Knowledge about mental health problems and previous contact are key variables in the fight against stigma. The aims of the study were: (1) to explore the level of stigma associated with mental disorders in students of different university degrees, and (2) to analyze the evolution of stigma in psychology students. Two groups completed the Attribution Questionnaire (AQ-27). Group 1 consisted of 392 first-year students of the different degrees evaluated ($M_{age}= 18.59$ years, $SD= 1.29$, 60% female), and group 2 consisted of 152 third-year Psychology undergraduates ($M_{age}= 24.35$ years, $SD= 8.97$, 73.4% female). Group 1 students with previous contact with mental disorders showed fewer stigmatizing attitudes. Differences were observed according to grade level. Group 2 showed lower levels of stigma throughout the academic year. The results support the effectiveness that mental health education and awareness-raising interventions through contact with people with mental health problems can have in reducing stigma.