State Voters Political Vote

Discriminant Analysis

Multivariate Solutions

Discriminant Analysis

- *Discriminant analysis is used in situations where the object is to build a descriptive model of group membership based on observed characteristics of predictor variables.*
- *The procedure generates a discriminant function based on linear combinations of the predictor variables that provide the best explanation of Group membership.*

Discriminant Analysis (cont.)

- *First Step: The first step is to determine a Group whose characteristics are explored. For the State Voters Database, the Group is defined by those who voted for the Political Party and those who did not.*
- *Interpretation: Standardized Coefficients can be used as weights when exploring which variables best contribute to membership in the Group. For example, if 'Voted in Primary' has a standardized coefficient of .8, and ' Age' has a standardized coefficient of .4, it can be said that 'Voted in Primary' has twice the discriminating power of Age in determining likelihood groups of Party Voters.*
- *Standardized coefficients near zero can be said to have little impact on the discriminating process.*

Variables Present in the Discriminant Analysis

The Group
Voted for the Party (47%)/Did Not Vote for the Party

Variables Present in Model Equation
Age
Voted in Primary
Ethnicity
Gender
Congressional District
County

Standardized Coefficients

Discriminant Analysis

Variables Present in Full Model Equation for Party Votership	Standardized Canonical Discriminant Function Coefficients
Age	0.693
Voted in Primary	0.684
Ethnicity	0.292
Gender	0.139
Congressional District	-0.150
County	-0.192

Age (From Youngest to Oldest) and Primary Voter Record are the Key Discriminators for Party Voters