Why Should I Trust You? An Analysis of Government Officials and Trust in Government

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5/5/2017

Question of Thesis and Motivation for Research

When we examine today's political climate, we seem to see a general distrust in the government. We see people distrusting their representatives. We see people fearful of providing information to the government. We even see people changing their way of life to prevent government overreach. With the revelations of government spying and other overreaches, it is no wonder why people distrust the government. What I seek to find out is whether one's distrust for government changes one's support for government officials differently at the federal, state, and local levels of government.

I seek to do this through examining people's support for officials of federal, State, and local governments as a function of one's self-reported trust in government. Research and public opinion polling shows that party identification, as well as ideology, have significant impacts on one's trust in government, thus I will be controlling for both of those. I plan to examine, through three different tests, how trust changes support between federal, State, and local government officials. The main part of this research will look at the differences between the three levels of government. This, has significance in the way in which laws are passed. Thus the design of the research focuses on the simple relationship between trust and support for government officials. That, I believe, should give us enough insight to make valuable conclusions about how trust affects support for government officials.

New research into the field of trust in government has begun to show real impacts of the decline of trust. More heavily researched examples include the recent debates over the American healthcare system. One of the highest determinants for one's support of the Affordable Care Act is high trust in government (Hopkins 2014). This is because with large, government-run initiatives, the people have to trust that the government will do the right thing. Thus, I want to do this research to see how one's trust in government can impact one's support for public officials. Ideally, higher trust in officials means higher support for policy. I hope that this research can explain why local and, to a lesser extent, state officials, can pass legislation more easily than federal officials, especially influential legislation.

Data

The dataset used in this study is the 2017 University of Illinois at Urbana-Champaign political science subject pool. The data can be found here (https://drive.google.com/file/d/0B3l1zKCLPf5YbnV6MlJteFQ5Y3c/view?usp=sharing). This specific data was collected in an online survey, where students received two extra credit points for participation, between February 15th and 17th of 2017. The collection of the data has been conducted by the political science graduate students and meets ethical requirements for dissertation data collection.

The data was coded depending on each question. For my explanatory variable (Trust in government), the data was coded so that 1 meant that one just about always trusts the government to do the right thing, 2 meant most of the time, 3 meant only some of the time and 4 meant Almost never. "Don't Know" was coded as a 5, but for our purposes, it will be recoded later so it is removed from analysis. The outcome variables (Bureaucratic Feeling Thermometer, state legislature feeling thermometer, and local officials feeling thermometer) was coded on a 0-100 scale, with 0 indicating very poor feelings, and 100 indicating very warm feelings. The control variable of political ideology was coded using a standard 7 point scale with 1 being "very liberal" and 7 being "very conservative" with 4 being a "centrist." Party identification was also coded on

a seven-point scale, with 1 being "very strong Democrat," 4 being "independent," and 7 being "very strong Republican." An abbreviated codebook can be found at the end of the code appendix.

The reasoning behind choosing this set of data when it comes to measuring the effect of trust on support for government officials is relatively straightforward. For measuring my explanatory variable, government trust, the survey asked, "How much of the time do you think you can trust the government to do what is right? just about always, most of the time, only some of the time, or almost never? "This is sufficient to measure a person's trust in government, so I believe it is a valid benchmark/measurement for this variable. Now, for the outcome variables for federal, state, and local officials, I had to choose some measurements that were not as cut and dry. For measuring feelings on federal officials, I had the option of using President Trump, President Obama, or federal bureaucrats. I felt that the measurements on both President Obama and President Trump would be too subject to partisan feelings, so I decided on a non-partisan measurement: bureaucrats. For similar reasons, regarding state level officials, I sided against using the feeling thermometer for Governor Bruce Rauner, and instead decided to use the measurement of the Illinois state Legislature. I didn't have any problems with the local government measurement because the survey asked directly about local officials, so I am using that for the test on local governments. When it comes to the controls, Party ID and Ideology were directly asked, so those were straightforward benchmarks for the testing.

Table 1: Summary Statistics for Outcome, Explanatory and Control Variables

Statistic	N	Mean	St. Dev.	Min	Max
govtrust	337	2.858	0.666	1	4
bureaucrats	337	44.234	18.172	0	100
statelegis	337	41.142	18.219	0	100
locgov	337	54.341	18.433	0	99
pid	337	3.267	1.616	1	7
ideology	337	3.039	1.657	1	7

	govtrust	bureaucrats	statelegis	locgov	pid	ideology
1	Min. :1.000	Min. : 0.00	Min. : 0.00	Min. : 0.00	Min. :1.000	Min. :1.000
2	1st Qu.:2.000	1st Qu.: 35.00	1st Qu.: 30.00	1st Qu.:50.00	1st Qu.:2.000	1st Qu.:2.000
3	Median :3.000	Median : 50.00	Median : 50.00	Median :50.00	Median :3.000	Median :3.000
4	Mean :2.858	Mean : 44.23	Mean : 41.14	Mean :54.34	Mean :3.267	Mean :3.039
5	3rd Qu.:3.000	3rd Qu.: 50.00	3rd Qu.: 50.00	3rd Qu.:65.00	3rd Qu.:4.000	3rd Qu.:4.000
6	Max. :4.000	Max. :100.00	Max. :100.00	Max. :99.00	Max. :7.000	Max. :7.000

As the tables show, there is a tendency for the feeling thermometer scores (bureaucrats, statelegis, and locgov) to have a median of 50 and for govtrust, PID, and ideology to have a median around 3. The median of 50 in the feeling thermometer cases is likely due to neutral opinions on all three of the government officials. This means that in general, people don't have strong feelings either way towards those groups. However, the means for statelegis and bureaucrats are less than 50, while the mean for locgov is above 50. This indicates that on average, people tend to like local government officials more than the officials of the state or federal government.

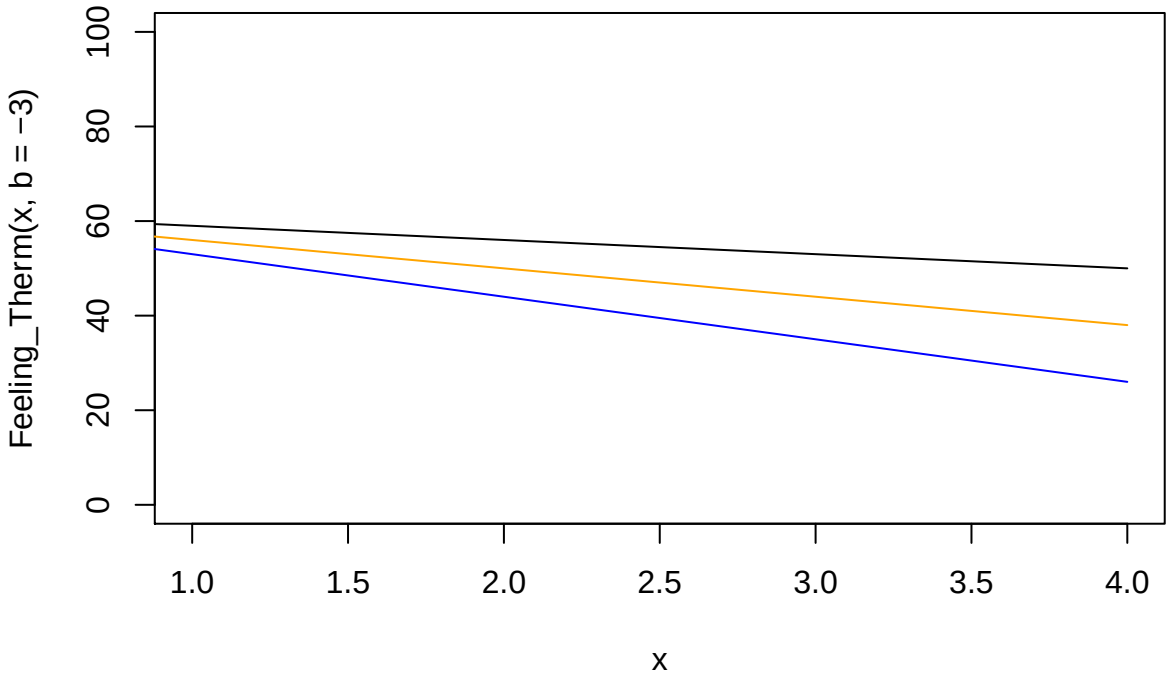
When it comes to Party ID, ideology and government trust, the medians all being three correlates to "Independent Leaning Liberal," "Somewhat Left of Center," and "only some of the time, "respectively. This indicates that in general, participants in this survey leaned liberal and generally did not trust government all that much. The means for these were 3.267, 3.039, and 2.858 respectively. This meant that students were, on average, leaning democratic, but overall were close to identifying as independents. They also leaned left of center on ideology. When it comes to trust, they tended to be in between"most of the time" and "only some of the time, "but tended to lean more towards the latter. This, in summary, represents that the participants were generally left-leaning, in both party ID and ideology and had a general sense of distrust towards the government. It is also interesting that almost all the feeling thermometers had a standard deviation of around

18. This means that the responses were generally spread apart the same amount and that responses were generally split evenly, despite different mean responses.

Expectations

Based on anecdotal evidence, I would expect for there to be significant differences between the three models I plan to run. I would expect for there to be a stronger drop-off for federal officials based on lower trust than for state or local officials. This assumes that people tend to generically trust officials more based on the locality of these officials. If I can drive five miles and get to meet my elected official, I will like them more and trust them more. However, if I only get to meet them on their schedule in large town halls and not have phone calls returned, I will not generally trust them, or the government. I would expect to see that the slopes will continually decrease between federal and state, and between state and local.

A plot shows the expected results I would get for slopes of the relationship between trust and support for officials at the three levels of government. As you can see, my predictions show that there is less of a steep slope for local officials, and get steeper with state and federal officials. This is based on the anecdotal evidence and some basic analysis of the variable data. In the graph below, the X axis represents government trust, the Y axis measures the feeling thermometer score. The blue line is the expected line of the federal government test. The orange line is the expected line of the state government test. Lastly, the black line is the expected line of the local government test.



Also, when choosing control variables, I largely chose Party ID and ideology as controls because data and research has suggested that both those affect one's natural trust in government. By controlling for them, I am making sure that partisan and ideological divides do not taint the data. Research shows that trust in government is partisan and ideological, with differences approaching 20% as recently as 2004. (Hetherington and Rudolph 2015) Thus, because there appears to be substantial partisan difference, I will be controlling for it.

Analysis

For reference, in all cases of government trust, a response of "don't know" was coded to be NA.

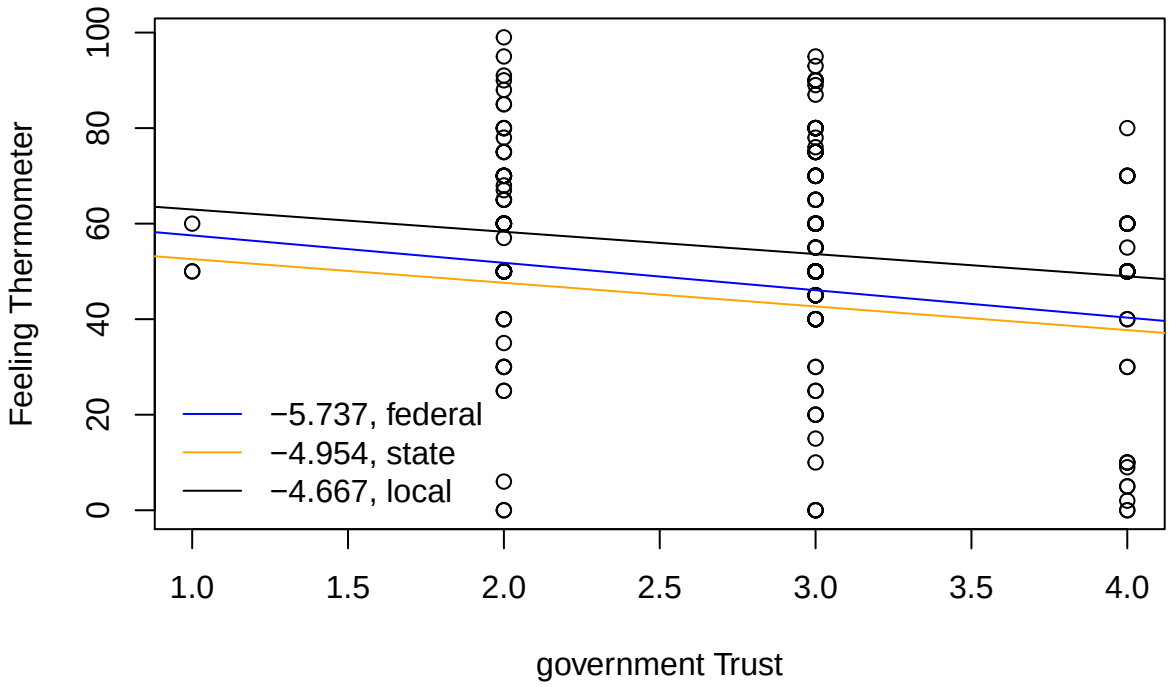


Table 2: Regression Output for federal, state, and local governments

	Dependent variable:		
	federal government (Bureaucrats)	state government (IL state Legislature)	local government (local governments)
government Trust	−5.737***	−4.954***	−4.667***
	(1.502)	(1.521)	(1.529)
Ideology	1.656	0.991	2.548**
	(1.068)	(1.081)	(1.087)
Party ID	−2.349**	−1.604	−2.355**
	(1.085)	(1.099)	(1.104)
Constant	63.270***	57.530***	67.630***
	(5.252)	(5.316)	(5.344)
Observations	337	337	337
R^2	0.055	0.037	0.049
Adjusted R^2	0.046	0.028	0.040
Residual Std. Error (df = 333)	17.750	17.960	18.060
F Statistic (df = 3; 333)	6.458***	4.242***	5.725***
Note:			*p<0.1; **p<0.05; ***p<0.01

In the above plot, the colors represent the same as the expectations plot.

Basic analysis of the three models, all examining government trust on feelings for officials, produce a statistically significant result for the government trust variable. This means that the likelihood of no relationship is extremely small. Respectively, the federal government Model returned a p-value of .00016, the state government Model returned a p-value of .00124, while the local government Model returned a p-value of

.00245. These all indicate that the feelings for officials is strongly affected by one's trust in government. The analysis also shows low R-squared values for all of the variables. This is not surprising given the size of the dataset and how there are many things that go into one's feelings for government officials.

The more important part of this analysis is regarding the coefficients for government trust for the three models. This is indicative of how much trust matters on the change in feelings. My hypothesis proposed that the steepest slope would be for federal officials, while the lowest slope would be for local officials. The linear models returned results of -5.737 for the federal government, -4.9538 for state government, and -4.667 for local government. This means that support for officials decreases by that percentage as each person responded less support for government on a 1-4 scale (see abbreviated codebook for more). These three results show the consistent trend that as trust decreases, support decreases, and it is more severe in its decline on federal scale and decreases in severeness with every level of government.

Confidence intervals conducted for the three slopes all show negative slopes of gov_trust at the 95% confidence level. The interval produced for the federal government was -4.75 $\pm$ 2.53. The Confidence interval for state government was -2.848 $\pm$ 2.57. Lastly, the confidence interval for local government was -4.65 $\pm$ 2.547. These all further indicate that, with 95% confidence, the slopes are not 0 and that there is a relationship between the explanatory and outcome variables.

Permutation tests lend support to the argument that the null hypothesis is not supported. For all three permutation tests, the p values returned are less than .01, indicating significance. This basically means that the test of whether the slopes are actually zero, or non-relational, is not supported. This provides evidence that, in fact, there is a relationship between feelings for officials and government trust at all three levels of government. Furthermore, I decided on only constructing a one-sided P-value test because all I am interested in seeing is if there is a negative relationship between trust and feelings for elected officials. A two sided p-value would not be worthwhile because it would not tell us anything because the value is naturally less than 0.

In the end, evidence, through linear models and permutation tests, show three things. First off, there are statistically significant relationships between feelings for elected officials and trust. This is shown by all three tests showing significance of some degree. Secondly, there is evidence to suggest that the difference between the three slopes follows my hypothesized pattern where it becomes less steep as one moves from federal to local officials. Third, that the permutation tests further prove that the slope values are non-zero, lending support to a relationship between trust in governmnet and support for government officials at all three levels of government.

Discussion

Overall, these results mean a few things. Primarily, the results generally support my initial hypothesis that there would be a stronger drop-off in support for federal officials based on lower trust than for state or local officials. This is proven true through a linear model, confidence intervals, and a permutation test. Second of all, they show that in general, participants are affected differently in the political landscape. local officials are overall more trusted, while federal and state officials are significantly less trusted. This has implications for policy proposals and for elections. Research on trust and healthcare shows that progressive agendas often require much more trust than conservative agendas. This study lends evidence to support more progressive political agendas at the local level. We have seen this in many cases where local governments enact much more progressive agendas than the area as a whole. Here in Champaign and Urbana, despite the area being about equal in presidential elections (IL-13, the district encompassing C-U, leans R+3 according to the Cook PVI), Urbana is a sanctuary city and Champaign County is a sanctuary county. Furthermore, Champaign County has a strong democratic majority on the board and actively represents progressivism. This partially stems from the high trust in local governments and it shows how this trust impacts policy.

The data confirms my anecdotal beliefs and observations regarding trust. People tend to lack trust in the federal government, with trust being higher the closer one gets to local government. The data supported that claim. The data backed this up with strong trends indicating that local governments enjoy more support than

the state or federal government. When it comes to the unexpected, there was nothing really surprising in the data. It all fell in line with what I expected and it was reassuring to see the data support my hypothesis.

In the end, the data supported my theory. Many of us hear the rhetoric of distrusting "Washington Politicians." This trickles down to a lesser extent to "Springfield Politicians." Yet, I have never heard someone lambast the "Champaign Politician" because we do not find the same level of distrust at the local level. This, as I have explained, has policy implications and electoral implications for the future. The voters place their trust in officials to legislate on their behalf, but at the same time, with trust so low, how can people feel that they are actually represented in different levels of government? This is something my generation needs to solve. We need to restore trust in government at all levels and hold the whole government accountable, for that is the essence of democracy.

Bibliography

Hetherington, Marc J., and Thomas J. Rudolph. 2015. Why Washington won't work polarization, political trust, and the governing crisis. Chicago: The University of Chicago Press.

Cawvey, Matthew. 2017. "Political Science Subject Pool."

Hopkins, Dan. 2014. "Americans' Faith in government Shapes How They Feel About Obamacare — Trust Me." FiveThirtyEight. https://fivethirtyeight.com/features/americans-faith-in-government-shapes-how-they-feel-about-obamacare-t (April 22, 2017).

Abbreviated Codebook

Gov_trust: 1=Just about always 2=Most of the time 3=Only some of the time 4=Almost never 5=I don't know

feeling_therm_bureaucrats: 0=Cold 100=Warm

feeling_therm_loc_gov: 0=Cold 100=Warm

feeling_therm_il_state: 0=Cold 100=Warm

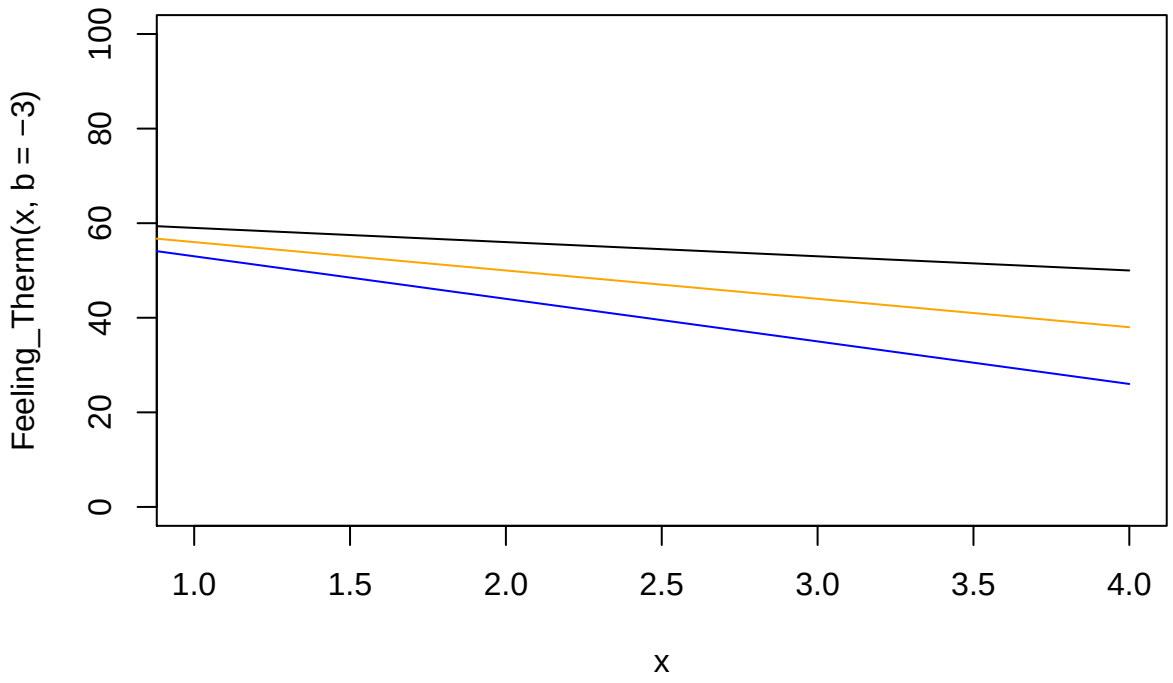
libcon_1: 1= Very Liberal 2=Liberal 3=Somewhat left of center 4=Centrist, middle of the road 5=Somewhat right of center 6=Conservative 7=Very Conservative

PID: 1=Strong Democrat 2=Democrat 3=Independent Leaning Democrat 4=Independent 5=Independent Leaning Republican 6= Republican 7= Strong Republican

Code Appendix

```
####Setup



#loading data
PSPoolCorrected <- read.csv("PSPoolCorrected.csv", header = T, sep = ",")

#loadingmosaic
library(mosaic)

##Coding 5, which is the code version of "don't know" as NA.
PSPoolCorrected$gov_trust[PSPoolCorrected$gov_trust==5]<- NA
```

```r
# installed.packages("xtable")
# library(xtable) ## might need to install.packages("xtable") first
# govtrust.tab<-c(summary(PSPoolCorrected$gov_trust,na.rm=TRUE),sd=sd(PSPoolCorrected$gov_trust,na.rm=T
# bureaucrats.tab<-c(summary(PSPoolCorrected$feeling_therm_bureaucrats, na.rm=TRUE),0,sd=sd(PSPoolCorre
# statelegislature.tab<-c(summary(PSPoolCorrected$feeling_therm_il_state, na.rm=TRUE),sd=sd(PSPoolCorre
# locgov.tab<-c(summary(PSPoolCorrected$feeling_therm_loc_gov, na.rm=TRUE),sd=sd(PSPoolCorrected$feelin
# PID.tab<-c(summary(PSPoolCorrected$PID, na.rm=TRUE),sd=sd(PSPoolCorrected$PID,na.rm=TRUE))
# Ideology.tab<-c(summary(PSPoolCorrected$libcon_1, na.rm=TRUE),sd=sd(PSPoolCorrected$libcon_1,na.rm=TR
#
# desc.tab<-rbind(Trust=govtrust.tab,Buraucrats=bureaucrats.tab,IL state Legislature=statelegislature.t
# thextab1<-xtable(desc.tab,caption="Univariate Summaries of Feelings for government and Political Trus
#                  label="tab:univardesc")

## making new dataset including potential vars ##
newdf <- cbind(PSPoolCorrected$gov_trust, PSPoolCorrected$feeling_therm_bureaucrats,  PSPoolCorrected$f

## change cols names in new dataset##
colnames(newdf) <- c("govtrust", "bureaucrats", "statelegis", "locgov", "pid", "ideology")

## delete NA values ##
readydf <- na.omit(newdf)

## making summary table of readydf ##
#install.packages("stargazar")
#library(stargazer)
#stargazer(readydf, summary = T)

## if use xtable
#library(xtable)
#xtable(summary(readydf))

#insert expectations plots

Feeling_Therm<- function(x,b){62+b*x}
curve(Feeling_Therm(x,b=-3), from=0, to=4, xlim = c(1,4), ylim=c(0,100))
curve(Feeling_Therm(x,b=-6), from = 0, to=4,xlim = c(1,4), ylim=c(0,100), col="orange", add=TRUE )
curve(Feeling_Therm(x,b=-9), from = 0, to=4,xlim = c(1,4), ylim=c(0,100), col="blue", add=TRUE )
```




```
#federal
#loading data
PSPoolCorrected <- read.csv("PSPoolCorrected.csv", header = T, sep = ",")

#recoding "dont know" to NA
PSPoolCorrected$gov_trust[PSPoolCorrected$gov_trust==5]<- NA

#making the linear model with controls

lm1control<-lm(feeling_therm_bureaucrats~gov_trust+libcon_1+PID, data = PSPoolCorrected)
summary(lm1control)


##state

#recoding "don't know" to NA
PSPoolCorrected$gov_trust[PSPoolCorrected$gov_trust==5]<- NA

#making the linear model with controls
lm2control<- lm(feeling_therm_il_state~gov_trust+libcon_1+PID, data = PSPoolCorrected)
summary(lm2control)




#localGOVT

#recoding "don't know" to NA
PSPoolCorrected$gov_trust[PSPoolCorrected$gov_trust==5]<- NA


#making the linear model with controls
```

```r
lm3control<- lm(feeling_therm_loc_gov~gov_trust+libcon_1+PID, data = PSPoolCorrected)
summary(lm3control)



##bootstrapping for slope
nsamps<-1000
#federal
lm1.perm<- do(nsamps)*lm(shuffle(feeling_therm_bureaucrats)~gov_trust+PID+libcon_1, data = PSPoolCorrec
summary(lm1.perm)

#state
lm2.perm<- do(nsamps)*lm(shuffle(feeling_therm_il_state)~gov_trust+libcon_1+PID, data = PSPoolCorrected
summary(lm2.perm)

#local
lm3.perm<- do(nsamps)*lm(shuffle(feeling_therm_loc_gov)~gov_trust+libcon_1+PID, data = PSPoolCorrected)
summary(lm3.perm)

#Pvalues of Bootstraps
#federal
sum(lm1.perm$gov_trust)
sum(lm1.perm$gov_trust>= coef(lm1control)[["gov_trust"]])
pvalue1<-1- sum(lm1.perm$gov_trust>= coef(lm1control)[["gov_trust"]])/1000
#state
sum(lm2.perm$gov_trust)
sum(lm2.perm$gov_trust>= coef(lm2control)[["gov_trust"]])
pvalue2<-1- sum(lm2.perm$gov_trust>= coef(lm2control)[["gov_trust"]])/1000
#local
sum(lm3.perm$gov_trust)
sum(lm3.perm$gov_trust>= coef(lm3control)[["gov_trust"]])
pvalue3<-1- sum(lm3.perm$gov_trust>= coef(lm3control)[["gov_trust"]])/1000


#confidence interval for federal
confint(lm1control,'gov_trust', level = .95)

#CI for state
confint(lm2control,'gov_trust', level = .95)

#CI for local
confint(lm3control,'gov_trust', level = .95)
```