

ROLE OF TOYS AND PLAY IN THE DEVELOPMENTAL STIMULATION OF CHILDREN

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ABSTRACT

“Play is not a break from learning—it’s the way children learn.” A wealth of lifetime advantages is the reward for playing with toys as a child. From immediate to long term benefits, for children’s early development and on-going growth are many e.g. skill development social development and imagination and creativity. Negative effects of staying indoors on kids’ - poor health, poor social skills, dependency on electronics, lack of creativity. This review is deals with the knowledge of ideal toys age by age in healthy children and differently challenged children’s it covers modern as well as Ayurvedic literatures.

Keywords: Toys, play, growth and development

INTRODUCTION

Toys are existing in our society from ancient time as long as toys have existed they have reflected the cultures, society, activities and have played important role in the development of the physique and mind. Toys excavated from the Indus valley civilization (3000-1500 BC) are Wheel cart Rattle, Dice etc. Gaming in Mohenjodaro-an archaeology of unities Elkerogersdotter found that every 10th item found is related to play. According to American academy of Paediatrics play is essential to

development because it contributes to the cognitive, physical, social, and emotional well-being of children and youth. Play enhances the progress of early development from 33-67% by increasing adjustment in language and reducing social and emotional problems¹. Toys and play plays an important role for early stimulation in a high risk child. Play improves their quality of life and activity daily living. When child plays with toys, this helps them to understand the benefits and importance of co-

operating and the need to follow rules as well as developing their own self-control.

Characteristic of ideal toys: Some toys have a powerful influence on children's thinking, interaction with peers, and creative expression. Other toys do not. Some of the toys that look most interesting to adults are not particularly effective in promoting development.

Toys should be selected, not collected: Interest and attention, Exploration of real life experiences, Nontoxic material, Development self-control, Expression of feelings, Teach a skill or concept.

Kreedanaka:

Kreedanaka should be given for playing to an infant when the *upvishansamskara*, *an-naprashanasamskara* etc is to be carried out in *Astanga Samgraha*, *CharakaSamhita* etc books, characteristics of ideal toys for infants have been described as-

Vagbatha says the toys should be made of *lac (lakh)*, making sound and of many colors, not frightening, pleasant, big in size, not having sharp points being models cow, horse fruits or such other auspicious things²

Acc to *Charaka* the toys of the child variegated, sounding, attractive, light, one without sharp edges, incapable of being swallowed, fraught with no danger to life and unfrighting³.

Kreedabhoomi: Prepare rounded or square area with the help of cow dung and water, in clean place of the center of the house or apartment/garden measuring four *hasta* about 72 inches; it should have plane or even surface; it should not have sharp weapons stones and pebbles; playground should be sprinkled with the *udakakwatha* prepared by the drugs of *vellaushana kana* or *nimba*⁴.

Toys and play in development of normal children

Age-by-age toy guide:

Infancy 1st year:

After birth (Up to 6 month), toys for this age are primarily for looking listening, sucking or fingering. Infants like to look at mother and others following with them with their eyes. Typically, they prefer faces and bright colors. Babies become fascinated with what their hands and feet can do, lift their heads turn toward sound, put things into their mouth etc. good toys for young infant's pictures of faces; unbreakable mirrors poems simple songs etc.

Older babies (7 to 12 month) are movers and they go from rolling over and sitting, to scooting, bouncing, crawling, pulling themselves up, and standing. They understand own names and other common words, can identify body parts, find hidden objects, and put things in and out of containers. Good toys for older infants' puppets, baby dolls, large wooden cubes etc. Infants play exploratory play & it stimulates Sensory and gross motor skills as shown in table no 1

Reasoning...

Initially, infants explore their world with eyes and ears only. The auditory system requires outside stimulation. This includes speech, music and sounds below 60db. There are excess numbers of hair cells present in cochlea and some will disappear if not connected or used similarly excess ganglionic cells are present in retina. High contrast and bold colours are used to stimulate⁵.

Toddler 1-3 yrs: Toddlers can walk steadily and even climb stairs. They get pleasure from stories and say their first words. They like to experiment- but need to keep them safe. Good

toys are cardboard and wood blocks, washable markers etc.

Toddlers play Constructive play and it helps in stimulation of fine motor, language and cognitive skills as shown in table no 2

Reasoning...

In the 2nd year of life, children are explorers filled with curiosity and wonder. A busy toddler needs toys for physical play as they gain strengths and practice fine-motor skills. Children imitate adults it help them to develop master life skills. Riding toys such as rocking horse stimulates motor skills like jumping running and balancing⁶

Pre-schooler: Pre-schoolers have longer attention spans than toddlers and talk a lot. They ask a lot of questions. They like to experiment with things and with their still emerging physical skills. They like to play with friends. They can take turn, sharing one toy with two or more children. Good toys are problem solving toys puzzles (12 to 20 pieces), blocks, things for pretending and building e.g. dolls with accessories

Pre-schoolers play dramatic play & stimulate social and behavioral skills as shown in table no 3

Reasoning...

Children begin to play actively with each other. Group play and constructive play develops cognitive functions such as working memory, self-regulation, self-talk. The ability to organize, focus, strategizes, initiates their plans and performs other skills that determine later success in school. Make believe plays stimulate their emotional and behavioural development

Play influences neurological development and determines how intricate neural circuits are wired. Among other research, positron-

emission tomography scans of Romanian orphans with play deprivation indicate that play is as essential to human development as other basic needs⁷.

SCHOOLER:

Schoolers play competitive play intellectual and social development which makes them a better human as shown in table no 4

Reasoning...

Children enjoy play that requires strategy and skills. They start playing with rules. Competition becomes a motivating force and challenge children to improve their emotional behaviour and to tolerate losing. Outdoor play has found to improve the child's attention to academic tasks that follow the playing period.

The International Association for the Evaluation of Educational Achievement (IEA) Pre-primary Project found that children's language performance at age 7 was significantly higher when teachers had allowed children to choose their own activities at age 4⁸.

Toys for differentially abled children:

Children who do not play or who is not stimulated are at increased risk of psychological, intellectual and social deficits⁹.

In visual impaired: Characteristic of play-look for multi sensorial toys¹⁰

Encourage symbolic representation & to use more imagination and fantasy. Support play by providing the opportunity to explore in a safe & familiar environments. Stimulate their other senses like hearing and touch. Noisy toys such as wooden duck that quacks when move, Matching games, Wikkistix, Sensory balls, Musical instruments, Skwish ball, Braille learning toys.

In hearing impaired: Characteristic of play: Children with hearing impairments are less affected in their play than children with visual impairments. Learning of language should be initiated early. Should create interest in make-believe play or fantasy play. Talking to your baby and singing are the most important things E.g. Sign language, Dancing, Toy phone, Musical instruments

Motor impairment: Characteristic of play: Physical activity can influence 8 components of physical fitness: agility, balance, amount of body fat, cardio-respiratory endurance, flexibility, muscular endurance, muscular strength, and anaerobic power¹¹.

Play that involves physical activity like use of wheel chairs and other physical assistance devices it can provide support to carry out daily self-care activities. Accept the child's limitation and modify their play. Focus on maximizing abilities – utilize individual strength. E.g. therapy balls, peanut balls, koosh ball, go go pogo, dough kneading, dyna gel soft balls, threading beads etc.

Mental disabilities: Characteristic of play: Child initiated activities should be encouraged. Less sophisticated and more functional play should be preferred. Parents and care givers should be taught to be playful and responsive to their children. Should encourage social interaction between children¹² E.g. Tobbles, stickers, balancing monkeys, fill and find monkey maths etc.

Language disabilities: Characteristic of play: Engage them in make-believe play. Encourage exhibit symbolic play. Include complexity in their play activities Initiate play with peer group.

At risk: Characteristic of play: Sensor-motor play, symbolic play and social play. The play of sensor-motor of at-risk children develops similar to that of non-risk, but if play indicates differences, it can give early intervention of a possible delay. At risk children should be stimulated with play and toys at early stages of development

Proportion of Disabled Population by Type of Disability India: 2011

Homemade rubbery goop:

Creativity and imagination, hand eye coordination sensory – development of the sense of the touch. Feeling and manipulating objects

Occupational therapies:

Occupational therapy is skilled treatment that helps people become successful in their everyday occupations.

Play therapy:

Play therapy is a technique where by the child's natural means of expression, namely play, is used as a therapeutic method to assist him/her in coping with emotional stress or trauma.

DISCUSSION

Nowadays, Preschoolers playtime is replaced by academic settings as parent's starts education by two and half year only. Children are spending the majority of their time in literacy and math's classes, leaving less than 30 minutes (and sometimes no time at all) for play. Research shows that the knowledge gained like this will fade by fourth grade¹³. So, let your child play and enjoy his childhood because that's the best way your child can learn.

Video gaming vs. Traditional games:

Traditional games plays an important role in development of children physically and socially where as modern games help just to pass

time while sitting at home and playing with computer games and making children more lazy. Video gaming gives adverse effect on the psychology of child. Research proves that there is an increased risk of aggressiveness, antisocial and behavioural disorders in children who play violent games. According to AAP, television and other electronic media should not introduce before age 3 yrs. early introduction may confuse child in between reality and fantasy.

Parent responsiveness: Promotes Assimilation Practice (Pivotal Behaviors)-Attention, persistence, interest, cooperation, initiation, joint attention, affect¹⁴.

Lifestyle disorders in children: Thus we know the cause of life style disorders is mainly alcohol, drugs and smoking as well as lack of physical activity and unhealthy eating, among all causes one important cause is lack of physical activity disorder e.g. obesity, depression, anxiety, aggressive, etc.

Toxic toys: Toys are usually a fun, important part of any child's development. But each year hundreds of kids are treated in hospitals for toy-related injuries. Toys manufactured in China contain toxic chemicals including lead, Bisphenol A, Phthalates and other toxins. In 2007 Toy manufacturers recalled millions of toys, including many favourite toys. As per a study Chinese toys found to be loaded with deadly toxins¹⁵.

Traditional toys: Madden from clay and wooden etc.

Kasappa has mentioned 34 varieties of animal which should be made up of *pisti* and *shailak-ratha*, and for girls specifically he mentioned dolls and balls which should increase curiosity in girls so v will find lots of variety of toys¹⁶

CONCLUSION

Playful children are happier, better adjusted and more co-operative and more popular in the society than those who play less. Children play longer when a wide variety of toys is available.

Playful children are more physically active, creative, humorous, imaginative, emotionally expressive, curious and communicative'. Father and mother each has unique contribution to make their children to play. We should think inclusion and adaptation for differently abled children. Conventional games are better than video games. Life style disorders can be prevented by the active play e.g. obesity depression etc.

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Table 1: Infancy1st year

Toys	Stimulation
Rattles	Visual and auditory senses
Crib gyms, safety mirrors	Reaching, grasping
Large keys, Soft dolls, Hand	Hand-eye coordination
Stuffed Toys	Transfer objects from hand to hand

Table 2: Toddler 1-3 yrs

Toys	Stimulation
Push and pull toys,	cognitive & social development
Dolls & Telephone	Cognitive & Social development
Rocking horse, Balls, play vehicles	To achieve a level of realistic detail

Table 3: Preschooler

Toys	Stimulation
Crayons, Simple paint with large brush, Finger paint	Fine motor control
Simple puzzles	Problem solving abilities
Simple musical instruments, outdoor games, make-believe games	Moderate level of real life understanding

Table 4: Schooler

Toys	Stimulation
Table games, Skipping rope, Puppets, Paper crafts, Bicycle	Attention span
Dress up material	Organized and competitive music

Table 5: Proportion of Disabled Population by Type of Disability India: 2011.

Type of Disability	Persons	Males	Females
Total	100.0	100.0	100.0
In Seeing	18.8	17.6	20.2
In Hearing	18.9	17.9	20.2
In Speech	7.5	7.5	7.4
In Movement	20.3	22.5	17.5
Mental Retardation	5.6	5.8	5.4
Mental Illness	2.7	2.8	2.6
Any Other	18.4	18.2	18.6
Multiple Disability	7.9	7.8	8.1

Source of Support: Nil

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