

This paper investigates the impact of greening schoolyards on children's (age 7–11) play and non-play behavior during recess. Five primary schools in The Netherlands took part in a longitudinal prospective intervention study using a pre-post design with a baseline and two-year follow-up. During recess at baseline and follow-up, the play behavior of children in grades 4, 5, and 6 in different target areas was videotaped with multiple cameras and afterward coded using the cognitive play categories and non-play categories of the Play Observation Scale (Rubin, 2001). These findings strengthen the empirical basis for greening schoolyards by providing data from a large scale quantitative study with a controlled, longitudinal pre-post design. Furthermore, there was an increase in games-with-rules, a small increase in constructive and explorative play behavior, and a decrease in passive non-play behaviors. Video recordings of 352 children at baseline, and 325 children in 66 target areas at follow-up, were divided into equal time frames of 30 seconds. Each child's behavior was coded at the 30th second of the time frame, yielding a dataset of 17046 observations. At baseline, all schoolyards were paved. Between baseline and follow-up, all schools greened their schoolyards. Results show an increase in observed play, as compared to non-play, behavior, after greening. This impact of greening was stronger for girls compared to boys.