

Choosing a Statistical Analysis Method

| Dependent Variable(s) | Independent Variable(s) | Method |
|------------------------------|---|--|
| One discrete | One discrete | Crosstabulation; contingency table analysis |
| | Multiple discrete | Loglinear analysis |
| | One continuous | Logistic regression; discriminant function analysis |
| | Multiple continuous | Logistic regression; discriminant function analysis |
| | Multiple, both discrete & continuous | Logistic regression |
| One continuous | One discrete | Oneway ANOVA |
| | Multiple discrete | ANOVA |
| | One continuous | Bivariate regression |
| | Multiple continuous | Multiple regression |
| | Multiple, both discrete & continuous | ANCOVA (if continuous IVs are covariates); otherwise use multiple regression with dummy variables for discrete IVs |
| Multiple discrete | Any number, either discrete or continuous | Analyze each DV separately, using the appropriate method |
| Multiple continuous | One or more discrete | If multiple DVs represent multiple operationalizations of a single theoretical construct, then use MANOVA; if multiple DVs represent distinct theoretical constructs, then analyze each DV separately using the appropriate method |
| | One or more continuous | Generally you would analyze each DV separately. If you have a complex causal model, you can use covariance structure methods (structural equation modeling, partial least squares). Finally, canonical correlation may be appropriate depending on your research question. |
| | Multiple, both discrete & continuous | Analyze each DV separately, using the appropriate method |