

## ABSTRACT

This study investigates the casual effect of college education on smoking, drinking, sleeping, and cancer screening behavior in Japan. To estimate the casual effect, we leverage a unique natural experiment that occurred in Japan in 1966, the Firehorse Superstition. Japanese believe women born under this superstition has a difficult personality, leading to parents to avoid having children in 1966. A significant decline in the number of children leads to a decline in competition for college education for individuals born into this cohort. To avoid selection bias, we further leverage the educational institution setting in Japan, which the new school starts at April of each year. This leads to a mismatch between Japanese calendar year and school year in 1966 that can be used as an instrument for college education. Using 2013 and 2016 Comprehensive Living Condition Surveys, we find that longer year of college education is associated with a reduction in smoking and drinking and an improvement in sleeping and using cancer screening. Exploring the mechanisms mediating the relationship, we find that the relationship is mediated partially by an improvement in labor market and financial literacy outcomes.

JEL Codes: I12, I21, J60

*Keywords:* college education; health behavior; an instrumental variable approach; superstition; Japan

