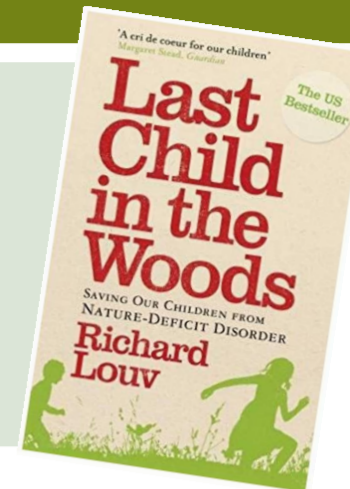


MILLIONS OF KIDS TODAY ARE SUFFERING FROM

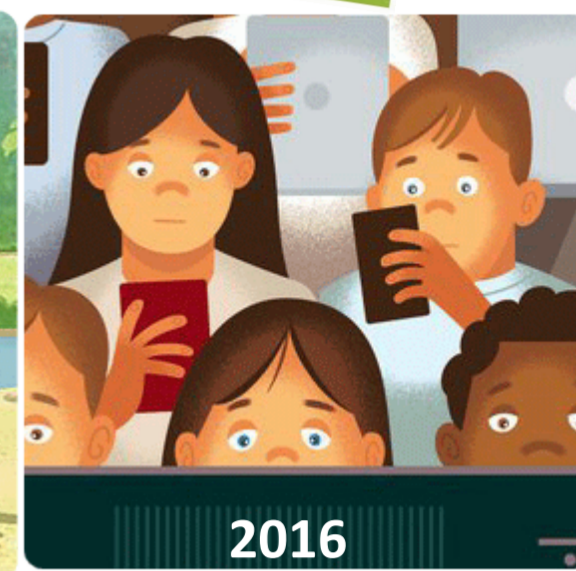
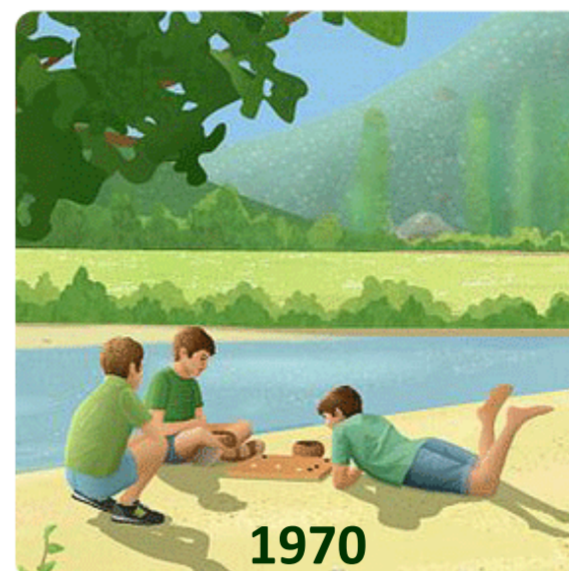
NATURE DEFICIT DISORDER

Nature Deficit Disorder (NDD) describes the human cost of alienation from nature. The term NDD was coined by author Richard Louv in his book *“Last Child in the Woods”* in order to explain how our societal disconnect with nature is affecting today’s children (and adults).



NDD is not a medical diagnosis, but rather a term that describes the costs of human alienation from nature, particularly for children in their vulnerable developing years.

Children spend less time playing outdoors than their parents did when they were young, even in rural areas. Children participation in outdoor activities has declined over the year.



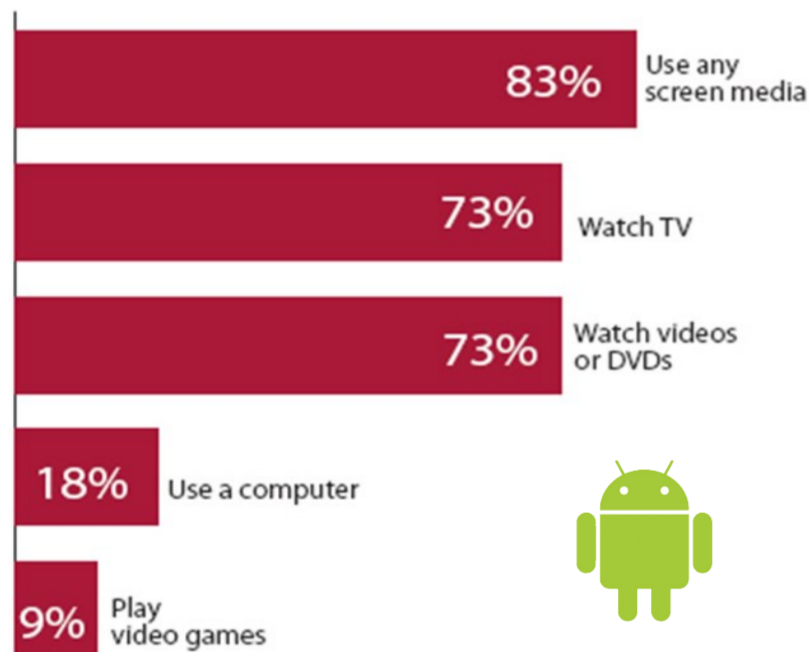
CAUSES

- Loss of natural surroundings in a child's neighborhood and city
- Parents are keeping children indoors in order to keep them safe from danger
- Increased draw to spend more time inside — with the advent of the computer, video games, and TV, children have more and more reasons to stay inside
- Children are confined to smaller spaces (more time in car seats, high chairs, strollers) for safety concerns

COSTS

- Vitamin D deficiency from lack of sunlight and other health issues
- Increased incidence and intensity of ADD, ADHD, and other behavioral and emotional disorders
- Lower standardized test scores in school in Reading, Writing, Math, Social Studies, and Science
- Rise in obesity and overweight
- Lack of self confidence

Percent of children 0-6 years old who, on a typical day ...



Rideout, V.J., E.A. Vandewater and E.A. Wartella. 2003. Zero to six: Electronic media in the lives of infants, toddlers and pre-schoolers. Henry J. Kaiser Family Foundation Publication #3378

OBESITY & ADHD IN CHILDREN

- According to The Centers for Disease Control (CDC), the U.S. Population of overweight children between ages two and five increased by almost 36% from 1989 to 1999. Furthermore, CDC found that the amount of TV that children watch directly correlates with measures of their body fat.
- Nearly 8 million children in the U.S. suffer from mental disorders, and ADHD is one of the more prevalent ones. The diagnosis of ADHD or ADD has been made in a staggering 15 percent of high school-age children. The number of children on medication for the disorder has soared to 3.5 million from 600,000 in 1990.

Children know more about Pokémon than common wildlife. In 2002, a British study discovered that the average 8-year-old was better able to identify characters from Pokémon than native species in the community where they lived: Pikachu, Metapod, and Wigglytuff were names more familiar to them than otter, beetle, and oak tree. (Balmfold, Clegg, Coulson and Taylor, 2002).



BENEFITS OF NATURE TO CHILDREN

- Supports creativity and problem solving
- Reduces Attention Deficit Disorder (ADD) symptoms
- Enhances cognitive ability
- Increases physical activity
- Reduces stress
- Improves academic performance, self-discipline, social relation, eyesight, and nutrition

(source: Natural Learning Initiative. *Benefits of Connecting Children with Nature: Why Naturalize Outdoor Learning*)

WHAT YOU CAN DO TO PREVENT NDD

- Reduce screen/electronic time (The American Academy of Pediatrics recommends no more than 1-2 hours of quality programming per day)
- Encourage children to play outdoors in green spaces
- Plant and care for trees and vegetation in your residence
- Create nature-related activities for the family
- Register for outdoor Summer camp



Recommended books to read about Nature Deficit Disorder and nature-base activities to prevent it:

1. *Last Child in The Woods*, Richard Louv (Algonquin, 2005)
2. *Vitamin N: The Essential Guide to a Nature-Rich Life*, Richard Louv (Algonquin, 2016)