

Citation	Population	Methods	Findings
<a href="#">"Landscape and well-being: a scoping study on the health-promoting impact of outdoor environments" (Abraham et al., 2010)</a>	120 peer-reviewed studies.	A scoping study which represents a special kind of qualitative literature review.	Landscapes have the potential to promote mental well-being through attention restoration, stress reduction, and the evocation of positive emotions; physical well-being through the promotion of physical activity in daily life as well as leisure time and through walkable environments; and social well-being through social integration, social engagement and participation, and through social support and security.
<a href="#">"Mothers' perceived proximity to green space is associated with TV viewing time in children: The Growing Up in Scotland study" (Aggio et al., 2015)</a>	3586 children (average age 5.9 years).	Caregivers questioned on walking distance to park (in minutes), hours of TV time per week and psychological distress of children was measured by the Strengths and Difficulties questionnaire (SDQ).	Children > 20 min walk to green space had worse mental health per SDQ scores, had worse general health, were of lower socioeconomic group and watched over 2 hours more television than children living < 5 min walk to green space.
<a href="#">"How is high school greenness related to students' restoration and health?" (Akpinar, 2016)</a>	223 high school students age 12–20 years.	Measures-Attention Restoration Theory components (i.e. being away, fascination, coherence, and compatibility), naturalness of school greenness, and health indicators (i.e. stress, mental health, physical health, and quality of life).	High school greenness contributes to students' perceived restoration. Younger students reported better health and quality of life with more green space at school.
<a href="#">"Would You Be Happier Living in a Greener Urban Area? A Fixed-Effects Analysis of Panel Data" (Alcock et al., 2013)</a>	Panel data to explore three different hypotheses about how moving to greener or less green areas may affect mental health over time. (n = 12,818; observations = 87,573).	Fixed-effects analyses controlled for time-invariant individual level heterogeneity and other area and individual level effects.	Moving to greener urban areas was associated with sustained mental health improvements, suggesting that environmental policies to increase urban green space may have sustainable public health benefits.
<a href="#">"Green and Blue Spaces and Behavioral Development in Barcelona Schoolchildren: The BREATHE Project" (Amoly et al., 2014)</a>	2111 school children (age 7–10 years) from 36 Barcelona schools.	Survey and Strengths and Difficulties Questionnaire (SDQ) by parents and ADHD/DSM-IV questionnaire for teachers.	Inverse association between green space playing time and SDQ total difficulties, emotional symptoms, and peer relationship problems-Inverse relationship between residential greenness and SDQ total difficulties and ADHD/DSM-IV total and inattention scores.
<a href="#">"Counties with more trees and shrubs spend less on Medicare" (Becker et al., 2019)</a>	Health and environmental data from 3,086 of the 3,103 counties in the continental U.S.	Categorized land as urban, shrubland, forest, grassland, or agricultural. These categories were overlaid with Medicare spending per capita. Spending was controlled for factors such as age, sex, race, income, and health care access.	For each 1% of land covered in forest, there were an average Medicare savings of \$4.32 per person. This equals a total of nearly \$6 billion annually in nationwide savings. The savings were the largest amongst low-income communities. By encouraging more forested land, counties can work to reduce Medicare costs in their communities.

<p><a href="#">"A systematic review of evidence for the added benefits to health of exposure to natural environments" (Bowler et al., 2010)</a></p>	<p>25 peer-reviewed studies that compare measurements of health or well-being in natural and synthetic environments.</p>	<p>A systematic review to collate and synthesise the findings of studies that compare measurements of health or well-being in natural and synthetic environments. Effect sizes of the differences between environments were calculated and meta-analysis used to synthesise data from studies measuring similar outcomes.</p>	<p>Some evidence of a positive benefit of a walk or run in a natural environment in comparison to a synthetic environment. There was also some support for greater attention after exposure to a natural environment but not after adjusting effect sizes for pretest differences. Meta-analysis of data on blood pressure and cortisol concentrations found less evidence of a consistent difference between environments across studies.</p>
<p><a href="#">"Green schoolyards as havens from stress and resources for resilience in childhood and adolescence." (Chawla et al., 2014)</a></p>	<p>Children in 6 locations: young elementary school children's play in wooded areas during recess; older elementary school children's use of a naturalized habitat for science and writing lessons; and high school students' involvement in gardening.</p>	<p>Qualitative: Observation and Student Interviews.</p>	<p>Natural areas enabled students to escape stress, focus, build competence, and form supportive social groups.</p>
<p><a href="#">"Green spaces and cognitive development in primary schoolchildren" (Dadvanda et al., 2015)</a></p>	<p>2593 children (7–10 years) from 36 Barcelona schools.</p>	<p>12-month cognitive development in working memory, superior working memory and in attentiveness measured every three months via computerized cognitive tests. Green space exposure measured via high resolution satellite.</p>	<p>Beneficial association between exposure to green space and cognitive development among school children partly mediated by reduction in exposure to air pollution.</p>
<p><a href="#">"The Relationship between Neighbourhood Green Space and Child Mental Wellbeing Depends upon Whom You Ask: Multilevel Evidence from 3083 Children Aged 12–13 Years" (Feng &amp; Astell-Burt,</a></p>	<p>3083 children (12–13 years) and their parents and teachers.</p>	<p>Goodman's strengths and difficulties questionnaire, General Health Questionnaire, Warwick-Edinburgh Mental Well Being Scale, Answered by children, parents and teacher.</p>	<p>High green space quantity and quality associated with better child well-being on all three measures regardless of informant-Associations with green space quantity only significant for parent reported total difficulties and internalized subscale. Associations with green space quality noted with parent and child reported outcomes.</p>
<p><a href="#">"Nature is there; its free': Urban greenspace and the social determinants of health of immigrant families" (Hordyk et al., 2015)</a></p>	<p>Seven immigrant families consisting of 13 children (ages 7–13), and 10 adults.</p>	<p>A hermeneutic phenomenological approach was used to access immigrant parent and children's lived experiences of nature in urban contexts.</p>	<p>Results suggest that activities in the natural environment serve as a protective factor in the health and well-being of this population, providing emotional and physical nourishment in the face of adversity.</p>
<p><a href="#">"Going outdoors daily predicts long-term functional and health benefits among ambulatory older people." (Jacobs et al., 2008)</a></p>	<p>West Jerusalem residents born between June 1920 and May 1921 (n = 759).</p>	<p>Participants underwent assessments for health, functional, and psychosocial variables at ages 70 and 77. Twelve year mortality data were collected.</p>	<p>Participants going out daily at age 70 reported significantly fewer new complaints at age 77 of musculoskeletal pain, sleep problems, urinary incontinence, and decline in activities of daily living (ADLs). Logistic regression analysis indicated that not going out daily at age 70 was predictive of subsequent dependence in ADL, poor self-rated health, and urinary incontinence at age 77.</p>

<p><a href="#">"A Potential Natural Treatment for Attention-Deficit/Hyperactivity Disorder: Evidence From a National Study" (Kuo &amp; Faber, 2004)</a></p>	<p>452 guardians of children age 5–18 years diagnosed with ADHD.</p>	<p>Survey, demographic questionnaire.</p>	<p>Green outdoor settings appear to reduce ADHD symptoms.</p>
<p><a href="#">"Morbidity is related to a green living environment." (Maas et al., 2009)</a></p>	<p>Records of 195 general practitioners in 96 Dutch practices, serving a population of 345,143 people.</p>	<p>Morbidity was classified by the general practitioners according to the International Classification of Primary Care. The percentage of green space within a 1 km and 3 km radius around the postal code coordinates was derived from an existing database and was calculated for each household. Multilevel logistic regression analyses were performed, controlling for demographic and socioeconomic characteristics.</p>	<p>The previously established relation between green space and a number of self-reported general indicators of physical and mental health can also be found for clusters of specific physician assessed morbidity. The study stresses the importance of green space close to home for children and lower socioeconomic groups.</p>
<p><a href="#">"Access to urban green spaces and behavioural problems in children: Results from the GINIplus and LISApplus studies." (Markevych et al., 2014)</a></p>	<p>1932 ten year-old children.</p>	<p>GINIplus and LISApplus strengths and difficulties questionnaire.</p>	<p>Poor access to urban green space was associated with behavioral problems, most consistent with hyperactivity/inattention.</p>
<p><a href="#">"The relationship between perceived health and physical activity indoors, outdoors in built environments, and outdoors in nature." (Pasanen et al., 2014)</a></p>	<p>National survey data (n = 2070) from Finland.</p>	<p>Perceived general health, emotional well-being, and sleep quality were regressed on the weekly frequency of physical activity indoors, outdoors in built environments, and in nature. Socioeconomic factors and other plausible confounders were controlled for.</p>	<p>The results indicate that nature provides an added value to the known benefits of physical activity. Repeated exercise in nature is, in particular, connected to better emotional well-being.</p>
<p><a href="#">"Impact of Urban Nature on Executive Functioning in Early and Middle Childhood" (Schutte et al., 2017)</a></p>	<p>34 seven to eight year-olds and 33 four to five year-olds.</p>	<p>Activity to fatigue attention followed by a nature walk and an urban walk. After each walk, children completed assessments on working memory, inhibitory control and attention.</p>	<p>Children performed faster on attention task after nature walk. School age children performed significantly better on attention task than preschoolers after nature walk. Preschoolers had more stable spatial working memory after nature walk.</p>
<p><a href="#">"Associations of neighbourhood greenness with physical and mental health: do walking, social coherence and local social interaction explain the relationships?" (Sugiyama et al., 2008)</a></p>	<p>1895 adults in Adelaide, Australia.</p>	<p>Twelve item short form health survey.</p>	<p>Recreational walking and social coherence were associated with mental health and the relationship between greenness and mental health.</p>

<a href="#">"Views of Nature and Self-Discipline: Evidence From Inner City Children" (Taylor et al., 2002)</a>	169 inner city boys and girls.	Parent ratings of the naturalness of the view from home. Tests of concentration, impulse inhibition, and delay of gratification.	A view of green space directly outside the home can increase self-discipline in girls.
<a href="#">"Nearby Nature A Buffer of Life Stress Among Rural Children" (Wells &amp; Evans, 2003)</a>	337 children (mean age 9.2 years).	Survey and Interview.	Nature moderates the impact of stressful life events in rural children.
<a href="#">"Linking Student Performance in Massachusetts Elementary Schools with the "Greenness" of School Surroundings Using Remote Sensing" (Wu et al., 2014)</a>	Data from 905 Massachusetts public schools collected between 2006 and 2012 (n = 6333).	Standardized test scores of 3rd grade students. The amount of trees and vegetation ("greenness") in the vicinity of schools was obtained via satellite from NASA's Earth Observing System data.	Consistently positive significant association between the greenness of the school in the spring and school-wide performance on both English and Math tests.