

# Research Methodology - Assignment 5

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For the last homework assignment we will look at limited independent variables and interactions. The data set is based on the analysis by Brambor, Clark and Golder (2006a), which is in turn based on that by Mozaffar, Scarritt and Galaich (2003).

```
> library(foreign)
> gol <- read.dta("golder.dta")
> gol$single.member.district <- ifelse(gol$avemagnitude.nyu ==
+   1, 1, 0)
> gol$simultaneous.elect <- ifelse(gol$proximity.nyu == 1, 1, 0)
> gol <- gol[!is.na(gol$year.nyu), ]
```

As you can see, two variables have been added, **single.member.district**, which is 1 for elections with single member districts and 0 for other elections, and **simultaneous.elect**, which is 1 for elections where presidential elections take place simultaneously with the legislative elections and 0 when not.

```
> names(gol)

[1] "country.nyu"          "year.nyu"            "dictator.nyu"
[4] "avemagnitude.nyu"    "concentration"        "district.nyu"
[7] "elecparties.nyu"     "frag2.conc.nyu"      "frag.conc.nyu"
[10] "fragmentation"       "fragmentation2"      "legparties.nyu"
[13] "logmag.conc.nyu"     "logmag.frag2.conc.nyu" "logmag.frag2.nyu"
[16] "logmag.frag.conc.nyu" "logmag.frag.nyu"     "logmag.nyu"
[19] "prescandidate.nyu"   "prox.prescandidate.nyu" "proximity.nyu"
[22] "seats.nyu"           "upperseats.nyu"     "uppertier.nyu"
[25] "single.member.district" "simultaneous.elect"
```

The variables of interest are:

|                               |   |
|-------------------------------|---|
| <b>legparties.nyu</b>         | Effective number of parties in the legislature  |
| <b>dictator.nyu</b>           | Dummy variable, dictator present = 1  |
| <b>concentration</b>          | Variable on scale from 0 to 4 which denotes the extent to which ethnopolitical groups are concentrated geographically |
| <b>fragmentation</b>          | Index for the amount of fragmentation in ethnopolitical groups  |
| <b>single.member.district</b> | Dummy variable, single member districts = 1   |
| <b>simultaneous.elect</b>     | Dummy variable, presidential elections simultaneous with parliamentary elections = 1                                  |

Present and interpret a model explaining the effective number of legislative parties by concentration, fragmentation, whether a dictator is present, and whether the parliamentary and presidential elections are taking place simultaneously. Add the variable for single member districts. Does this change the results? Study the interaction effect between **dictator.nyu** and **simultaneous.elect**, as well as between **single.member.district** and **concentration**. What do you conclude?

Make sure you write the answer in essay style - around 600 words, including introduction, data analysis, and conclusion. Add tables and graphs as you think is reasonable.

## References

- Brambor, Thomas, William Roberts Clark and Matt Golder. 2006*a*. "Are African party systems different?" *Electoral Studies* 26: 315–323.
- Brambor, Thomas, William Roberts Clark and Matt Golder. 2006*b*. "Replication data for: Are African Party Systems Different?". <http://hdl.handle.net/1902.1/10559>
- Mozaffar, Shaheen, James R. Scarritt and Glen Galaich. 2003. "Electoral institutions, ethnopolitical cleavages, and party systems in Africa's emerging democracies." *American Political Science Review* 97(3): 379–390.