

State Voters Political Donations

CHAID Analysis Tree Exploration

Multivariate Solutions

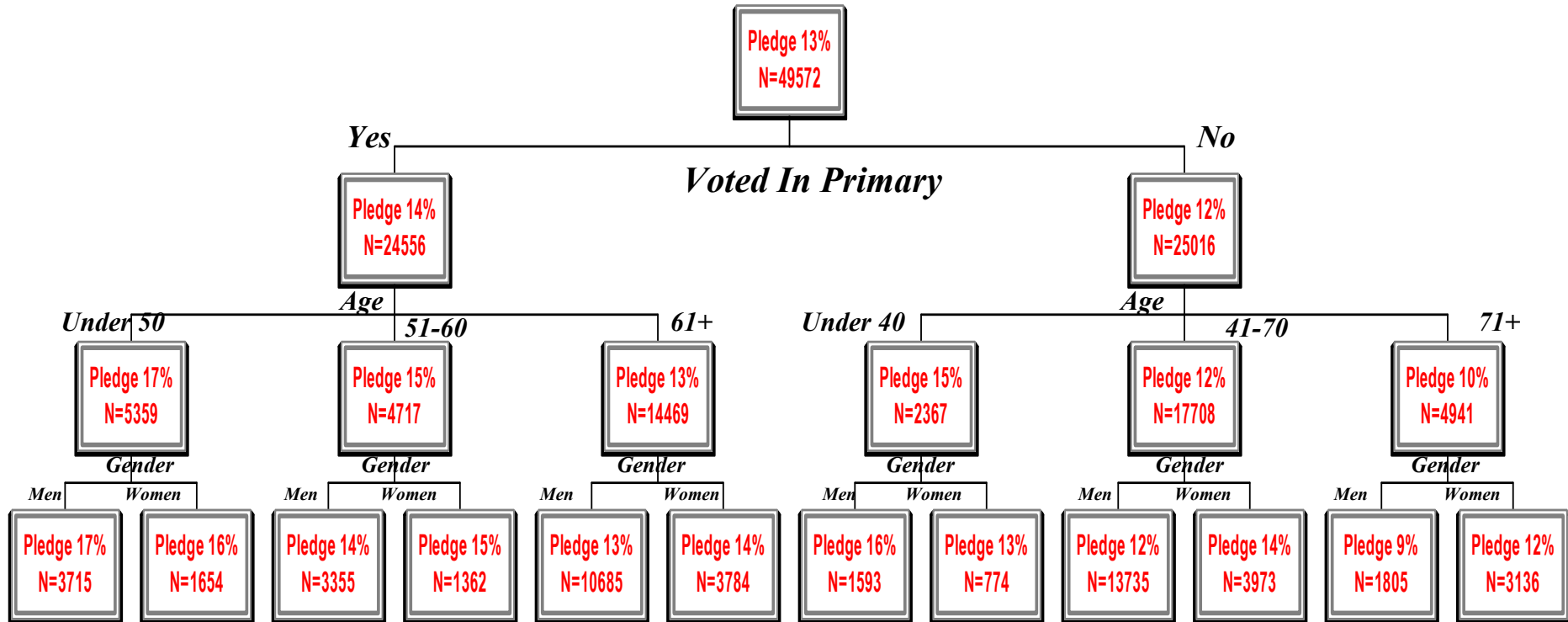
CHAID Analysis

- *CHAID, for Chi-square Automatic Interaction Detector is an exploratory method used to study the relationship between a dependent variable and a series of predictor variables.*
- *CHAID analyzes a single attribute of a population (the dependent variable) based on other attributes -(predictor variables). CHAID iteratively subdivides the population into classes having significantly different values for the dependent variable.*
- *The developed model is a classification tree (or data partitioning tree) that shows how major "types" formed from the independent (predictor or splitter) variables differentially predict a criterion or dependent variable.*

Chi-Square Decision Tree

Made Pledge to the State Political Party

Made Pledge to the State Political Party



CHAID

Interpreting the Map

- *In the CHAID tree, each box contains a percentage of dependent variable (Pledged money) and a sample size. The Top Box has a Pledge=13% with a sample size N=49572. This is read as, There are 49,572 people in the sample (top box is the entire sample), 13% of them made pledges.*
- *CHAID then finds the predictor with the best breaks in percentages among the top box. For example, Voted In Primary, is the top predictor. The left box indicates that people who voted in the primary had a pledge rate of 14%, while those who did not (right box) had a pledge rate of 12%.*
- *CHAID then examines the sub-boxes and looks for differences in the predictor variable. For example, the far left, third level box is read, 'People Who Voted in the Primary Under the Age of 50' had a pledge rate of 17%. The next box, 'People Who Voted in the Primary Age 51-60 had a pledge rate of 15%. So on.*

CHAID Key Findings

- *Primary voters have a significantly higher rate of pledging than do non-primary voters. This is the top break.*
- *Younger voters have a higher percentage of pledging than do older voters. Almost one-fifth (17%) of primary voters under the age of 50 gave money.*