The purpose of this study was to analyze the evolution of smoking among Psychology students at the University of Santiago de Compostela (Spain) over a ten-year period (1986-2006). We also assessed the extent of knowledge of the Spanish health legislation on tobacco (Ley 28/2005) and its effect on smoking. We administered a questionnaire to representative samples of students from the 1st year of their Psychology course to the 5th year, on four occasions. In the academic year 1996-1997 (N=835), 34% of the sample claimed to be daily smokers; in 1999-2000 (N=842), the figure was 35.2%; in 2003-2004 (N=835) it was 31.9%; and in 2006-2007 (N=688), it was 22.8%. Moreover, in the last assessment, 97.1% of the sample reported being aware of the legislation (Ley 28/2005) and 41.9% of the smokers claimed that it had some degree of influence on their smoking. It can be stated that, although overall current prevalence of smoking is similar to that of 10 years ago, a significant change is observed in the profile of smokers. This change is expressed in lower levels of nicotine dependence and a decrease in the percentage of daily smokers, together with an increase in occasional smokers.