

Highest Degree and Political Party Affiliation

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Introduction:

This analysis is thought for analyzing a General Social Survey in order to find if exists a correlation between the Political Party Affiliation of a subject and its highest degree.

Data:

This extract of the General Social Survey (GSS) Cumulative File 1972-2012 provides a sample of selected indicators in the GSS with the goal of providing a convenient data resource for students learning statistical reasoning using the R language. Unlike the full General Social Survey Cumulative File, we have removed missing values from the responses and created factor variables when appropriate to facilitate analysis using R. Our hope is that this will allow students to focus on statistical concepts without having to (initially) be concerned about some of the data management and interpretation issues associated with missing data and factor variables in R. Other than the two modifications mentioned above, all data and coding come from the original dataset. Students and researchers seeking to conduct research or explore the full codebook behind the full General Social Survey Cumulative File are urged to consult the original dataset at the citation that follows:

Smith, Tom W., Michael Hout, and Peter V. Marsden. General Social Survey, 1972-2012 [Cumulative File]. ICPSR34802-v1. Storrs, CT: Roper Center for Public Opinion Research, University of Connecticut /Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors], 2013-09-11. [doi:10.3886/ICPSR34802.v1](https://doi.org/10.3886/ICPSR34802.v1)

Exploratory data analysis:

The basic structure of the dataset is

```
names(gss)
```

```
## [1] "caseid" "year" "age" "sex" "race" "hispanic"
## [7] "uscitzn" "educ" "paeduc" "maeduc" "speduc" "degree"
## [13] "vetyears" "sei" "wrkstat" "wrkslf" "marital" "spwrksta"
## [19] "sibs" "childs" "agekdbrn" "incom16" "born" "parborn"
## [25] "granborn" "income06" "coninc" "region" "partyid" "polviews"
## [31] "relig" "attend" "natspac" "natenvir" "natheal" "nacity"
## [37] "natcrime" "natdrug" "nateduc" "natrace" "natarms" "nataid"
## [43] "natfare" "natroad" "natsoc" "natmass" "natpark" "confinan"
## [49] "conbus" "conclerg" "coneduc" "confed" "conlabor" "conpress"
## [55] "conmedic" "contv" "conjudge" "consci" "conlegis" "conarmy"
## [61] "joblose" "jobfind" "satjob" "richwork" "jobinc" "jobsec"
## [67] "jobhour" "jobpromo" "jobmeans" "class" "rank" "satfin"
## [73] "finalter" "finrela" "unemp" "govaid" "getaid" "union"
## [79] "getahead" "parsol" "kidssol" "abdefect" "abnomore" "abhlth"
## [85] "abpoor" "abrape" "absingle" "abany" "pillok" "sexeduc"
## [91] "divlaw" "premarsx" "teensex" "xmarsex" "homosex" "suicide1"
## [97] "suicide2" "suicide3" "suicide4" "fear" "owngun" "pistol"
```

```
## [103] "shotgun" "rifle" "news" "tvhours" "racdif1" "racdif2"
## [109] "racdif3" "racdif4" "helppoor" "helpnot" "helpsick" "helpblk"
```

As can be seen the dataset provides many different variable but the only one in which we are interested are “degree” and “partyid”. We can subset that variables with

```
degree <- gss$degree
partyid <- gss$partyid

tbdata <- table(degree, partyid)

summary(tbdata)
```

```
## Number of cases in table: 55754
## Number of factors: 2
## Test for independence of all factors:
## Chisq = 1473, df = 28, p-value = 5e-293
```

We have 55754 numbers of cases and 2 factor categorical values.

We can see the entire table and plot it.

```
tbdata
```

```
##
##      partyid
## degree      Strong Democrat Not Str Democrat Ind,Near Dem Independent
## Lt High School      2591      2786      1176      2085
## High School      4110      6281      3565      4579
## Junior College      454      583      389      456
## Bachelor      1006      1436      988      795
## Graduate      724      715      548      412
##
##      partyid
## degree      Ind,Near Rep Not Str Republican Strong Republican
## Lt High School      754      1342      852
## High School      2633      4865      2702
## Junior College      273      504      340
## Bachelor      841      1610      1135
## Graduate      368      568      448
##
##      partyid
## degree      Other Party
## Lt High School      145
## High School      411
## Junior College      54
## Bachelor      151
## Graduate      79
```

```
plot(tbdata, main="Party Affiliation")
```

Party Affiliation

partyid

Lt High School High School Junior College Bachelor Graduate

Sen Rep Ind Dem Other

degree

Inference:

Insert inference section here...

Conclusion:

Insert conclusion here...