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CHILD- THE SPRING OF HIDDEN ENDOWMENTS- A REVIEW MANUSCRIPT

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ABSTRACT

This study was aimed to identify and review evidence in respect of the process of development for children from birth up to the age of five. There is abundant research that highlights the significance of children's play in natural space. Natural environment provide rich settings to support children's play drives, affording a diversity of possibilities for play behaviours. Such play experiences fulfill their biological potential for connection and affiliation with the natural world. This review supports the importance of children's play in natural space and associated benefits to their health and well being. Such experiences also enhance cognitive, physical and affective development in children, and may profoundly influence future individual and societal relationships with the natural world.

INTRODUCTION

The one who descends on earth as the messenger of the past and ambassador of the future- containing within him/herself all powers and possibilities, is the CHILD**.** The child is truly the symbol of naturalness, spontaneity, love, peace, innocence and grace. It has been said that in order to live longer and to make life joyful; it is necessary to be like a child and look at the world through the eyes of a child. Children are the most beautiful blossoms in the nature's paradise. They have been the subjects of the poets and objects of delight to everybody. A child is the hope and aspiration of the family, the light of the world. Each child is unique. Each child can express his/her unique endowments if provided with adequate nurture, appropriate environment and the opportunity. Each one can flourish, shine in his/her own line. The child is not only the potential asset of family but also the future of the world. It is the imperative need of the citizens of the world to nourish and educate children leading to their total development and self-expression.

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Problems and Issues

As the society is in flux both socially as well as economically, the needs of children are constantly changing. A whole range of factors- including inadequate nutrition, poor health and lack of care and stimulation result in slow brain development in children than they should or failing to develop properly. This damages their health, education and their ability to earn as adults, their reproductive choices, their parenting and ultimately their life chances. Currently, the change in needs of the children are due to some additional situations, such as abandonment, war, urbanization, new health challenges, etc. In addition, the problems faced by the children can be summed as under:-

- The problem of repeated separation from mother may weaken attachment to the mother and results in bad child care.
- The diversity of child care environments affects the quality of childcare and in turn affects development.
- The interrelationship between home and childcare environments and how the interaction may affect child development.

- The parental social class and socio-economic status (SES) also affects child development.
- The problem of ignorant and faulty child-rearing practices affects the child development, by suppressing the spontaneity during early childhood.

Nature and Child Development

Several researchers have identified the unique relationship between children and nature. In this review, we may see that while " Environment" is relatively straight forward to be defined as the physical, biological and cultural conditions in which an organism lives, 'Nature' is 'perhaps the most complex word in the world of language' (Williams 1976; cited in Mergen, 2003). As a starting point, Nature may be defined as the natural physical world containing plants, animals and landscapes. The modern meaning of Nature, according to Tuan (1978) noted that it is generally used to describe anything that has been made by human beings. The "natural environment" comprises all living and non-living things that occur naturally. Nature is the best teacher to the child. Nature will provide the student with necessary situation to earn knowledge (Yarrow, 1973). It is nature that will be the guiding force to inculcate the spirit of learning in the mind of a student to learn anything. Naturalism is revolutionary in the field of education. Naturalistic tendency revolted against traditional, formal and the stereotyped education of 18th century. *Rousseau* maintained that education should be organized with Psychological insight according to the innate nature of the child. He regarded nature as equivalent to endowed/ inherited dispositions and capacities of a child (Rusk, 1979). Education has a naturalistic tendency and favoured imparting education according to the nature of child in a natural setting. Open air natural atmosphere is conducive for spontaneous growth and development of a child. Commenting on this point, *Gopabandu* says, "closed buildings are unsuitable for mental and physical development of the students".

For the purpose of this review, the term "natural environment" may be seen in a continuum of human-environment influence, ranging from total human designed space to "pure" wilderness (carver et al, 2002). The phrase is dependent on context and degree rather than a set definition. Thus, in an urban context, a child may have daily access to a range of natural spaces with varying degrees of human design modifications. The term 'wild' as used above brings a further dimension of natural environments that influence their utilization by children that wild spaces are perceived as relatively free from adult design and adult agendas (Mandsley, 2005, white & stocklin, 1998). It should be recognized that individual and environment make an inseparable pair and no individual can exist without an environment (Gibson, 1986). In this mutual relationship, every individual is both a perceiver of the environment and a behaver in the environment. No individual organism can exist in isolation (Capra, 2003). There is an intimate connection between the child and its environment (cobb, E, 1977). The social context beyond the family should also be considered (Melhuish, 2001).

The Developing Child

There is every possibility within the little to be great. The romantic poet *Wordsworth* had attributed the child in his inimitable style as the 'father of man' (Dowen, 1897). *Dante* has written his first sonnet in the ninth year of his life. (Whiting, 1922). At the age of eight *Tagore* had composed poems in Bengali (Merriman, 2006). *Goethe* had composed a story in seven languages when he was ten (John, 2001). Pope had composed his 'ode to Solitude' when he was twelve (Baines, 2001). *Meera Bai* was imparting spiritual education at the age of three (Pettinger, 2007). *Sri Aurobindo* could speak English fluently at the age of twelve (Mishra, 2004). The worlds famous Mathematician *Ramanujan* could solve the sums of Intermediate classes when he was in class III and sums of graduation course in class IV (Kanigel, 1992). *Descarts* was absorbed in meditation and was considered a philosopher when he was a tiny child (Clarke, 2006). *Michaelangelo* was engrossed in drawing wherever he went in his childhood (Rolland, 2009). Eight years old *Dhruba Muni* created ripples in swimming circles by becoming the youngest person to swim 14km distance from Uran To Bombay in four hours and forty-six minutes. According to greater Bombay Amateur Aquatic Association, Muni broke the age record standing since 1976 (Muralidharan, R. 1990).

Extensive research shows that children have a strong and deep rooted sensitivity to the natural world. While there is evidence to support those perspectives recognize the interplay of genes, individuals and environment in the expression of this attachment. The human world is complex. The distinction between nature and human made is a relatively new concept, reflecting significant changes to the physical, social, cultural, economic and political landscape. Any attempt to explore children's relationship with the natural world must take into account all of the above dimensions. The behaviour of children during infancy and early childhood are natural and invariably spontaneous. According to the *Oxford Advanced Learner's Dictionary of current English,* 'any work done from natural impulse, not caused or suggested by something or somebody outside', is spontaneous. Thus, spontaneous behaviours refer to all those overt or covert activities which are mostly involuntary- not forced or labored or suggested. As the child grows older, his/her behaviour is moulded, manipulated, motivated, guided, deliberated and hence, becomes voluntarily controlled. Thus, spontaneous behaviour may be viewed as the unconscious or sub-conscious manifestation from within, which may be observed in its most unadulterated form in preschool children.

Maria Montessori used the term "absorbent mind" to describe the young preschool child's spontaneous natural urge to absorb knowledge from the environment like 'sponge'. The child does this naturally, and without thought or choice (Montessori, 1949) *Tagore* viewed that children have their active sub-conscious mind to draw food like trees from soil (Merrimman, 2006). *Aurobindo* believed that nothing can be taught to children- they learn everything by themselves spontaneously (Mishra, 2004) *Piaget,* while emphasizing the importance of spontaneous self-initiated activity of the child, views "all actions culminate in cognition" (Piaget, 1977). The growth and development of of a child is through interactions between evolved mechanisms and the environment and as such developmental patterns are not conceived as genetically predetermined but as as a result of an evolved epigenetic process that adapts human competencies to local conditions (Blasi & Bjorklund, 2003). The preschool children have the

following psychological characteristics or natural/spontaneous behaviour as the symbols and secrets of their childhood:

Activeness: The preschool children often may appear overactive. Rarely, they seem inactive and sitting silent unless they are ill.

Manipulative Behaviour: The young children have a natural inclination for grasping, handling and manipulating objects.

Sense of wonder, curiosity and interest: The world is completely new for them. Curiosity is the mother of all learning, innovation, discoveries and inventions. Spontaneous interest leads the child to become absorbed in what he/she does for a longer period.

Incessant Questioning: Preschool children ask many questions to their parents and other adults in their environment. Their questions are mostly on 'who' of persons, 'what', 'why' and 'how' of things. Sometimes they ask most philosophical and surprising questions.

Joy and mirthfulness: young children are often seen playing, whistling, singing, talking, moving all the time. They are also indifferent to joys and sorrows.

Striving for independence: Young children strive hard for independence. They want to do everything by themselves.

Fearlessness: The child is by nature fearless. Complete fearlessness of the child gradually disappears as adults show or teach many real or imaginary fears.

Truthfulness: The children are by nature truthful. Through imitation of adults behaviours they learn to tell lies.

Creativity: Young children have their own imagination, own ideas and own creative thinking. They first break or take-apart things in order to remake/reassemble them.

Egocentricity: young children are extremely egocentric and self-centered. The 'I-ness' and 'My-ness' in their language and behaviour are rampant.

Stubbornness and insistence: The preschool children insist on fulfilling their demands somehow even by showing temper tantrums.

Transitoriness of emotions: Young children's emotions like fear, anger, delight, etc. are frequent but transitory.

Concentration: Young children's concentration is more selective and deeper.

Sense of appreciation: young children are naturally attracted to the good and the beautiful.

From joy all beings are born. The beings or the creatures sustain themselves in joy. At the end the creation culminates in joy. The preferred state for survival would be through a "positive" feelings- Joy and Pleasure, the state of joy being defined as the greater ease to act (Damasio, 2003). Recognizing this we may see 'Play' as a biological drive by which the child seeks to play themselves in a favourable position in their environment. Play drive may exist to guarantee that children engage with their world in such a way as to suit their abilities but also to maximize the opportunity for understanding how this environment works (Hughes, 2001).

Play Instinct

There is always spontaneous music and movement in nature. The air is blowing, the river is flowing, and the birds are singing- following a spontaneous cosmic rhythm. A child's behaviour is as free flow of a fountain that springs from mountains. How spontaneous is the child's joy! The child's play is also another important example of spontaneous activity. How playful is the child! Play is the predominant life-activity of the child through which s/he expresses him/herself and learns everything about the world (Dewey, 1963). For children Play is a biological drive and the primary mechanism through which they encounter and explore their immediate physical environments. Children play instinctively with natural elements; they are natural experts. As such, Play is the process whereby children fulfill their drive to affiliate with nature, and natural environments provide optimal setting for children to engage to actualize their drive to play.

Play may be connected to enhancement of social, physical and cognitive skills (Prout, 2005). This is not necessarily to prepare a child to become a better adult, but because the benefits of playing in the present moment help to make a better child (Hughes, 2001). Placing Play firmly in an evolutionary frame, proposes that Play enables children to fit themselves into their complex environments, to 'ground themselves physically and psychologically'. At its most basic we may see Play is the central to survival (Hughes, 2001). The word 'Survival implies a sense of struggle'. But in Play terms, "survival represents a victory of life over death, a cause of celebration" (Chilton Pearce, 1992).

"Love childhood, indulge its sports, its pleasures, its delightful instincts. Who has not sometimes regretted that age when laughter was ever on the lips and when the heart was ever at peace? Why rob these innocents of joys which pass so quickly of that precious gift which they cannot abuse? Why fill with bitterness, the fleeting days of early childhood which will no more return for them than for you? Do not lay up sorrow for yourselves by robbing them of this short span which nature has allotted to them. As soon as they are aware of the joys of life, let them rejoice in it, so that when God calls them, they may not die without having tasted the joy of life" (Rusk, 1979).

Play & Brain Development

Recent work by (Sutton-Smith; 1997,1999,2002) has explored the relationship between play, environment and the function and development of the human brain. Sutton-Smith remarks on the enormous plasticity of the human brain in the early years, with the ability to respond to what happens in the external environment. Play is a child's way of creating an alternative or virtual reality, which helps to create the brief illusion that the limits of existence do not exist and therefore allows the child to play with possibilities. Sutton- Smith refers to this as a 'fabulating mind' and suggests that through this process play

promotes the realization of brain potential. According to *Montessori's* concept of 'sensitive' or 'critical periods', it has been observed that during the course of child's development, there are periods when the child shows intense interest for certain activities and expresses readiness for certain learning (Montessori, 1912). Piaget (1969) is of opinion that early sensory motor activities and play of the child provide foundation for the development of cognition/intelligence. Thus, conation leads to cognition. Interest in different activities and concentration on the task in hand are essential for intellectual development and require training and encouragement (Russel, 1926). Natural setting increases children's ability to focus and therefore enhances cognitive abilities (Wells, 2000). Research findings conducted over the past three decades have led to an understanding of the rapid growth of the brain in the early years and how stimulation acts as a catalyst for that growth. Dr. Fraser Mustard of the Council for Early Child Development (CECD) and others have established that the experiences in the early years 1) shape the architecture of the brain and 2) set the developmental trajectories that influence lifelong learning, behaviour, and health for individuals. According to *Dr. Fraser Mustard* of the Council for Early Childhood Development, "problem based play programs optimize development of neural pathways during all periods of early childhood from infancy to grade one. Consistent play opportunities with other children provide rich sensory stimulation that the young child absorbs and integrates into core brain development" (Mustard, 1999, 2007).

Play and Emotions

Children have a natural affinity towards nature; sand, water, trees and plants and small animals (Moore & Wong, 1997). Importance of children's innate sense of curiosity about the natural world and their struggle to work out their relationship to this as children's way of understanding about life and its meanings has been acknowledged (Hart, 1997). This requires the opportunity to have unmediated contact with the local environment. At this point it is recognized that children's Play is 'natural'; children do not need to learn how to play, it is an integral part of the innate character of a child. Playful social interactions begin at birth (Bergen, 2002; Bredecamp & Copple, 1997). Studies of children's play in outdoor natural environment notes that natural play spaces have been a key site for children's motor development. The vigorous, playful movement enhances muscle growth, healthy growth of heart and lungs (Fjortoft, 2004). Natural spaces and materials stimulate children's limitless imaginations and serve as the medium of inventiveness and creativity. (Moore, 1986). The foundations of social competence developed in the first five years of a child's life are linked to emotional well being and social skills needed later in life (Berchied & Reis, 1998; Reis et al, 2000). While social and emotional development is important in its own right, it is also important because it facilitates cognitive development. Children with effective social and emotional skills do better with getting along with others, understanding directions, and focusing on a task; skills that enhance learning and important in school success and lifelong learning (Lewis & Henderson, 1997). The brain circuits that regulate the emotions in the early years are ultimately associated with the development of problem-solving skills (Posner & Rothbart, 2000).

Child's Independence

A child's ability to move independently within their local environment is considered to be vital to healthy growth and development (Moore, 1986; Gaster, 1991; Mathews, 1992; Huttenmoser, 1995; Sobel, 1997; Kytta, 2004). Rabindranath Tagore gave importance to environment. Education, according to Tagore, should be imparted "in an institution where the first great lesson is the perfect union of man and nature". (NIPCCD, 1984).

Child's ability to move independently tends to:

- explore their environment more freely.
- learn with confidence.
- be more popular with peers.
- exhibit more positive social interaction.
- be more emotionally stable.
- be able to express and manage their feelings well.
- demonstrate greater ability to handle stress and help others handle stress.

Summary and Conclusion

The child is a body that grows and a soul that develops. Every child needs care and education. It has been said that the biggest and the most important responsibility in the world, the responsibility which overweighs all other values in the world is the responsibility of rearing children. Rearing involves providing proper nourishment to the child and catering to the developmental and psychological needs of the child. In terms of responsibility and duration, child-rearing is much more important than child-bearing. The education of children at pre-school and primary stage should be based on their above said spontaneous behaviour to make it joyful and meaningful. The young child has the capacity to do wonders if his/her natural spontaneity is carefully nurtured, harnessed and prolonged or passed on to the later stages of development. In fact, all contemporary educational psychologists give importance to natural environment. It is through the natural environment that the child trains the senses by contact with plants and trees, flowers and leaves.

The teacher's first duty is to watch over the environment, and this takes precedence over all the rest (Montessori, 1912). The 'Prepared Environment' is important to Montessorian system of education. The environment has to be ready and beautiful for the children so that it energizes and motivates them to work. Montessori refers to work as an activity the child does independently or what many people might call Play. The adult's role then is to construct the environment in which they will learn. The development of the child is, therefore, dependent on the environment he/she is in, and this environment also includes the parents. The environment must be rich in motives which lend interest to activity and invite the child to conduct his own experiences. But the problem is that due to ignorant and faulty child-rearing practices the spontaneity of early childhood is suppressed. In order to make child's education effective, it should be Play and Activity based. The education imparted through play or self-activities not only gives joy to children but also makes their learning permanent-'Thorndike's Law of Effect'. The children remember the pleasurable/joyful experience. Through play/activities the child experiences. Experience is central in

education. True learning is experiencing through doing and discerning. *St. Thomas Acquinas* drew an analogy between the offices of the doctor and teacher. The doctor prescribes medicines. By that the doctor only aids the potentialities of natural powers of the body to heal themselves. Similarly, in the process of education the student must do and learn, must experience himself. The teacher cannot do for him/her. The teacher can teach him/her but to say ungrammatically he cannot learn him/her. Parents play a critical role in their children's early learning as their first and foremost teacher. Initially, parent's role early in their child's life is to provide warm, sensitive and responsive care-giving that will promote a sense of belonging, security and healthy attachment.

From birth and throughout the preschool period, parents and other caregivers play a vital role by providing a safe and stimulating environment rich in adult guided experiential play experiences. Parents can take a role in their children's learning by comforting and responding to children's needs as well as reading, talking, singing, dancing and exploring the world with their children. The types of interactions that parents have with their children and early experiences lay the foundation for children's early learning and all subsequent learning experiences. This in turn, has a tremendous impact on individual longer term health, well-being, and success in life. The importance of early childhood learning experiences in shaping children's development throughout their lives is well documented. Current research has provided a better understanding of how children learn in the early years and the importance of quality early learning opportunities. Children who receive responsive and consistent care giving early in life develop secure attachments to their parents/caregiver, which helps with their growth and learning. In order to realize our goal of joyful education and the development of whole personality of the child, education should be based on spontaneous behaviour of the children transacted through play/activities by efficient and devoted teachers. Thus, the focus should be on continuously improving the quality of care.

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