ABSTRACT: This dissertation is based and was a part of large randomised trial featuring an evaluation of the effect of the school-based Unplugged prevention program implemented as part of the EU-Dap-2 international project. Consumption of tobbaco is one of the key risk factors causing serious illness and early death, although that can be prevented effectively. The Unplugged intervention consists of a total of 12 lessons delivered within one academic year and is based on the Comprehensive Social Influence Model. Aims: To ascertain whether the Unplugged program has an impact on tobacco use, by means of the lifetime and 30-day prevalence indicators. To verify the duration of the program's measurable effect over time using retests. Methods: The randomised trial of the program was conducted on a total of 1874 children (with a mean age of 11.8 years), who were divided into the experimental group (exposed Unplugged intervention) and the control group (without intervention). Both groups were followed up for next 24 months after the intervention. Data were collected using the 2003 version of the ESPAD questionnaire. Baseline testing was conducted among sixth-grade students immediately prior to the program's implementation, and 5 follow-up tests were carried out 9, 12, 21, 24, and 33 months after the baseline testing. Results: As regards the 30-day smoking prevalence indicator, the tests performed after the completion of the intervention showed statistically significant differences between both groups in favour of the experimental one. Two years after the completion of the intervention the experimental and control groups showed 30-day prevalence rates of 26.7% and 33.1% (p < 0.01). The progression of smoking in the 30-day prevalence among the experimental group was apparently slower than that among the control group over the period of time. However the gender results comparing the experimental and control group provide evidence of statistically significant effects in lifetime and 30-day prevalence of tobacco use only among girls. Conclusions: The implementation of the Unplugged program resulted in a statistically significant measurable positive effect on tobacco use in Czech adolescents. Given the gender equality approach to drug prevention, differences in outcome may be overcome by adding gender-specific elements to the intervention program's curriculum.