What social and economic factors are good predictors of expenditures on lottery products?

Executive Summary

State-operated lotteries have become big business over the past half century. Forty-one states, the District of Columbia, and Puerto Rico today operate some form of the lottery. The purpose of a state-operated lottery is to bring in revenue to the state without passing new taxes. It has been estimated that individuals, nationally, spend over $50 billion on lottery related products. The percentage of that money varies from state to state, but in the year 2000, which is the test year for this project, states were able to keep about 23% of the money spent on lottery products.

From state to state, per capita expenditures on lottery related products differ greatly. The aim of this research is to test and see if a variety of social and economic factors within a state significantly influence that state’s per capita lottery expenditure.

Past research performed within the area focused primarily on people’s opinions about the lottery as well as their spending habits with regards to lottery products. Chapter 2 presents a broad overview of this research. Much of the research concluded that several specific factors do influence people’s decisions about whether or not to support a lottery. Among these are religious adherence, education level, race/ethnicity, per capita income, and age.

Most research tended to agree that African-Americans, Hispanics, individuals with little education, and those who are not very religious typically spend more money on lottery related products. Research regarding age and income levels exhibits a variety of different results.
The dependent variable for this study was per capita lottery expenditures for each lottery state as of the year 2000. There were 38 such states at the time. Lottery revenues for each state are available from the U.S. Census Bureau’s State and Local Government Finance Data. These revenues were divided by population to derive the per capita expenditure.

Seven specific independent variables were used. These were percentages of Hispanics and African-Americans, percentages of high school graduates and college graduates, percentage of the population over 65 years of age, per capita income, and the percentage of the population who claim to be a Christian. The first six of these were pulled from the 2000 U.S. Census. The seventh, percentage of Christians, was available from the U.S. Census Bureau but the actual survey was performed by an outside source.

The data was plugged into a multiple regression model. The overall model was statistically significant, but only one of the individual independent variables contributed to this significance. The regression showed that as percentage of high school graduates rises, per capita lottery expenditures decreases. All other independent variables were not significant predictors of per capita lottery expenditures. This finding was contrary to much of the other research performed in this field.

This study concludes that, of the seven variables, only a lower percentage of high school graduates can lead to higher per capita lottery expenditures.