

# Children growing up in low greenery areas at risk of losing IQ points

26 August 2020, by Bob Yirka



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A team of researchers affiliated with multiple institutions in Belgium has found that children who grow up in areas with little greenery are at risk of scoring lower on IQ tests. In their paper posted on the open access site *PLOS Medicine*, the group describes their study of children's IQ and the amount of greenery where they were growing up, and what they found.

Prior research has shown that children who grow up in areas with less greenery experience more cognitive problems than those who grow up in greener areas. In this new effort, the researchers have found that growing up with less greenery can also reduce a child's intelligence.

The work involved accessing IQ data from the East Flanders Prospective Twin Survey, a registry that was created as part of a study on multiple births in East Flanders, Belgium. The researchers found data on a little over 600 children aged 10 to 15 years old. They also obtained [satellite images](#) that covered the areas where the children lived, allowing them to see parks, large lawns and other

greenery. When comparing the children by their proximity to green areas, the researchers found that those children who lived in areas with little greenery (3% less than for greener neighborhoods) scored on average 2.6 points lower. They note that the differences were not tied to economic level; children in rich areas saw just as much decline as those in poor areas in conditions of low greenery. The researchers also found that the decrease was more noticeable for those children who naturally had lower IQs.

As part of their effort, the researchers also compared the children by behavioral difficulties tied to aggressiveness and short attention spans. They found that those [children](#) living in less [green areas](#) also scored worse in this area—on average, two points lower on reports given by their teachers.

The researchers found no evidence to explain why greenery might impact a child's intelligence level, but suggest it is likely that greenery influences reduced stress and more social activity. They note that other studies have shown that living in areas with little greenery could have a [negative impact](#) on cognitive abilities.

**More information:** Esmée M. Bijnens et al. Residential green space and child intelligence and behavior across urban, suburban, and rural areas in Belgium: A longitudinal birth cohort study of twins, *PLOS Medicine* (2020). [DOI: 10.1371/journal.pmed.1003213](#)

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