With limited options and ever-increasing levels of academic strain, today, more than ever before, students across America find themselves misusing prescription stimulants for academic purposes. The growing issue of nonmedical prescription stimulant use (NPS) has been primarily studied among college student populations, where the highest rates of NPS are found. Consequently, there is a lack of research that scrutinizes NPS induced by academic strain among high school students. To help fill this gap, the extent to which academic strain is a determinant of NPS consideration/engagement among a sample of 111 twelfth-grade students from a suburban high school was studied. Survey research was used. Academic strain was found to predict 17.7% of the variation of NPS consideration and 7.4% of the variation of NPS engagement. The relationships between academic strain and both measures of NPS were found to be direct, as opposed to the indirect relationship proposed by the General Strain Theory. Perceptions of NPS for academic purposes were also taken into account. Overall, 50% of the students had negative perceptions of NPS, 20% had positive perceptions, and 30% had neutral perceptions. The results of the study show that academic strain is a determinant of NPS consideration/engagement to a small extent among the sample of high school students surveyed. The implications of these findings are discussed. The paper ends with recommendations for future research and ways to reduce the amount of students practicing NPS for academic purposes.