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Mini-Review

The Effect of Nature on Child Development

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Abstract

Nature has many positive effect on people's mental health and mental capacity. The purpose of the paper is to investigate the positive effect of nature on children development. Even though children has plenty of opportunities in rural areas, children in big cities and metropolitan areas missing the opportunity to involve in nature. Therefore, children in schools may face more problems and they can demonstrate more emotional and behavioral problems. Interaction with nature can help children in alleviating these problems.

Opinion

Because the world has met the technology and cities are becoming metropole, today's children become estranged to nature. Most of the children have a lack of interaction with nature, and, instead of playing outside, they play games on a computer, a tablet or a smartphone. World Health Organization (2019) carried out an investigation through the world, and it was found that 80% of adolescence are physically inactive because of sedentary behavior's which involve screening TV, video game playing, and so on [1]. Also, according to the OMO global children and play investigation, 56% of children in the world spend as little time as an average prisoner a day on average, and 61% Turkish children play outside for an hour or less per a day averagely [2]. It can be justified that technological tools are interesting and attractive for children, but it is an undeniable fact that there is no sufficient place for them to play outside or no enough setting to meet them with natural aspects, like making acquainted with animals or plants. Shopping malls and residences displaced big gardens and parks where children can play, so they become alienated from nature. Lack of natural interaction causes inevitable adverse impacts the development of the children in terms of many aspects, such as physical or social, and "Nature Deficit Disorder" is a non-medical term which is stated by Richard Louv in order to explain the harm of being isolated from nature for the children. Louv (2010) claims that like children need to sleep or to eat innately, the interaction with nature is needed for the healthy development of children, and because children are alienated from nature, they have disorders, like attention deficiency, obesity, emotional and social illness [3].

The current study is significant in terms of comprehending the negative impacts of being alienated to nature for children because of modern lives which are equipped with the technology by putting mainly emphasis on benefits of the interaction with nature for the physical, cognitive, emotional and social development of the children. Thus, the present study is an attempt to investigate the relationship between interaction with nature and its impact on the development of children. Specifically, the focus is on exploring the positive impacts of contact with nature and outdoor activities on children and the importance of outdoor education. Because nature provides an environment to allow children to be physically active, like running or jumping, health and body development occur appropriately. It can be clearly said that sedentary behaviours, like watching TV or playing computer cause physical durability for children from the early ages, and this inactivity damages body and muscle development of children. Timmons et al. carried out a study where children who have lower physical activity tend to have more problem in body composition and motor skill development [4]. Being regularly active supports bone, skeletal and cardio metabolic health in early years of childhood [5]. Today's children suffer because of being overweight which is one of the main reason for many disorder, like diabetes and cardiovascular disease. According to the report of UNICEF (2018), there are 38 million children who suffer because of obesity, and specifically, 7% of children under five and an estimated 23% of school-age children in Latin America are overweight or obese [6]. Nature encourages children to be more physically active by offering opportunity in which children interact with animals and plants, so avoid to be overweight. Bell, Wilson and Liu (2008) found as a result of two years study that children who live inmore natural settings tend to have less weight and to be thinner than neighbourhoods with less vegetation because their curiosity and enthusiasm to natural components lead them to psychically active [7].

Contact with nature enhances the cognitive abilities of children and supports mental health by functioning the brain. Furnas finds that the right hemisphere of the brain can be made stronger by the contact with nature, and the function of the brain in terms of harmony is recovered due to nature [8]. Children explore each aspect of nature with their curiosity, and because interaction with nature provides a new way of feeling and thinking, their imagination capacity improves. The ecological theory claims that it is critical that children should be in touch with the nature for the development of imagination and creativity that promote the cognition and intellectual abilities of the children [9]. Because being contact with nature develops the cognition, the mental health of the children is also supported and well developed. Children, who are familiar to the naturalsettings and outdoor playing's, is less likely to have stress, depression and attention deficiency disorder, instead, they are good at the concentration on tasks, and resilience [10]. Natural connection helps children to create a mental ability about how they direct life andcope with difficulties. Webster (2011) states that nature offers children an environment where children are exposed various, new and complex aspects that lead them to analyse, to explore and finally to gain a skill, which involves making decisions for current and further situations, due to the process of trial and error by internalising what works or does not [11]. Many research shows that active nature experiences from early childhood develop children's emotional and social skills. Because children are led to explore by nature, they started to ask questions and cooperate with others through this funny and rich journey. Mc Clain and Peeler (2016) claim that children, who experience, nature more not only be physically active but also they are more involved in



social relations [12]. It can be claimed by using many researches as a base that children who are contacted with nature are more likely to be productive because their capability of creativity, imagination, social cooperation is well developed by nature. Some authors also correlated directly the productivity and interaction with nature that social competence, being able to engage in societal aspects easily and well coping are some key aspects that lead children to produce new ideas, solution or [13].

Nature provides a setting where children are able to practice the trial of the real-life, so they learn empathy, collaboration and as well as finding a solution to a problem and coping with a challenging situation. The dual achievement leads children to be more self-esteem and self-confidence. Maller (2009) carried out a qualitative study which found that children who are hands-on contact with nature show more sense of achievement, self-esteem, self-confidence, engagement to school activities, and self-efficacy [10]. Since interacting with nature helps individuals to be self-confident and self-esteem, it is most likely to be expected that they are more successful in school. Donovan, Gatzliolis, Michael and Hoyer (2018) found that experience of nature, at both home and school, support the cognitive development and academic performance of the children [14]. Due to many positive impacts of nature on the development of the children, many researchers highlight the importance of outdoor education. Because the current day's children are alienated from nature because of technology and modern cities, it is necessary to create some opportunities in order to meet children and nature. One of the effective ways is too involved nature in the educational processes and curriculums in schools. McClain and Peeler (2016) carried out a study where children show more awareness about themselves and natural components by asking more question and observation, scientific reasoning, more engagement with a peer after visiting state park which is rich for natural components, and it is observed that outdoors activities not only encourage children to be more physically active but also, they express themselves better verbally [12].

Teachers have a significant role to meet children with nature in terms of outdoor activities, and the appropriate guidance is needed to reach achievement in the development of children, both physically, socially and cognitively. Vessel (2013) claims that teachers can help children to elicit creativity and imagination due to the encouragement of their curiosity by meeting them with natural components [15]. Also, he emphasized the importance of the engagement of the teacher in outdoor activities for children learning and avoiding dangerous situations and removing broken materials. Natural setting not only provides interesting and beneficial items directly for children and their learning process but also, it offer various materials that can be used by the teachers, like giving an opportunity to tell how a rainbow emerge or teaching direction in a forest and how they can be determined by natural aspects, like the face of trees holding moss shows north. Dymont and Reid (2005) say that outdoor classroom activities enable and inspire teacher in order to enrich the curriculum and the learning by providing diverse materials and allowing trial and error method [16]. The literature review indicates that since children interact with nature less because of initially technology and metropole cities, children are deprived of the great support of nature for their physical, cognitive, social and emotional development. Experience with nature allows children to be physically active, so they have better body health and avoid themselves from obesity. Children who interact with nature are more likely to be creative, imaginative, curious and productive due to offer a different and broaden thinking and feeling way by the natural aspects, so they are less depressed, instead they are more self-confident and self-esteemed. Also, nature provides a setting where children can be socialized and learn to cooperate with others [17-19].

Considering all benefits of being in contact with nature and limited greener environmental settings in which children live, the importance of outdoor education should be emphasized. Thus, it can be recommended that children should be familiarized to nature, and learning capabilities of them should be expanded by involving outdoor activities in school curriculums, for example organizing school trips to natural parks, establishing outdoor activity places that are involved as a part of schools, or giving children a responsibility to grow a plant as a part of course requirement.

References

1. World Health Organization (2019) To grow up healthy, children need to sit less and play more.
2. Unilever (2016) Omo's global survey of child and game data have been announced Turkey.
3. Louv R (2010) *The Last Child in Nature*. In: (1st edn., Ankara, İstanbul: Tübitak Yayınları, pp. 1-462.
4. Larouche R, Garriguet D, Tremblay MS (2016) Outdoor time, physical activity and sedentary time among young children: The 2012-2013 Canadian Health Measures Survey. *Canadian Journal of Public Health* 107(6): e500-e506.
5. Kuzik N, Clark D, Ogden N, Harber V, Carson V (2015) Physical activity and sedentary behaviour of toddlers and preschoolers in child care centres in Alberta, Canada. *Canadian Journal of Public Health* 106(4): e178-e183.
6. Unicef (2018) Working together against childhood obesity.
7. Bell JF, Wilson JS, Liu GC (2008) Neighborhood greenness and 2-year changes in body mass index of children and youth. *American journal of preventive medicine* 35(6): 547-553.
8. Maller C, Townsend M, Pryor A, Brown P, St Leger L (2006) Healthy nature healthy people: 'contact with nature' as an upstream health promotion intervention for populations. *Health promotion international* 21(1): 45-54.
9. Kellert R, Peter H Kahn (2002) *Children and nature*. England: Massachusetts Institute of Technology, UK, pp. 1-370.
10. Maller C, Townsend M, St Leger L, Henderson-Wilson C, Pryor A, et al. (2009) Healthy parks, healthy people: The health benefits of contact with nature in a park context. In *The George Wright Forum* 26(2): 51-83.
11. Webster K (2011) Potential benefits from interacting with nature: a look at outdoor education for children. *Psychology and Child Development*, pp. 1-23.
12. McClain C, Vandermaas-Peeler M (2016) Outdoor Explorations with Preschoolers: An Observational Study of Young Children's Developing Relationship with the Natural World. *International Journal of Early Childhood Environmental Education* 4(1): 37-53.
13. Dowdell K, Gray T, Malone K (2011) Nature and its influence on children's outdoor play. *Journal of Outdoor and Environmental Education* 15(2): 24-35.
14. Donovan GH, Michael YL, Gatzliolis D, Hoyer RW (2018) The relationship between the natural environment and individual-level academic performance in Portland, Oregon. *Environment and Behavior* 52(2): 164-186.
15. Jacobi-Vessels, Jill L (2013) Discovering nature: The benefits of teaching outside of the classroom. *Dimensions of Early Childhood* 41(3): 4-10.
16. Dymont JE, Reid A (2005) Breaking new ground? Reflections on greening school grounds as sites of ecological, pedagogical and social transformation. *Canadian Journal of Environmental Education* 10(1): 286-301.
17. Maller CJ (2009) Promoting children's mental, emotional and social health through contact with nature: a model. *Health education* 109(6): 522-543.
18. Lohr VI (2007) Benefits of nature: what we are learning about why people respond to nature. *Journal of physiological anthropology* 26(2): 83-85.
19. Wishart L, Rouse E (2019) Pedagogies of outdoor spaces: an early childhood educator professional learning journey. *Early Child Development and Care* 189(14): 2284-2298.