects of their environmental experiences.¹³

Previous studies have shown that playing with gender specific toys reinforces gender stereotypes since it limits the range of available activities for kids and directs their behaviour.¹⁴ By encouraging kids to participate in activities related to, for instance, dolls and trucks, parentally provided toys spread some of the earliest gender-based messages.¹⁵ In our study, half of the parents believed that gender specific toys should not be given to the children, the associated stigma should be eliminated and the awareness about the same should be given in the community. In our study parents provide their children the toys that challenge them to develop skills which is also in consistent with the study done which concluded that play helps children adjust to the school setting and enhances children’s learning readiness, social and communication skills, learning behaviors, and problem-solving skills.¹⁶

According to our study, parents made different facial expressions for the child to imitate or wave at the baby and also asked the child to repeat the words (monosyllables /disyllables) when they recited a poem or sang aloud. These different gestures, imitations, vocalizations and responses to the prelinguistic behaviors are associated with language outcomes in children according to another study done.

Furthermore, a number of studies that the increasing levels of feedback by parents to child’s communicative behavior increases the quality and quantity of prelinguistic vocalizations.¹⁷ According to a study, Siblings are often children’s first playmates and thus provide an experience for reciprocal play, which involves sharing and collaboration¹⁸, this is consistent with our study response where children played alone and as well as with their siblings with the toys.

The survey identified a highly positive attitude among parents towards early exposure to play materials in child development. As there is a positive linear correlation found between knowledge, attitude and practice, according to the study the good knowledge in parents might lead to positive attitude and a good practice in parents regarding the early exposure of play materials in children.

REFERENCES

1. Ghai, O. P. (2005). Essential of Pediatrics, New Delhi: Dr.
2. Healey, A., Mendelsohn, A., Childhood, C. O. E., Sells, J. M., Donoghue, E., Earls, M., ... & Williams, P. G. (2019). Selecting appropriate toys for young children in the digital era. *Pediatrics*, 143(1).
3. Ford, N. D., & Stein, A. D. (2016). Risk factors affecting child cognitive development: a summary of nutrition, environment, and maternal–child interaction indicators for sub-Saharan Africa. *Journal of developmental origins of health and disease*, 7(2), 197-217.
4. Poresky, R. H. (1996). Companion animals and other factors affecting young children’s development. *Anthrozoös*, 9(4), 159-168.
5. Deave, T., Heron, J., Evans, J., & Emond, A. (2008). The impact of maternal depression in pregnancy on early child development. *BJOG: An International Journal of Obstetrics & Gynaecology*, 115(8), 1043-1051.
6. Karuppanan, A., Ramamoorthy, T., Rammamoorthi, A., & Ravichandran, L. (2020). Mother’s knowledge on child’s developmental milestones and parenting skills in Kanchipuram District, Tamilnadu: a descriptive cross sectional study. *Int J Health Sci Res [Internet]*, 10(2), 242-7.

7. Sk, R., & Banerjee, A. (2021). Measuring the child's home learning environment and its associated factors in Malda: A micro-level study in India. *Children and Youth Services Review, 125*, 105984.
8. Shaari, M. F., & Ahmad, S. S. (2016). Physical learning environment: Impact on children school readiness in Malaysian preschools. *Procedia-Social and Behavioral Sciences, 222*, 9-18.
9. Milteer, R. M., Ginsburg, K. R., Council on Communications and Media Committee on Psychosocial Aspects of Child and Family Health, Mulligan, D. A., Ameenuddin, N., Brown, A., ... & Swanson, W. S. (2012). The importance of play in promoting healthy child development and maintaining strong parent-child bond: Focus on children in poverty. *Pediatrics, 129*(1), e204-e213.
10. Nandy, A., Nixon, E., & Quigley, J. (2020). Parental toy play and toddlers' socio-emotional development: The moderating role of coparenting dynamics. *Infant Behavior and Development, 60*, 101465.
- 11 Anderson, D. R., & Davidson, M. C. (2019). Receptive versus interactive video screens: A role for the brain's default mode network in learning from media. *Computers in Human Behavior, 99*, 168-180.
- 12Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., Golinkoff, R. M., Baum, R., ... & COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH. (2018). The power of play: A pediatric role in enhancing development in young children. *Pediatrics, 142*(3).
13. Peretti, P. O., & Sydney, T. M. (1984). Parental toy choice stereotyping and its effects on child toy preference and sex-role typing. *Social Behavior and Personality: an international journal, 12*(2), 213-216.
14. Goldberg, A. E., Kashy, D. A., & Smith, J. Z. (2012). Gender-typed play behavior in early childhood: Adopted children with lesbian, gay, and heterosexual parents. *Sex roles, 67*, 503-515.
15. Boe, J. L., & Woods, R. J. (2018). Parents' influence on infants' gender-typed toy preferences. *Sex Roles, 79*, 358-373.
16. Social, I. Y. C. (2004). Strengthening Social and Emotional Competence in Young Children—The Foundation for Early School Readiness and Success. *Infants and Young Children, 17*(2), 96-113.
17. Miller, J. L., Lossia, A., Suarez-Rivera, C., & Gros-Louis, J. (2017). Toys that squeak: Toy type impacts quality and quantity of parent-child interactions. *First Language, 37*(6), 630-647.
18. Hughes, C., McHarg, G., & White, N. (2018). Sibling influences on prosocial behavior. *Current opinion in psychology, 20*, 96-10