IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 14, Issue 7 Ver. I (July. 2015), PP 124-128
www.iosrjournals.org

Play In India: A Comparison between Children from Different Socio-Economic Groups

Parinitha P. Shetty, Naema Laila, Archana Rai
Nitte Institute of Speech & Hearing, Mangalore University, India

Abstract: *Play reflects advances in social, cognitive, motor and language skills and conversely provides opportunities for these skills to develop further. Therefore, the data on developmental norms of play serves to benefit the assessment and rehabilitation of children with developmental issues, when no other behavioral responses can be satisfactorily obtained for observation. Given India's diversity in economic, cultural and social factors, the current study explores if differences in children's economic background affects their play behavior. 20 children, aged 3;6-4;6 years, 10 each from Private and Government-run Schools were selected to play freely with the toys, which was video recorded for 15 minutes. Each child was later analyzed separately for frequency of all the stages of play development. Comparison of play was made between the 2 socio-economic groups. No difference was seen between both groups for different plays except for relational play which was higher in frequency in urban children.*

Keywords: *children, Indian, play, socio-economic*

I. Introduction

Play, a behavior inseparable from children, has been realized as a behavior manifested not just for fun, rather as a means to understand one's environment and to build on one's physical abilities. It is described as any activity by the child that is intrinsically motivated, freely chosen, pleasurable, non-literal and involving active engagement by the child physically/psychologically or both [1]. A leading proponent of play theory states that while playing, children are not only developing their neurological foundations that will enable problem solving, language and creativity, but also enables learning how to relate to others, how to calibrate their muscles and bodies and how to think in abstract terms [2]. From neurobiological and neuropsychological perspectives, authors in their book on play have cited, "Without play, Panksepp suggests, optimal learning, normal social functioning, self control and other executive functions might not mature properly"[3].

A normal child goes through 5 developmental stages of play namely exploratory play, relational play, self-pretend play, simple pretend play and sequence pretend play, where exploratory play is a stage of play with toys or objects observed in children as soon as they are able to hold it. It involves different actions like dropping, throwing, mouthing, shaking, hitting, examining, feeling or rubbing. In relational play, children discover the ability to relate objects one to another such as banging one object with the other or stacking toys one over the other. In the stage of self -pretend play children emerge with the ability to imitate actions of others and use imagination to let one object represent the other, such as using toy cup to represent real cup and pretending to drink from it. In simple pretend play, children begin to relate their actions to a doll or toy animal such as pretending to feed the animal or doll. When children are able to sustain their pretend play for much longer and link their actions into a simple sequence it is called sequence pretend play. For example making bed and making a doll sleep and feeding milk with a bottle [4]. These stages are studied by different researchers and have reported the age at which these plays are seen in children. One of the studies report that exploratory play, which is also referred to as sensory motor play to occur in children around 9-15 months [5]. The same play is documented in another study to occur around 6 months and the next stage of play, which is relational play to occur by 9 months [4]. The representational stage of play or pretend play is reported to be seen around 15 - 24 months in one study[5], 18 months-4 years in another similar study [6] and around 18 months, 24 months and 36 months according to a study which further categorized the play as self-pretend play, simple pretend play and sequence pretend play respectively [4]. Much of the pretend play at self pretend stage may not last long and may be followed by less mature play such as piling toys on top of one another or rubbing them together[4].

Researchers since the early 1950s have extensively studied play behavior to understand the relationship between a child's play with different developmental domains such as cognition [6,7,8,9], affect [10,11,12], literacy [13] and language [14,15,16,17,18,19,20,21,22,23,24,25] and have shown that play has positive effect on development of these domains. Therefore, documenting the development of play facilitates understanding and base lining of other developmental domains.

This is especially useful during the assessment of children suspected of developmental delay/ disabilities, where normative data on play alone may serve as a valuable tool when no other behavioral responses can be satisfactorily obtained for observation.

Although, research on play development has been documented widely in western literature, not much research has been carried out in Indian context, a country which is diverse in social and cultural status. Research on play behavior in India has documented play activities exhibited using different objects [26], gender differences [27,28] and preference between object and people [29]. Accounting for the dearth of literature on different stages of play exhibited at different ages, the current study is undertaken.

II. Need

Reflects advances in social, cognitive, motor and language skills and conversely provides opportunities for these skills to develop further. Hence data on developmental norms of play serves to benefit in the assessment and rehabilitation of children with developmental issues when no other behavioral responses can be satisfactorily obtained for observation. Given India's diversity in social, economic, cultural and linguistic factors, western norms if used on the Indian population may not give valid results. Hence the current study is carried out that looks at documenting play behavior in children aged 3;6-4;6 years from 2 different commonly seen socio-economic groups of the nation.

III. Aim

To obtain frequency of play in typically developing 3;6 – 4;6 years old Indian children from 2 different socio-economic backgrounds. To determine if statistically significant difference exists when the stages of play are compared between the groups of children with different socio-economic status

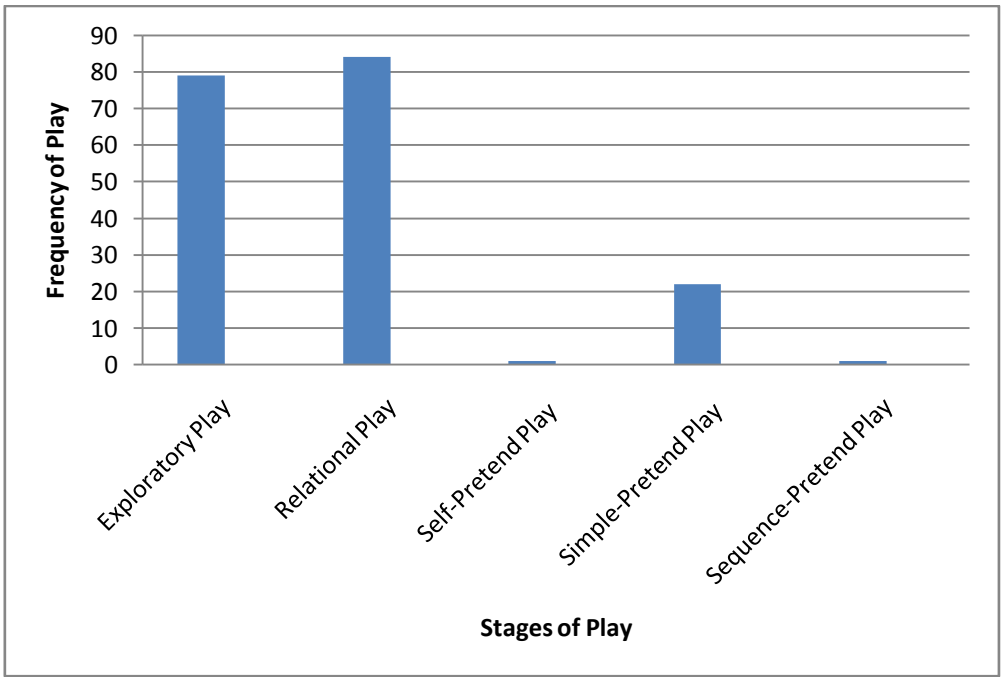
IV. Method

Subjects: 10 children (mean age= 4.1 years) attending a privately run kindergarten school in Mangaluru, a corporation city of Dakshin Kannada district were considered. Average annual income of their parents was greater than 3 lakhs. 10 children (mean age = 4 years) attending Government-run Kindergarten, about 10 km from Puttur, a town located in the same district were considered. Average annual income of their parents was less than 1 lakh. Information on parents' annual income was obtained from the schools' head. All subjects were informally screened for any visual, speech, language or hearing problems by the Speech- Language Pathologists.

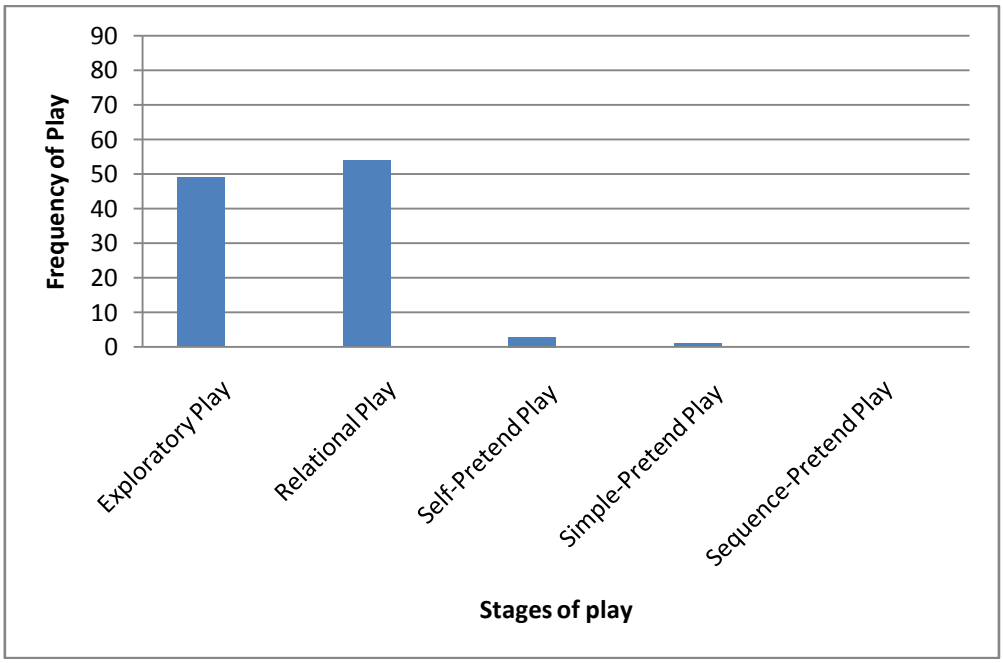
Stimulus: Stimuli consisted of toys that were available at schools where the data was intended to be obtained. The 2 schools differed in the availability of variety and number of toys. Private School had toys consisting of ring stands, bead stands, rattles, balls, animal and fruit models, toy cars, teddy bears, puppets, and dolls with toy feeding bottles, toy cups, toy jugs, toy comb and building blocks. Each child had access to 4-5 toys at any given. The Government-run School had toys consisting of building blocks, models of vehicles, fruits, vegetables and animals; and children attending this school had access to 1-2 objects at any given time.

Procedure: Permission to carry out the study was duly obtained from the school authority. No instructions regarding the use of toys were given. All children were left free to play. This was video recorded using Nikon digital camera of 10.0 mega pixel for 15 minutes. Each child was later analyzed separately for frequency of all the stages of play development. A tabular column was drawn with 5 stages of play for each subject. A score of 1 was given to each kind of play that was exhibited by the child during the recording time. Frequency of play obtained for each kind of play in the 2 groups are graphically represented in Graph 1 and 2 below. Scoring for different kinds of play for each subject was done by 2 observers. Only those play behaviors exhibited by children that were judged similarly by both observers as the kind of play described for exploratory, relational, self-pretend, simple pretend and sequence pretend play [4] were considered.

V. Results



Graph 1: Frequency of play summed across 10 subjects for each stage of play in children attending Private School



Graph 2: Frequency of play summed across 10 subjects for each stage of play in children attending Government School

Results showed that children who came from higher socio-economic conditions (as seen in Graph 1) exhibited relational play (Frequency=84) and exploratory play (Frequency=79) as the most frequent plays. Simple pretend play occurred with lesser frequency (22 times), while self and sequence pretend plays occurred with a frequency of just once. Mann-Whitney U-Test was carried out to determine if relational or exploratory stage of play dominated the age group of children with high socio-economic status. Results revealed no significant difference in the frequencies of relational (Mdn=8.5) and exploratory (Mdn=9) plays ($U=49.5$, $Z=0$, $p>0.05$).

Similarly, children who came from lower socio-economic conditions (as seen in Graph 2) exhibited relational (Frequency=54) and exploratory play (Frequency=49) as the most frequent plays. Similar to the findings in children attending Private School, pretend plays occurred at lesser frequency, with self pretend play occurring at a frequency of 3 times, simple pretend play with a frequency of just once, and absent sequence play. Mann-Whitney U-Test was carried out on this group of children too, to determine if relational or exploratory stage of play dominated the plays. Results showed no significant difference in the frequencies of relational (Mdn=5) and exploratory (Mdn=4) plays ($U=41.5$, $Z=0.6$, $p>0.05$), the findings that was similar to what was observed among children attending Private School.

When statistical comparison of the stages of play was made between children from high and low socio-economic backgrounds, it was seen that there were no statistically significant differences between exploratory plays (Mdn=9,4; $U=28$, $Z=1.6$, $p>0.05$,), self pretend plays (Mdn=0,0;$U=49.5$, $Z=0$, $p>0.05$), simple pretend plays (Mdn=1,0;$U=23.5$, $Z=1.97$, $p>0.05$) and sequence pretend plays (Mdn=0,0; $U=45$, $Z=0.34$, $p>0.05$) on Mann-Whitney U-Test. However, statistically significant difference was observed when relational play exhibited by children attending Government School (Mdn=5) was compared with relational play exhibited by children attending Private School (Mdn=8.5), $U=11.5$, $Z=2.94$, $p<0.05$.

VI. Discussion

The study aimed to understand if children from different socio-economic conditions, with differences in exposure to the variety and number of toys, manifested play behaviors differently. For this 20 children, 10 each from Private and Government-run Schools aged 3;6 – 4;6 years were analyzed for the occurrence of different kinds of play behaviors. The Government-run School was lower in toy varieties and child to toy ratio compared to the Private School.

Statistical analysis revealed relational and exploratory plays as most frequent plays in both groups of children who came from 2 different socio-economic conditions (high and low). This is in contrast to the findings documented in western literature which report these plays to be prominent in children before the age of 15 months [4,5]. Pretend plays occurred in both groups at lesser frequencies, the plays that should have been frequently occurring in the age group that was considered in the present study [4,6]. However the findings cannot be observed as being contradictory, given the reports in previous literature that the stage of pretend play may not last long and could be followed by less mature plays like exploratory or relational [4]

There was no difference between the frequencies of different stages of play exhibited by children from both groups with different socio-economic status, except for relational play. Relational play occurred at a significantly lower frequency in children with lower socio-economic status, who attended the Government-run School. This difference could be attributed to the limited access of play materials per child in the Government-run School compared to the children attending Private School. However this observation needs to be interpreted with caution, given the recording duration which was limited to 15 minutes. Further research in the same age group with extended recording duration could be carried out to substantiate the current findings.

VII. Conclusion

Comparison of play frequency data between children from different socio-economic status in the age group of 3;6-4;6 years showed that socio- economic differences did not affect play development in either of the groups except for the kind of play that required access to several toys. Toys differed in number and variety in schools attended by the 2 groups of children which could be the probable reason for the current findings. However lengthened recording duration or re-observation on provision of additional toys is warranted before drawing concrete conclusions on the differences in relational plays in the 2 groups.

The data from the current study when combined with the normative data in other developmental domains of children in a culturally, linguistically and socially complex nation like India would be useful in the assessment of children with developmental delay/disabilities, when no other behavioral responses can be satisfactorily obtained.

Limitations: Information on the use of toys at home by both groups of children could not be obtained.

Future directions: Inclusion of larger sample to better represent the population with increased recording duration.

Acknowledgement

Our immense thanks to our Principal, Prof. T. Dattatreya, Nitte Institute of Speech and Hearing, Mangalore, for his encouragement and support in carrying out this study.

References

[1] Rubin, K. H., Fein, G.C., & Vanderberg, B. (1983). Play. In P.H. Mussen (Ed.), Handbook of child psychology (4th ed., pp. 693-774). New York: Wiley.

[2] Sutton-Smith, B. (1997). The Ambiguity of play. Cambridge, MA.: Harvard University Press
[3] Brown, S., & Vaughan, C. (2009). Play: How it shapes the brain, opens the imagination, and invigorates the soul (p.100) New York, NY: Avery
[4] Jeffrey, G. (1986). The Education of children and young people who are mentally handicapped. Paris: UNESCO.
[5] Rosenblatt, D. (1977). Developmental trends in infant play. In B. Tizard & D. Harvey, The Biology of Play (pp. 33–44). Philadelphia, PA: Lippincott.
[6] Piaget, J. (1951). Plays, dreams, and imitation in childhood. London: Routledge and Kegan Paul Ltd.
[7] Lifter, K., & Bloom, L. (1998). Intention and the role of play in the transition to language. In A. Wetherby, S. Warren, & J. Reichle (Eds.). Transitions in prelinguistic communication (Vol. 7, pp. 161–196). Baltimore: Brookes.
[8] Nicolich, L. (1977). Beyond sensorimotor Intelligence: Assessment of Symbolic Maturity through Analysis of Pretend Play. Merrill-Palmer Quarterly, 23, 89–99.
[9] Rossetti, L. (2001). Communication intervention: Birth to three (2nd ed.). San Diego, CA: Singular
[10] Russ, S. (1987). Assessment of cognitive affective interaction in children: Creativity, fantasy, and play research. In J. Butcher & C. Spielberger, Advances in personality assessment (pp. 141–155). Hillsdale, NJ: Lawrence Erlbaum Associates.
[11] Singer, J. L. (1973). The Child's world of make-believe. New York: Academic Press.
[12] Singer, D. G., & Singer, J. L. (1990). The house of make-believe: Children's play and the developing imagination. Cambridge, MA: Harvard University Press.
[13] Roskos, K., & Christie, J, F. (2000). Play and literacy in early childhood: Research from multiple perspectives (2nded.). CA: Lawrence Erlbraum Associates.
[14] Bates, E., Benigni, L., Bretherton, I., Camaioni, L., & Volterra, V. (1979). The Emergence of symbols: Cognition and communication in infancy. New York: Academic Press.
[15] Bates, E., Bretherton, I., Snyder, L., Shore, C., & Volterra, V. (1980). Vocal and gestural symbols at 13 months. Merrill-Palmer Quarterly, 26, 407–423.
[16] Belsky, J., & Most, R. (1981). From exploration to play: A cross-sectional study of infant free play behavior. Developmental Psychology, 17, 603– 639.
[17] Casby, M. W., & Della Corte, M. (1987). Symbolic play performance and early language development. Journal of Psycholinguistic Research, 16, 31–42.
[18] Casby, M. W., & Ruder, K. (1983). Symbolic play and early language development in normal and mentally retarded children. Journal of Speech and Hearing Research, 26, 404–411.
[19] Lifter, K., & Bloom, L. (1998). Intention and the role of play in the transition to language. In A. Wetherby, S. Warren, & J. Reichle (Eds.). Transitions in prelinguistic communication (Vol. 7, pp. 161–196). Baltimore: Brookes.
[20] McCune, L. (1995). A normative study of representational play at the transition to language. Developmental Psychology, 31, 198–206.
[21] McCune-Nicolich, L. (1981). Toward Symbolic Functioning: Structure of Early Pretend Games and Potential Parallels with Language. Child Development, 52, 785–797.
[22] Nicolich, L. (1977). Beyond sensorimotor intelligence: Assessment of symbolic maturity through analysis of pretend play. Merrill-Palmer Quarterly, 23, 89–99.
[23] Ogura, T. (1991). A Longitudinal study of the relationship between early language development and play development. Journal of Child Language, 18, 273–294.
[24] Shore, C., O'Connell, B., & Bates, E. (1984). First sentences in language and symbolic play. Developmental Psychology, 20, 872–880.
[25] Veneziano, E. (1981). Early language and nonverbal representation: A reassessment. Journal of Child Language, 8, 541–563.
[26] Bhargava, P. (2010). Children's understanding of self and others. Unpublished Doctoral Dissertation, University of Delhi, India.
[27] Chaudhary N. (2012). Parents' beliefs, socialization practices and children's development in Indian families. Unpublished report of a major research project funded by the university grants commission, New Delhi.
[28] Subhash, P.D. (2010). Gender differences in free play of preschool children in select cultural settings of Kerala. Kottayam, Kerala: Mahatma Gandhi University.
[29] Mehra, V. (1995). Parental perceptions and patterns of young children's' play. Unpublished Master's Dissertation, University of Delhi, India.