

The Importance of play During Childhood: The Lesson for care Givers, Parents and Pre- schools in Tanzania

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Abstract: As early as infancy, children immerse themselves in playful activities with the purpose of making sense of the world around them. However, their effort to achieve this is most frequently halted by parents, care givers and teachers who work around with them. There have been questions surrounding the importance of play for children in Tanzania. The major question has been what children learn when they play. Lack of knowledge on the importance of play for children has led parents, care givers and pre-school teachers deny children their rights to play, instead they have placed more emphasis on reading and arithmetic. This paper is based on literature review, and presents the developmental stages of childhood and discusses the importance of play for cognitive, social, emotional and physical development of children. The paper suggests that parents, community and preschools, and society as a whole should create conducive and safe environment for children to play, so as to help children to develop their capabilities to their full potentials.

Keywords: infancy, children, childhood, parents, pre-school.

1. INTRODUCTION

As early as infancy, children immerse themselves in play activities with the purpose of making sense of the world around them. Play gives children the opportunity to learn and experience things themselves, which is vital for their holistic growth, maturation and development emotionally, socially, physically, and intellectually. From their earliest days, children develop individual skills, competencies and interests that form the foundation for all that follows. Despite this recognition, play has intrigued educators, philosophers, parents and theorists for a long time. Although we all can recognize when a child is in play, it is more difficult to define it, explain it, understand its importance and consider it in relation to other childhood activities. There are many questions that can be raised regarding play. For example, what does play mean, when does play begin and when does it end? What do children learn from play? Or what is the importance or essence of play?

[3, 2005, p.30]

Wuest and Bucher (1999) define play as activities that are freely engaged in for purposes of amusement. It is a spontaneous activity and the act of playing is rewarding in itself. In the same manner Cordes and Ibrahim (1999) define play as activities in which individuals engage in freely and from which they derive personal satisfaction. Froebel (1894) felt that play was a way in which children gain insight into their world and was a means of creative self-expression. White (2004) views play as a way in which children learn about the world around them, learn to talk and share and learn about themselves. Play then, is considered as a way to foster cognitive as well as social development. Herbert Spencer described play as the purposeless expenditure of buoyant strength while other scholars define it as the product of superfluous energy left over when people's primary needs are met [23, 2002, p.230 ;33, 2002, p.230-233].

Although there are varying definitions of play, there are common elements to most definitions. Play is regarded as: (a) being spontaneous (b) free from rules (c) involving active engagement (d) intrinsically motivated (e) a means rather than an end (f) having no time dimension and place (it can take place at any time and any where). Play includes a range of self-chosen activities, undertaken by children for their own interest, enjoyment and satisfaction. The pattern of children's play reflects the society in which they live, including social changes over time (Lindon, *Ibid*)[23, 2002, p.231].

The stages of a child's development are perceived in phases, from infancy (from birth to 18 months) through early childhood (toddlers from 18 months to 3 years of age), preschoolers (from 3 to 5 years), and middle childhood (from 5 to 12 years of age). This paper focuses on young children aged between 3 and 10 years. During infancy most children progress through a definite order of motor (movement) activities. Motor activities contribute significantly to development of the infant's brain and are essential for the organization of the nervous system [3, 2005, p.31 ;7, 1999, p.70 ; 25, 1991, p.250].

Early childhood (toddler and preschoolers) represents a major transformation that includes the process of learning a language. Children at this stage take play seriously as they engage in new activities and develop new skills. Play at this stage, not only serves as a means of self-expression but also as an indicator of emotional and social adjustment. This is a crucial time for children to build self-confidence and self esteem[3, 2005, p.32 ;7, 1999, p.71].

Toddlerhood encompasses the period between 18 months and 3 years of age. Moving unsteadily but independently in the upright posture, children grow faster during this stage than at any other time in their life. Their mobility, verbal competence, and independence increase. The period from birth to 2 years of age, according to Jean Piaget, is called the sensorimotor stage of development, during which children learn to deal with objects, time, and space. At this stage play activities that are appropriate are those which can provide space and equipment for gross motor activity, that is, activity that uses the large muscle groups that coordinate the body movements required for normal living such as walking, running, throwing, and balance [3, 2005, p.33 ; 7, 1999, 72].

As toddlers develop into preschoolers they enjoy greater mobility and their mental power increases. They develop a conscience and become aware of gender differences and of their relationships with others. Children at this stage need abundant opportunities for gross motor play. Through such movements, children learn more about their physical abilities and can

enhance their problem solving skills. Preschoolers also enjoy handling objects, eye-hand coordination exercises, creative opportunities and sensory experiences [3, 2005, p.34 ;7, 1999, p.73].

Middle childhood starts from 5 to 12 years. It is marked by slower but steadier growth that allows children to engage in activities without energy draining changes that result from rapid physical growth during early childhood. Increased heart and lung capacity allow children to be active for longer periods without rest. As bones and muscles develop, children become stronger and more flexible, and as a result they react faster to their environment. They continue to master complex motor skills and to improve their fine motor skills (the use of precise, coordinated movements in such activities as writing and cutting. This group needs activities with simple rules. Children in this age group also build skill competence and cooperative play develops into competitive play [7, 1999, p.74].

Play is so important to optimal child development that it has been recognized in Article 31 of the UN Convention of the Rights of the Child. This article recognizes “the right of child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts”. This right came after having recognized that reduced time for physical activity may be contributing to the discordant academic abilities for children, because schools that promote sedentary styles of learning become a more difficult environment for children to navigate successfully. It is believed that providing increased time for play can lead to better concentration, reduced disruptive behavior, and higher test scores in reading, math, and writing. It is also known that physical activity improves overall health. Ginsburg (2007), for example, notes that play improves circulation, increase blood flow to the brain, and raise endorphin levels [16, 2000, p.160 ;17, 2007, p.182-191 ;19, 2005, p.190 ; 27, 2002, p.991-1015 ; 30, 2005, p.26-30].

Play is, therefore very essential and important part of a child's life. Playing helps the child to develop emotionally, mentally, physically and also creates bonding between parents and their child. It is through play that a child's aptitude and personality can be fully explored. Through play, social skills are also developed to help a child to be aware of other people who are around his/her life and learn how to respect others [6, 2011, p.60].

2. THE ORETICAL BACKGROUND

The theories discussed below are intended to provide some insights into the origin and function of play in human society, but it should be understood that they do not explore the true importance of play in children's daily lives, nor do they adequately explain how the quality of play influences children's development.

Psychological theorists provide different views on the role of play in children's development. Sigmund Freud (1856-1939) regarded play as cathartic or therapy. In 1920 he posed a psychoanalytic play theory that was defined in his book, *Beyond the Pleasure Principle*. He described play as a mechanism for children to release negative feelings caused by traumatic events and substitute them with more positive ones. Through play, children come to understand painful situations and find ways to substitute pleasurable feelings for unpleasant ones. Children master their covert thoughts and overt actions, and learn to interpret their experiences [33, 2002, p.234].

Psychoanalytic theory also teaches that infants and young children realize their helplessness

and come to know they must rely on other people's goodwill to serve their needs. This realization of dependency often brings with it a fear of abandonment. Play can help children reduce this fear and a sense of vulnerability. For instance, children can play with miniature toys, reducing the overwhelming world of adults to a manageable size [20, 1999, p.200].

One of the psychoanalytic theorists Erik Erikson (1902-1994) points out that during the first year of children's life, in the development of play, they use their sensory and motor skills to explore their own bodies. In their second year, they progress to manipulate objects in the environment. These play activities help children develop their self-esteem and a sense of empowerment since play allows them to master objects. Gradually, as they play, children move beyond control of objects to mastery of social interactions with their peers [20, 1999, p.201].

Piaget, a cognitive theorist, considered play as a tool for facilitating children's mental or intellectual development. Jean Piaget is most noted for introducing the stages of child development. These stages directly relate to play, as he stated that intellectual growth occurs as children go through the stages of assimilation, or manipulating the outside world to meet one's own needs-playacting and accommodation, or readjusting one's own views to meet the needs of the outside environment, or work [3, 2005, p.35].

In Piaget's stage theory, the changes in play through each stage parallel different levels of cognitive and emotional development. Piaget believed that people change their ways of thinking and behaving in order to adapt to their environments and that such adaptation is important for physical survival and psychological /intellectual growth. For example, children who repeatedly play with the same object, such as pretending to drink from an empty cup, several times, actually are practicing eye-hand coordination and developing sensory-motor skills (Tsao, *ibid*). At the same time, children practice the behaviors that are acceptable to society so that they can act appropriately in different situations [33, 2002, p.235].

According to Piaget (1962), play involves both assimilation and accommodation. It is a way of taking information from the world and organizing it. Piaget further noted that play helps to reduce ego centric thought. Think of, for example, the hide and seek play, when the one hiding is seen (caught), the play restarts and the one who was hiding has to seek for the other. This means there is equal opportunity for all participants to seek or hide. This reduces the tendency of egocentric since the children involved in the play learn to accept the results by changing their responsibilities. Additionally, skills learned in structured lessons can be practiced during play. Once skills are learned they need to be practiced and generalized to other situations. Play allows for this practice and generalization. There is a circular relationship with learning and play. As children play they practice and learn new skills which lead to higher levels of learning and at the same time assist in learning new skills in structured sessions leading to higher quality play behaviours. Play is a child's way of learning.

According to Diamond and Hestenes (1997), different kinds of play require different levels of cognitive complexity, and that is why each different type of play is found at a specific stage of cognitive development. Tsao (2002) summarizes it that Piaget's theory of play focuses on play as a means of facilitating learning by exposing "a child to new experiences and new possibilities of physical and mental activities"

John Dewey, one of the prominent theorists in the early 1900s, viewed play as preparation for future life. According to him, play is a subconscious activity that helps an individual develop both mentally and socially. He contended that play should be separated from work as it helps a child to grow into a working world. As children become adults, they no longer "play" but seek amusement from their occupation. Childhood activity of play prepares children to become healthy working adults [33, 2002, p.236].

Maria Montessori, an Italian educationist, during the early 1900s, perceived play as sensory learning. She postulated that "play is the child's work." Montessori method of teaching, which is still employed today, shows that children would be best served if they spend their play time learning or imagining. Montessori play is sensory, i.e., using hands-on approach to everyday tools like sand tables. The child sets her own pace, and the teacher is collaborative in helping the child play to learn [33, 2002, p.237].

Vygotsky, a socio-cultural theorist, believed that play serves as a tool of the mind to help children master their behaviors. That is, he viewed play as social development. The function of play, according to Vygotsky, is to help children develop self-regulation, expand the separation between thought and actions, and develop the skills needed to obtain a higher cognitive functioning. This separation between thought and action prepares children to develop abstract thinking. By exercising their minds through different play behaviours, children become capable of using high-level mental functions (i.e., abstract thinking) to manipulate and monitor thoughts and ideas without direct and immediate reference to the real world. Therefore, play can be an important educational strategy for facilitating children's development in cognitive, social/ emotional, motor, and language areas [4, 1996, p.40].

Children play make-believe in order to develop roles, learn adult expectations for behaviours, and master social norms. Through socio-dramatic play, children come to understand the meaning of the particular role they play, act out that role, and learn to maintain the associated script. Children learn to distinguish the differences between playing mommy and playing daddy by drawing on each role's different symbolic gestures and costumes. When children play, they behave according to the roles they assume. In order to play a particular role well, they need to unite their body, mind, and spirit [4, 1996, p.41].

The surplus-energy theory of play hypothesizes that play allows people to release pent-up energy that has collected over time. Teachers, parents and care givers must understand that after intense (and often inactive) academic class-room pursuits, children need to "let off steam". Educators also believe that outdoor play enables children to "recharge their batteries," to reinvigorate themselves by engaging in a very different activity from their classroom experience. This recreation theory of play enables children to get ready to return to the important work of academic learning. These theories view outdoor play as an essential component to academic learning, not as an important activity in its own right.

Summing from the theories highlighted above, we can agree that play contributes to children's development. Play allows children to transform reality and develop symbolic representations of the world in order to meet psychological and physical needs. In addition, the qualitative differences in children's play reflect different levels of abilities (i.e., from sensorimotor activities to fantasy play). Play also can facilitate children's development from lower to higher functions and from understanding simple concepts to performing advanced

mental activities. Play can help children master their behaviors, learning adult roles, beginning with the exploration of their sensory and motor skills and proceeding through to gradual acquisition of social skills. Moreover, play helps children prepare for the future. Not to be forgotten, play is enjoyable with others. During bouncing or dribbling of balls or during assuming parental role (being mum or dad) in the imaginative play area, children are encouraged to engage in conversation and develop peer relationships. It is through play that children develop essential life skills, they learn how to interact with their peers and with adults, they learn how to choose friends and enemies, they learn how to run around, play team games and sports [32, 2011, p.320].

Play also provides bonding opportunities. Circumstances in which children play among themselves or with their parents or teacher creates close relationships and bonds between children and their parents or teachers. The bonds in turn lead to love and trust. In addition, play helps children to understand their cultural aspects such as their language, cultural beliefs, norms and values.

Play enhances physical and motor development.

Wuest and Bucher (1999) argue that learning proceeds most rapidly when instructional experiences are geared to individuals' physical and intellectual abilities. Motor development is concerned with origins of and changes in movement behaviour throughout the lifespan. It encompasses the study of biological and environmental influences on motor behaviour from infancy to old age. Motor learning involves the acquisition of movement skills as a consequence of practice [37, 1999, p.370].

Climbing, running, jumping and navigating with play equipment are all ways in which play can enhance the development of large muscles. Children improve balance, agility and coordination through these types of play. For example, running, jumping, playing the game of tag/ hopscotch, neighborhood, kick ball, pretend to cook food using playdough soil, or constructing houses using mud; all these plays enhance a child's physical development. Additionally, fine motor skills are readily developed through play. Colouring, cutting with child-sized scissors and playing with toys such as peg boards or dressing dolls are some of the means through which children develop muscle coordination and dexterity. As skills increase, children naturally increase the complexity of their play, constantly stretching their limits (Rushton, *Ibid*) [29, 2011, p.290].

Play often involves the use of the senses, the body and its extremities (hands and legs). When children play, they exercise their bodies for physical strength, fluidity of movement, balance and coordination. Perceptual-motor ability, or the capacity to coordinate what they perceive with how they move, is an essential skill that preschoolers need to develop. A three-year old who is engrossed in digging, scooping, and pouring sand into a container must match his or her perception of the space in front of him or her with actual hand movements, so that he or she can successfully fulfill the motor activity.

During toddlerhood, children experience motor-growth spurt that equips them to solitarily fiddle with anything they can get their hands on - be it a construction of toys or the box from where it came [7, 1999, p.75].

3. THE IMPORTANCE OF PLAY TO CHILDREN EMOTIONAL DEVELOPMENT

Play helps children to deal with emotions. Many times children in groups are exposed to situations that cause new emotions such as anger with peer, frustration with adults or extreme sadness over sharing. Play gives children opportunity to learn how to appropriately express their feelings.

Children who are given the opportunity to engage in large amounts of free play express themselves with more confidence. They are able to cooperate with peers and adults. They learn how to express their emotions in an appropriate manner and how to deal with negative feelings productively. Children, when given the opportunity, will acquire cognitive skills at a quicker pace when they have a good sense of self. Higher self-esteem and increased confidence in oneself is a result of free expression, and for children this is easily done through play.

Play also brings a feeling of joy. Many scholars agree that play brings joy, excitement or amusement to children. A toddler who jumps and sings shows the sheer happiness that play brings him or her [33, 2011, p.237].

Play Fosters Social Development

Play is an important part of the socialization process. Play creates the opportunity for children to learn how to cooperate and share as well as develop interactive skills. Skipping Rope and balls. Filling the bottle with sand and water. Preschoolers begin extending their play to involve others at different stages of their game. Their physical and motor skills allow them to widen their play arena, from dramatic play to table games to outdoor pursuits [23, 2002, p.232].

Play also enhances health. Children who engage in lots of physical activities at school tend to engage in more energetic activities at home, while children who have childcare and school experiences that lack active physical activity, engage in more sedentary behaviors at home, such as watching TV and computer use. Children who learn to enjoy play have a much higher likelihood of becoming adults who enjoy gardening, jogging, bicycling, mountain climbing, or other physical activity endeavors. This is critical as obesity becomes an ever-greater urban concern and as we learn to care for and protect the environment. Physical benefits include positive effects for blood pressure and on preventing obesity [17, 2007, p.192].

Play Facilitates Cognitive Learning

Play is vital to the intellectual development of a child. The role of play is for the child to understand better cognitive concepts in ways that are enjoyable, real, concrete, and meaningful to them. For instance, through play, a child is able to grasp that the equation $1 + 2 = 3$ by means of 'putting together' stones and lining them on sand or other bases. When a child combines 2 triangles to make a square during block play, or when he/she writes down his/her scores in a bowling game, the child is displaying what he knows about shapes and numbers. This means that play aids in academic skills development. In a longitudinal study, Bergen and Mauer (2000) found out that children who had high levels of play with literacy materials in preschool were likely to be spontaneous readers of place signs and have greater pretend verbalizations in a "town-building" activity at age 5.

In addition, play helps in the development of problem solving and other cognitive

capabilities. Bergen (2002) noted the relationship of play to specific cognitive strategies such as self-regulation, narrative recall, divergent problem solving, and rule understanding. Vygotsky (1978) as quoted by Bergen (2002) theorized that young children use private speech in play to regulate their behavior and eventually transform this private speech into self-regulation through internal thought. Krafft and Berk (1998) as quoted from Bergen (2002) compared the private speech of preschool children in Montessori and traditional play-oriented programs and found that more private speech occurred in the play-oriented setting, especially during pretend play with fantasy characters. They conclude that, at the preschool level, "make-believe play" serves as a vital context for the development of self-regulation (Bergen, *ibid*) [1, 2002, p.1-10].

Through play, the child constructs his or her world view by constantly working and reworking his understanding of concepts. Incorporating the learning themes to the interest areas creates opportunities for learning formal concepts such as alphabet, colours, and shapes. The art area is a great place to incorporate these concepts. The same goes for the block and science areas. Play helps children to understand the world around them. They learn how far they should jump, slide and how to slide on sand or grass. Play also can help children explore their nature such as understanding various animals, rivers, and mountains [23, 2002, p.233].

Play encourages creativity that opens an entire avenue for children to express themselves, show what they know and how they feel, and to create their own masterpiece. It provides the children with the opportunity for original thinking and expression [31, 2004, p.1806-1820].

Play enhances language development. Toddlers who are still grappling with words need to be immersed in oral language so they can imitate what they hear. They benefit from songs and rhymes that provide the basis for understanding how language works. When these tots are playing with toys, adults model to them how language is used to label objects or describe events. At play, preschoolers use language to interact, communicate ideas, and likewise learn from dialogues with more mature members of society. Table 2 summarizes the benefits of play to children.

4. REFERENCES

- [1] Bergen, D. (2002). The Role of Pretend play in Children's cognitive Development. *Association of Childhood Education International*, 4 (2), 1-10.
- [2] Bergen, D., and Mauer, D. (2000). Symbolic play, Phonological Awareness, and Literacy Skills at three age Levels. In K. A. Roskos and J. F. Christie (Eds.), *Play and Literacy in Early Childhood: Research from Multiple Perspectives*. New York: Erlbaum. Pp.45-62.
- [3] Berk, L. (2005). *Infants and children: Prenatal Through Middle Childhood*, (5th ed.). Boston: Pearson.
- [4] Bodrova, E., and Leong, D. (1996). *Tools of the Mind: The Vygotskian Approach to Early childhood Education*. Columbus, OH: Merrill.
- [5] Brown. (2002). *The Power of Play: A strategy to meet the Developmental and Learning needs of Young Children*. New York: UNICEF.
- [6] Cheong, P. (2011). The importance of a child's play. <http://ezinearticles.com/?The-Importance-of-a-Childs-Play&id=733513>

- [7] Cordes, K. A., and Ibrahim, H. M. (1999). *Applications in Recreation and Leisure for Today and Future*, (2nd ed). Boston: McGraw-Hill.
- [8] Crawford, K. (1996). Vygotskian Approaches to Human Development in the Information Era. *Educational Studies in Mathematics*, 31, 43-62.
- [9] Dzewaltowski, D. (2005). Prevention of the epidemic increase in child risk of overweight in low-income schools: The El Paso coordinated approach to child health. *Arch Pediatric Adolescent Medicine* (159), 217-224.
- [10] Elias, M. J., & Arnold, H. (2006). *The Educator's guide to emotional intelligence and academic achievement: Social-Emotional Learning in the Classroom*. Thousand Oaks, CA: Corwin Press.
- [11] Fairclough, S., & Stratton, G. (2005) 'Physical education makes you fit and healthy'. Physical education's contribution to young people's physical activity levels. *Health Education Research* (20)(1) 14-23.
- [12] Fantuzzo J., Bulotsky R., McDermott P., Mosca S., & Lutz, M. N. (2003). A multivariate analysis of emotional and behavioral adjustment and preschool educational outcomes. *School Psychology Review*. 32, 185-203
- [13] Fardy, P., Azzollini, A., & Herman, A. (2004). Health-based physical education in urban high schools: The PATH Program. *Journal of Teaching in Physical Education* (23), 359-371.
- [14] Fitzgibbon, M. L., Stolley, M.R., Dyer, A.R., VanHorn, L., &KauferChristoffel, K. (2002). A community-based obesity prevention program for minority children: rationale and study design for hip hop to health, jr.*Preventative Medicine* (34), 289-297.
- [15] Froebel, F. (1894). *The education of man*. New York: Appleton & co.
- [16] Gandhi, P. R. (2000). *Blackstone's international human rights documents (2nd Ed)*. London: Blackstone Press Ltd.
- [17] Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *American Academy of Pediatrics*, 119(1). 182-191.
- [18] Ginsburg K. R., &Jablow, M. (2006). *A Parent's Guide to Building Resilience in Children and Teens: Giving Your Child Roots and Wings*. Illinois: American Academy of Pediatrics.
- [19] Gurian M., & Stevens, K. (2005). *The minds of boys: Saving our sons from falling behind in school and life*. San Francisco, CA: Jossey-Bass.
- [20] Hughes, F. P. (1999). *Children, play, and development, (3rd ed.)*. Boston: Allyn and Bacon.
- [21] Hurwitz, S. C. (2003). To be successful: let them play! *Child Educ*,79, 101-102
- [22] Johnson, M., Christie, D., & Wardle, P. (2005). *Play, development and early education*. Allyn and Bacon, Boston, MA.
- [23] Lindon, J. (2002). *What is play?* London: National Children's Bureau.
- [24] Malawi Government. (2004). *Early childhood development basic training manual*. Paris: UNICEF.
- [25] Malina, R. M. & Bouchard, C. (1991). *Growth, maturation, and physical activity*. Champaign, IL: Human Kinetics.

- [26] McWayne C. M., Fantuzzo, J. W., McDermott, P. A. (2004). Preschool competency in context: an investigation of the unique contribution of child competencies to early academic success. *Developmental Psychology*, 40, 633-645.
- [27] Pellegrini, A. D., Kato, K., Blatchford, P., & Baines, E. (2002). A short-term longitudinal study of children's playground games across the first year of school: implications for social competence and adjustment to school. *American Educational Research*, 39, 991-1015
- [28] Piaget, J. (1962). *Play, dreams, and imitation in childhood*. New York: Norton.
- [29] Rowland, T. W. (1990). *Exercise and Children's Health*. Champaign, IL: Human Kinetics.
- [30] Rushton, C. (2011). Importance of play for children's physical development. Retrieved from http://www.ehow.com/about_5245265_importance-play-children_s-physical-development.html on 2nd July 2011
- [31] Satcher, D. (2005). Healthy and ready to learn: Research shows that nutrition and physical activity affect student academic achievement. *Educational Leadership* (63), 26-30.
- [32] Tamis-LeMonda, C. S., Shannon, J. D., Cabrera, N. J., & Lamb, M. E. (2004). Fathers and mothers at play with their 2- and 3-year-olds: contributions to language and cognitive development. *Child Development*, 75, 1806-1820.
- [33] Tombs, M. (2011). The Importance of play in a child's development. Retrieved from <http://www.lbcma.org.uk/newsArticles/NAplay.asp> on 2nd July 2011.
- [34] Tsao, L. (2002). How much do we know about the importance of play in child development? *Child Education*, 78, 230-233.
- [35] Vygotsky, L. S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- [36] White, R. (2004). *Young children's relationship with nature: Its importance to children's development & the earth's future*. White Hutchinson Leisure & Learning Group.
- [37] Wilson, R. A. (2000). *Outdoor Experiences for Young Children* (ERIC Digest). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools (ERIC Identifier ED448013
- [38] Wuest, D. A., & Bucher, C.A. (1999). *Foundations of physical education and sport, (13thed.)*. Boston: McGraw-Hill.
- [39] Zimmerman F. J., & Christakis, D. A. (2005). Children's television viewing and cognitive outcomes: a longitudinal analysis of national data. *Arch PediatrAdolesc Med*, 159, 619-625.
- [40] Zins J. E. (2004). *Building Academic Success on Social and Emotional Learning: What Does the Research Say?* New York, NY: Teachers College Press.