Multiple Regression--FORCED-ENTRY HIERARCHICAL MODEL I. The Model

National community study 2006

National RDD survey conducted by CATI, communication Research Center at Cleveland State University

Bo Zhang

Date: March 4, 2014

I. MODEL



Political Participation

Q20: I learn about community activities and problems from the community newspaper
Q21. I'd feel comfortable voicing a complaint at a public meeting in my community
Q23. Public officials in my community seem receptive to views of residents
Q24. I generally discuss political candidates and issues with neighbors at election time.
Q25. I generally discuss political candidates and issues with family and friends at election time.
Q31. Public officials in this community don't care much what people like me think
Q80. How many days in the past week did you engage in political discussion with friends and family, never, once, a couple times, almost every day, or several times a day?
Q81. How often do you discuss politics with people whose political views are different from yours--almost never, seldom, sometimes, or frequently?
Q82. About how many people do you discuss politics with on a regular basis, none, one, two or three, five to ten, or more than that?
PP = ZQ20+ZQ21+ZQ23+ZQ24+ZQ25+ZQ31+ZQ80+ZQ81+ZQ82

IVs

Q1: Geographic Description: "Which of the following best describes where you live? (1-6 measure of ruralness; 1=central city, 6=in the country)

- Q2: How long have you lived in your neighborhood or community?
- Q9: Value of neighborhood or community
- Q10: Value of your religion
- Q11: Value of your ethnic or racial heritage
- Q12: Value of being an American
- Q15: Value of your personal or political philosophy
- Q46. How many political clubs or organizations?
- Q101. How many hours did you listen to the radio yesterday?
- Q104. Age
- Q105. Education completed
- Q106. Ethnic or racial background (Black)
- Q107. Annual household income
- Q109."And, just for the record, are you male or female?" (Female)

DV

II.RUNNING SPSS

1) Analysis -> Regression -> Linear

ransform	Analyze Direct Marketing Gra	aphs <u>U</u> tilities	Add-ons Wir	ndow <u>H</u> elp				
5 3	Reports Descriptive Statistics		- 42 III	A 4	ABS			
Туре	Tables	Label	Values	Missing	Columns	Align	Measure	Role
Numeric	Tables	PUTE Or	None	None	13	■ Right	Scale Scale	> Input
Numeric	Compare Means	e: Q100	None	None	11	■ Right	Scale Scale	> Input
Numeric	General Linear Model	e: Q102	None	None	11	■ Right	🛷 Scale	S Input
Numeric	Generalized Linear Models	PUTE N	None	None	9	Right	I Scale	> Input
Numeric	Mixed Models	PUTE Ex	None	None	8	■ Right	🛷 Scale	S Input
Numeric	<u>C</u> orrelate	PUTE C	None	None	11	■ Right	I Scale	> Input
Numeric	Regression	Automa	tic Linear Modeli	ng	12	■ Right	I Scale	> Input
Numeric	L <u>o</u> glinear	Linear			18	■ Right	🛷 Scale	> Input
Numeric	Neural Networks	Curve E	stimation		12	■ Right	I Scale	S Input
Numeric	Classify	Partial I	east Squares		13	■ Right	🛷 Scale	> Input
Numeric	Dimension Reduction				17	■ Right	scale 🖉	> Input
Numeric	Scale	Binary L	ogisuc		18	≡ Right	Scale 🖉	> Input
Numeric	Nonparametric Tests	Multinon	nial Logistic		13	■ Right	Scale 8	> Input
Numeric	Forecasting	Ordinal.	14.		14	Right Right	scale 🖉	> Input
Numeric	Survival	Probit			18	■ Right	Scale 🖉	S Input
Numeric		Nonlinea	ar		19	≡ Right	Scale 🖉	> Input
Numeric	Missing Value Analysis	Weight	Estimation		10	■ Right	Scale 🖉	> Input
Numeric	Multiple Imputation	2-Stage	Least Squares		10	■ Right	Scale 🖉	> Input
Numeric	Complex Samples	Ontimal	Scaling (CATP)	EQ)	10	■ Right	Scale 🖉	> Input
Numeric	Complex Samples	Opumai	THOILE	EG)	10	■ Right	Scale 🖉	> Input
Numeric			None	None	10	■ Right	🛷 Scale	> Input
	ROC Curve					1		
					-	1		

2) Select dependent variable Click variable name->arrow

rm :	Analyze Dire	ct Marketing	<u>Graphs</u> <u>Utilities</u>	Add-ons Win	idow <u>H</u> elp					
	📑 📥	3			A 14	ARS ARS				
ype	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role	
ric	8	2	COMPUTE Or	None	None	13	≡ Right	🛷 Scale	S Input	
ric	11	5	Zscore: Q100	None	None	11	≡ Right	🛷 Scale	ゝ Input	
ric	11	5	Zscore: Q102	None	None	11	≡ Right	🛷 Scale	ゝ Input	
ric	8	2	COMPUTE N	None	None	9	≡ Right	🛷 Scale	ゝ Input	
ric	8	2	COMPUTE Ex	None	None	8	≡ Right	🛷 Scale	ゝ Input	
ric	8	2	COMPUTE C	None	None	11	= Right	Scale .	> Input	
ric	8	2	COMPUTE S	None	ta Linear Reg	gression	IB Rope	1000		
ric	8	2	COMPUTE T	None			Dependent:		Ctatistica	
ric	8	2	COMPUTE E	None	COMPUT	Е Е 🛋	\		Staustics	
ric	8	2	COMPUTE Or	None	COMPUT	Έ C	Block 1 of 1	1	Plots	
ric	8	2	COMPUTE O	None	COMPUT	E S	Deview	Next	Save	
ric	8	2	COMPUTE C	None	COMPUT	E I 75 5	Previous	Next	Options	
ric	8	2	EastDrinkTalk	None	COMPUT	E Q.	Independe	nt(s):	Bootstrap	
ric	8	2	OrgTPActivity 2	None	COMPUT	Έ O				- II
ric	8	2	OutsideActivity	None	COMPUT	ЕС				- 11
ric	8	2	CommercialVe	None	EastDrine	так	Me	thod: Enter		- 11
ric	8	2	COMPUTE W	None	OrgTPAc	tivity	_			- 11
ric	8	2	dummy code	None	Comment	cuvit cialV	Selection Va	ariable:		- 11
ric	8	2	rural	None	COMPUT	EW				- 11
ric	8	2		None	🖉 dummy c	ode [Case Label	S:	_	- 11
ric	8	2		None	nural [RO	1]				- 11
					Female		WLS Weigh	<u>n</u> t:	_	- 11
					PP					- 11
						OK	Paste Reset	Cancel Help		- 11
										_

3) Select independent variables for block1 Click independent variable name->arrow

<u>A</u>	nalyze Direc	t <u>M</u> arketing	Graphs Utilities	Add-ons Win	dow <u>H</u> elp				
	E	= #1		- A	· · · · · · · · · · · · · · · · · · ·	► ~			
	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
	8	2	COMPUTE Or	None	None	13	≡ Right	🛷 Scale	S Input
	11	5	Zscore: Q100	None	None	11	≡ Right	🛷 Scale	S Input
	11	5	Zscore: Q102	None	None	11	≡ Right	🛷 Scale	S Input
	8	2	COMPUTE N	None	None	9	≡ Right	🛷 Scale	S Input
	8	2	COMPUTE Ex	None	None	8	≡ Right	🛷 Scale	S Input
	8	2	COMPUTE C	None	None	11	= Right	& Scale	N Innut
	8	2	COMPUTE S	None	ta Linear Reg	ression	it inget	1000	
	8	2	COMPUTE T	None			Dependent		Statistics
	8	2	COMPUTE E	None	COMPUT	E N 🛋	🤟 🔗 PP		Statistics
	8	2	COMPUTE Or	None	COMPUT	ΈΕ	Block 1 of 1		Plots
	8	2	COMPUTE O	None	COMPUT	E C			Save
	8	2	COMPUTE C	None	COMPUT	ES	Previous	Next	Options
	8	2	EastDrinkTalk	None	COMPUT	E I F F	Independe	nt(s):	Bootstrap
	8	2	OrgTPActivity2	None	COMPUT	E O			
	8	2	OutsideActivity	None	COMPUT	E O	<u> </u>		
	8	2	CommercialVe	None	COMPUT	E C	🔶 ме	hod: Enter 🔻	
	8	2	COMPUTE W	None	EastDrink	Talk			-
	8	2	dummy code	None	Org I PAct OutsideA	tivity	Selection Va	riable:	
	8	2	rural	None	Commerge	sialV		TYDIC.	
	8	2		None	COMPUT	ΈV	Case Label	S:	
	8	2		None	dummy co	ode			
					rural [RQ	1	WLS Weigh	<u>n</u> t:	
					Female		•		
						OK	Paste Reset	Cancel Help	

4) Move to the next block Click next

Analyze Dire	ct Marketing	Graphs Utilities	Add-ons Wir	ndow <u>H</u> elp					
۱ 🖹 🕌	= #		- 42 📰	A 🕢	ARG 1				
Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role	
8	2	COMPUTE Or	None	None	13	≡ Right	🖋 Scale	ゝ Input	
11	5	Zscore: Q100	None	None	11	≡ Right	🛷 Scale	ゝ Input	
11	5	Zscore: Q102	None	None	11	≡ Right	🛷 Scale	ゝ Input	
8	2	COMPUTE N	None	None	9	≡ Right	🛷 Scale	ゝ Input	
8	2	COMPUTE Ex	None	None	8	■ Right	🛷 Scale	ゝ Input	
8	2	COMPUTE C	None	None	11	= Right	& Scale	> Input	
8	2	COMPUTE S	None	ta Linear Reg	ression	ill linger	1 200		
8	2	COMPUTE T	None			Dependent		Otorio tion	-
8	2	COMPUTE E	None	A 0100 Era	a wa	M PP		Statistics	
8	2	COMPUTE Or	None	✓ Q100:Fie	ursli.	Block 1 of 1		Plots	
8	2	COMPUTE O	None		days			Save	
8	2	COMPUTE C	None	🖉 🛷 Q103:Mar	rital	Previous	Next	Options	
8	2	EastDrinkTalk	None		[q104]	Independe	nt(s):	Bootstrap	i II
8	2	OrgTPActivity 2	None	Q105:Edu Q106:Eth	ucati	dummy	code [Race]		1
8	2	OutsideActivity	None		nic, iseh		a [a104]	,	1
8	2	CommercialVe	None	🚜 Q108:Zip	code	Me	thod Enter	5	1
8	2	COMPUTE W	None	🛷 Q109:Ger	nder	<u> </u>			1
8	2	dummy code	None	🛷 quit		Selection Va	ariable:		1
8	2	rural	None	COMPUT	ЕТ		I KOIG.		1
8	2		None	COMPUT	Е І	Case Label	S:	_	
8	2		None	COMPUT	E P	<u> </u>			
				Score: 0	224:	WLS Weigh	<u>n</u> t:	_	
				A Terrora (<u>125</u> ∙ ▼				
					ОК	Paste Reset	Cancel Help		

5) Select independent variables for block2 Click variable name->arrow

[NOTE: Screenshots for blocks 3 and 4 are not shown]

Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
3	2	COMPUTE Or	None	None	13	≡ Right	🖋 Scale	S Input
11	5	Zscore: Q100	None	None	11	≡ Right	I Scale	S Input
11	5	Zscore: Q102	None	None	11	≡ Right	🛷 Scale	S Input
3	2	COMPUTE N	None	None	9	≡ Right	I Scale	> Input
3	2	COMPUTE Ex	None	None	8	■ Right	I Scale	S Input
3	2	COMPUTE C	None	None	11	= Right	& Scale	N Input
3	2	COMPUTE S	None	🕼 Linear Re	gression	Witept	of Second	X
3	2	COMPUTE T	None			Depende	nt	
3	2	COMPUTE E	None	🖋 status\$	*	> PP		Statistics
3	2	COMPUTE Or	None	🛷 time\$		Block 2 of 2		Plots
3	2	COMPUTE O	None	/ timeans	5			Save
3	2	COMPUTE C	None	/ platids		Previous	Next	Options
3	2	EastDrinkTalk	None	@ Q1:Whe	re live.	Indepen	dent(s):	Bootstrap
3	2	OrgTPActivity 2	None	Q2:Time	lived			
3	2	OutsideActivity	None	🖧 Q3.Deci	ding f	茸 ()		<u> </u>
3	2	CommercialVe	None	& Q4:Com	munit		Method: Enter	-
3	2	COMPUTE W	None	Q5:Neigi	nborf			
3	2	dummy code	None	Q0. Value	e wor	Selection	Variable:	
3	2	rural	None	Q8:Value	e frien	<u> </u>	TNUK	Sec
3	2		None	🧳 Q9:Value	e neig	Case Lat	els:	_
3	2		None	Selection of the Alian A	e reli			
				Q11:Valu	ue eth	WLS We	ig <u>h</u> t:	
				Q12:Vall	Je bel 👻	×		
					OK	Paste Res	et Cancel Help	
			2	L			-	

6) Statistics setting

6.a Click statistics

6.b Click Estimates, Model fit, R square change, Descriptive, Part and partial

correlations, Collinearity diagnostics.

An	alyze Direc	t Marketing	Graphs Utilities	Add-ons Win	idow <u>H</u> elp				
	E	i i i			M 🖉	ABS			
	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
	8	2	COMPUTE Or	None	None	13	≡ Right	🖋 Scale	S Input
	11	5	Zscore: Q100	None	None	11	≡ Right	🛷 Scale	S Input
	11	5	Zscore: Q102	None	None	11	≡ Right	🖋 Scale	S Input
	8	2	COMPUTE N	None	None	9	≡ Right	🛷 Scale	S Input
	8	2	COMPUTE Ex	None	None	8	≡ Right	🖋 Scale	S Input
	8	2	COMPUTE C	None	None	11	= Right	& Scale	N Innut
	8	2	COMPUTE S	None	ta Linear Reg	ression	Billion	/ Scale	25
	8	2	COMPUTE T	None			Deservations		
	8	2	COMPUTE E	None	A 010	Linear Regr	ession: Statistics		x sucs
	8	2	COMPUTE Or	None	🖉 Q10 🕞	egression (adal fit	ots
	8	2	COMPUTE O	None	A Q10	/ Entimated			ave
	8	2	COMPUTE C	None	🛷 Q104	Captidana	s integrale 🖉 D	squared change	tions
	8	2	EastDrinkTalk	None	🖉 Q10			escriptives	tstrap
	8	2	OrgTPActivity 2	None	✓ Q10	Level(%).	95 P	ant and partial correl	
	8	2	OutsideActivity	None	A Q10	Covariance	e matrix	plineanty diagnostic	
	8	2	CommercialVe	None	🖋 Q10 📑	lesiduals-	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
	8	2	COMPUTE W	None	🛷 quit 👔	Durbin-Wa	atson		
	8	2	dummy code	None	🖋 COI 👔	Casewise	diagnostics		
	8	2	rural	None		Outliers	outside: 3	standard devia	tions
	8	2		None		All cases	<u>/</u>		
	8	2		None	Zsce		×		
					Scc 2	C	Cance	Help	
					A Tern				
						ОК	Paste Reset	Cancel Help	
					L				
_									

7) Plots setting

7.a Click Plots

7.b Click *ZERSID to Y and *ZPRED to X

7.c Check Histogram and Normal probability plot



III. SPSS Output

1.Syntax

REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT PP /METHOD=ENTER q104 Race Female /METHOD=ENTER q2 q107 RQ1 /METHOD=ENTER q9 q10 q11 q12 q15 /METHOD=ENTER q46 q101 /SCATTERPLOT=(*ZRESID ,*ZPRED) /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID) /SAVE MAHAL COOK.

-								 				-	-	_	_	-	_	_		_	-	_					 	 		-	-	-	-	-	-	_	
									D	e	s	C	Ĺ	0	ίī	V		S	a	Û	s	ti	C	s													

2.Regression

Desc	riptive Stati	stics	
	Mean	Std. Deviation	Ν
PP	39.6538	11.56786	312
dummy code	.1346	.34186	312
Female	.5160	.50055	312
QI04:Age	4.33	1.605	312
Q1:Where live	3.56	1.815	312
Q2:Time lived there	3.90	1.913	312
Q107:Household income	4.79	2.217	312
Q9:Value neigh- community	7.29	2.084	312
QI0:Value religion	7.43	3.310	312
Q11:Value ethnic-racial heritage	6.04	3.429	312
Q12:Value being American	8.33	2.578	312
Q15:Value personal-pol. philosophy	6.88	2.598	312
Q46:Belong pol. clubs, orgs	.15	.358	312
Q101:Hours listened to radio yesterday	2.04	2.713	312

0.0.7	.001 .133 .000 .000 .000 .000 .000 .000	3178 0.044 312 312	312 312 312 312 312 312 312 312 312 312	American American OffS.Value personal-pol. philosophy G46:Belong pol.clubs, orgs
0.0.7	.001 .133 .000 .000 .000 .000 .000 .000	3778 0.04 372 4.72 312 312	312 312 312 312 312 312 312 312 312 312	Gr12:value being American 015:value personal-pol. philosophy
Intr	.001 .133 .000 .000 .000 .000 .000 .000	3178 0.04 312	312 312 312 312 312 312 312 312 312 312	Q12:Value being American
Intr	.001 .133 .000 .000 .000 .000 .000 .000	.004 2222	312 312 312 312 312 312 312 312 312 312	
0.47 .446 .118 .344 .068 .233 .040 .021 . 153 .113 .110 .204 .063 .170 .306 .140 .355 . 312 .312	.001 .033 .030 .000 .000 .000 .000 .000	.004 .004 222 .472 312 312	3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Q11:Value ethnic-racial heritage
0.47 .446 .118 .344 .068 .233 .0.0 .021 . 153 .113 .161 .204 .063 .170 .306 .140 .392 .312 </td <td>.001 .133 .000 .000 .000 .000 .000 .000</td> <td></td> <td>312 312 312 312 312 312 312</td> <td>community Olifi Value reliaion</td>	.001 .133 .000 .000 .000 .000 .000 .000		312 312 312 312 312 312 312	community Olifi Value reliaion
0.47 .446 .118 .344 068 .213 .040 0.07 . 153 .110 .161 204 .062 .170 268 40	.001 .133 .000 .000 .000 .000 .000 .000		312 312 312 312 312	Q3:Value neigh-
0.0.7	.001 .133 .000 .000 .000 .000 .000 .000	378 .004 222 .472 312 .312 312 .312 312 .312 312 .312 312 .312 312 .312	312	Q107:Household income
0.07	.001 .036 .133 .000 .000 .000 .000 .000 .000 .000	378 .004 222 .472 312 312 312 312 312 312 312 312	312	OTTING IN A MARK
047 .446 .118 .344 088 .233 .040 .021 153 .113 .101 .204 .093 .170 .206 312 312 .312 312	.001 .086 .133 .000 .000 .000 .000 .000 .000 .000	378 .004 222 .472 312 312 312 312 312 312	312	QI04;Age
0.47	.001 .013 .000 .000 .000 .000 .000 .000	378 .004 222 .472 312 312 312 312	312	Female
0.47 .4.46 .118 .344 .068 .233 .040 .021 . 153 .113 .161 .204 .093 .170 .309 .140 .355 . 312 312 312 .312	.001 .038 .000 .000 .000 .000 .000 .000 .000	378 .004 222 .472 312 312	2	dummy code
647 445 .118 .344 .089 .233 .040 .021 . 153 .113 .161 .204 .093 .170 .369 .146 .356 .	050 2000 2100 2100 2100 2000 2100 2100 2	378 .004	312	PP
047 445 .118 .344 0.98 .233 .040 .021 .	.001 .086 .000 .000 .000	378 .004	.012 .1	Q1013Hours listened to radio yesterday
	000. 2000. 2001. 2000. 2	_	.000	Q46:Belong pol. clubs, orgs
164 .003 .096 .007 .044 .001 .002021	.000 .133	379 .067	.000	Qi15:Value personal-pol. philosophy
421 .000 .192 .000 .000 .000002 .040	.0001	.004	r. 001.	Q12.Value being American
263 .000 .001 .000 .000	.001	.001	.347 .t	Q11:Value ethnic-racial heritage
437 .009 .030 .000	.001	2009 .002	.279 .0	Q10.Value religion
079 .000 .464000 .000 .000 .007 .344		398 .116	.000	09:Value neigh- community
206 076 464 030 001 192 096 118	480	000 .084	000	Q107.Household income
004	. 000	UU3 .183 .221	.002 .0	02:Time lived there
001 .000 .400 .001 .065 .133 .000 .000 .077		.332	.000	QI04:Age
163 .221 .084 .116 .002 .001 .004 .067 .004	.332	457	.075 .4	Female
398 002 000 398 009 347 380 500 500 398 002 000 398 009 000 .139 .379 .378	000	.075	.157	(1-tailed) PP dummy code
.027 .027 .027 .027 .027 .027	094	043004	Y 87.1'	GT013Hours listened to radio yesterday
0001 GLI 660 1910 2.20 2.40 800 660	180	018 - 148	1 11	ange ange
0001 211 000 110 120 100 100 100 100 100	202	can-	.578 J.	philosophy
511 000 011 010 010 010 010 010 110 6601 001 001 1875 515 182 540 157 110	212	145		American
				heritage
008 activate -100 259 469 1000 339 175 -041	r- 580'	134 .164	.033	OID:Value religion
1000 238 005 1000 234 239 281 139 023	185	890, 210	1-1	community
847 .081 1.000 .005 .108 .180 .049 .074 .067	.003 -0	205 .078		Q107 Household income
152 1.000 -001 .226 .133 .108 .241 .079 .000	.376	107044	.1631	Q2:Time lived there
000 .152047 .000 .009036 .011 .051095	.171 1.1	056	.0151	Q1:Where live
171 .376 .003 .185 .085 .063 .212 .209 .081	1.000	025	245 -2	0104.JAge
881. 380. 140. 171 171 181. 181. 210. 210. 201. 201. 201. 201. 201. 20	- 202		1.1 /20.	Female -
015 .163 .221 .261 .033 .022 .052 .379 .217	.245	082	1- 000	arson Correlation PP 1
the community co	Qi04;Age Q1.Where	ode Female	P dummy co	9
Correlations				

	1 1111110 1111		
Model	Variables Entered	Variables Removed	Method
1	QIO4:Age, Female, dummy code		Enter
2	Q1:Where live, Q107: Household income, Q2: Time lived there		Enter
3	Q15:Value personal-pol. philosophy, QI0:Value religion, Q9: Value neigh- community, Q12:Value being American, Q11:Value ethnic-racial heritage		Enter
4	Q101:Hours listened to radio yesterday, Q46:Belong pol. clubs, orgs		Enter

Variables Entered/Removed^b

a. All requested variables entered. b. Dependent Variable: PP

Model Summary

									Cha	ange Statistio	cs		
Model		R	R	Square	Adjusted R Square	Std. Error of the Estimate		R Square Change	F Change	df1	df2	Si	g F Change
1	Τ	.257ª	Π	.066	.057	11.23494	Π	.066	7.235	3	308	1	.000
2		.353 ^b	П	.125	.107	10.92894		.059	6.830	3	305		.000
3		.519°		.270	.243	10.06617		.145	11.905	5	300	$ \langle $.000
4		.547ª		.300	.269	9.89075		.030	6.368	2	298		.002

a. Predictors: (Constant), GI04/Age, Female, dummy code, Q1:Where live, G107:Household income, Q2:Time lived there c. Predictors: (Constant), GI04/Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there, Q15:Value personal-pol.philosophy, QI04/Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there, Q15:Value d. Predictors: (Constant), QI04/Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there, Q15:Value personal-pol.philosophy, QI04/Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there, Q15:Value personal-pol.philosophy, QI04/Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there, Q15:Value personal-pol.philosophy, QI04/Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there, Q15:Value personal-pol.philosophy, QI04/Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there, Q15:Value personal-pol.philosophy, Q10:Value religion, Q9:Value neigh-community, Q12:Value being American, Q11:Value ethnic-racial heritage, Q101:Hours listened to radio yesterday, Q46:Belong pol, clubs,orgs

.....

			ANOVA ^e			
Model		Sum of Squares	df	Mean Square	F	ßig.
1	Regression	2739.642	3	913.214	7.235	.000ª
	Residual	38876.973	308	126.224		
	Total	41616.615	311			
2	Regression	5186.877	6	864.480	7.238	.000 ^b
	Residual	36429.738	305	119.442		
	Total	41616.615	311			
3	Regression	11218.278	11	1019.843	10.065	.000°
	Residual	30398.337	300	101.328		
	Total	41616.615	311			
4	Regression	12464.209	13	958.785	9.801	•000.
	Residual	29152.407	298	97.827		
	Total	41616.615	311			\cup

a. Predictors: (Constant), QI04:Age, Female, dummy code b. Predictors: (Constant), QI04:Age, Female, dummy code, Q1:Where live, Q107: Household income, Q2:Time lived there c. Predictors: (Constant), QI04:Age, Female, dummy code, Q1:Where live, Q107: Household income, Q2:Time lived there, Q15:Value personal-pol.philosophy, QI0: Value religion, Q9:Value neigh-community, Q12:Value being American, Q11:Value ethnic-racial heritage d. Predictors: (Constant), QI04:Age, Female, dummy code, Q1:Where live, Q107:

d. Predictors: (Constant), QI04:Age, Female, dummy code, Q1:Where live, Q107: Household income, Q2:Time lived there, Q15:Value personal-pol.philosophy, QI0: Value religion, Q9:Value neigh-community, Q12:Value being American, Q11:Value ethnic-racial heritage, Q101:Hours listened to radio yesterday, Q46:Belong pol. clubs, orgs

e. Dependent Variable: PP

I	.760	.910	.773	.919	.776	.912	.839	.702	.619	.734	.880	.931	.949

		Unstandardize	d Coefficients	Standardized Coefficients			с	orrelations		Collinearity	Statistics
Model		В	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	32.871	2.093		15.708	.000					
	Black	.258	1.932	.008	.134	.894	057	.008	.007	.931	1.074
	Female	-1.752	1.273	076	-1.376	.170	082	078	076	.999	1.001
	QI04:Age	1.767	.412	.245	4.294	.000	.245	.238	.236	.930	1.075
2	(Constant)	25.231	2.944		8.572	.000					
	Black	1.954	1.939	.058	1.008	.314	057	.058	.054	.874	1.144
	Female	-1.269	1.246	055	-1.018	.309	082	058	055	.988	1.012
	QI04:Age	1.601	.431	.222	3.711	.000	.245	.208	.199	.801	1.248
	Q1:Where live	144	.352	023	409	.683	.015	023	022	.943	1.061
	Q2:Time lived there	.641	.353	.106	1.817	.070	.163	.103	.097	.843	1.187
	Q107:Household income	1.229	.289	.236	4.252	.000	.221	.237	.228	.936	1.069
3	(Constant)	15.625	3.413		4.578	.000					
	Black	1.310	1.914	.039	.684	.494	057	.039	.034	.761	1.315
	Female	496	1.187	021	418	.676	082	024	021	.923	1.084
	QI04:Age	1.019	.409	.141	2.490	.013	.245	.142	.123	.755	1.324
	Q1:Where live	275	.325	043	848	.397	.015	049	042	.937	1.068
	Q2:Time lived there	.539	.337	.089	1.597	.111	.163	.092	.079	.782	1.278
	Q107:Household income	.999	.269	.191	3.712	.000	.221	.210	.183	.915	1.093
	Q9:Value neigh- community	1.235	.298	.222	4.138	.000	.261	.232	.204	.843	1.187
	QI0:Value religion	316	.204	090	-1.549	.122	033	089	076	.714	1.401
	Q11:Value ethnic-racial heritage	106	.211	032	504	.614	.022	029	025	.621	1.610
	Q12:Value being American	247	.257	055	961	.337	.052	055	047	.742	1.347
	Q15:Value personal-pol. philosophy	1.428	.232	.321	6.144	.000	.379	.334	.303	.894	1.119
4	(Constant)	14.108	3.384		4.169	.000				\frown	
	Black	1.095	1.882	.032	.582	.561	057	.034	.028	.760	1.316
	Female	148	1.175	006	126	.900	082	007	006	Q10	1.099
	QI04:Age	1.052	.408	.146	2.577	.010	.245	.148	.125	OUDIE-CIICK	0 1.364
	Q1:Where live	221	.322	035	685	.494	.015	040	033	activate	1.088
	Q2:Time lived there	.467	.333	.077	1.404	.161	.163	.081	.068	.776	1.289
	Q107:Household income	.997	.265	.191	3.763	.000	221	.213	.182	.912	1.096
	Q9:Value neigh- community	1.167	.294	.210	3.970	.000	.261	.224	.192	.839	1.192
	QI0:Value religion	240	.202	069	-1.189	.235	033	069	058	.702	1.424
	Q11:Value ethnic-racial	126	.208	037	608	.544	.022	035	029	.619	1.615
	Q12:Value being American	196	.254	044	772	.441	.052	045	037	.734	1.362
	Q15:Value personal-pol. philosophy	1.328	.230	.298	5.770	.000	.379	.317	.280	.880	1.136
	Q46:Belong pol. clubs, orgs	4.328	1.623	.134	2.667	.008	.217	.153	.129	.931	1.074
	Q101:Hours listened to radio yesterday	.486	.212	.114	2.288	.023	.128	.191	.111	.949	1.054
a. D	ependent Variable: PP							. /			
								1			
					\sim			1			

) -				ummy code	e, <u>F</u> emale, d	ant), QI04:Ag	. Predictors in the Model: (Const	B
.619	1.053	.949	.135	.020	2.347	.118°	Q101:Hours listened to radio yesterday	
.621	1.073	.932	.155	.007	2.719	.138°	Q46:Belong pol. clubs, orgs	ω
.788	1.028	.973	.165	.004	2.914	.156 ^b	Q101:Hours listened to radio yesterday	
.793	1.048	.954	.187	.001	3.315	.179 ^b	Q46:Belong pol. clubs, orgs	
.767	1.068	.936	.334	.000	6.183	.323 ^b	Q15:Value personal-pol. philosophy	
.786	1.115	.897	.003	.954	.057	-003b	Q12:Value being American	
.775	1.245	.803	.025	.661	.438	.026 ^b	Q11:Value ethnic-racial heritage	
.796	1.084	.923	044	.439	775	043 ^b	QI0:Value religion	
.791	1.083	.924	.225	.000	4.035	.219 ^b	Q9:Value neigh- community	2
.924	1.009	.991	.156	.006	2.769	.152ª	Q101:Hours listened to radio yesterday	
.923	1.030	.970	.195	.001	3.479	.191ª	Q46:Belong pol. clubs, orgs	
.885	1.059	.944	.342	.000	6.383	.340ª	Q15:Value personal-pol. philosophy	
.889	1.074	.931	.013	.826	.220	.013ª	Q12:Value being American	
.814	1.184	.845	.020	.730	.345	.021ª	Q11:Value ethnic-racial heritage	
.906	1.065	.939	046	.423	803	046ª	QI0:Value religion	
.897	1.042	.959	.234	.000	4.209	.230ª	Q9:Value neigh- community	
.889	1.054	.949	.229	.000	4.129	.228ª	Q107:Household income	
.808	1.167	.857	.077	.180	1.345	E080.	Q2:Time lived there	
.913	1.046	.956	032	.576	559	032ª	Q1:Where live	-
Minimum Tolerance	VIF	Tolerance	Partial Correlation	Sig.	+	Beta In	e	Mode
tistics	llinearity Sta	00						

Excluded Variables^d

b. Predictors in the Model: (Constant), QI04:Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there
 c. Predictors in the Model: (Constant), QI04:Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there, Q15:Value personal-pol.philosophy, QI0:Value religion, Q9:Value neigh-community, Q12:Value being American, Q11: Value ethnic-racial heritage
 d. Dependent Variable: PP

Model Dimensi	ion Eigenvalue	Condition Index	(Constant)	dummy code	Female	Q1043Ag	a Q1:Where	live	live Q2:Time lived there	live G2.Time lived Household lincome	Ive Q2.Time lived Household community	Ive Q2:Time lived Household O2/Value Ive There Household neight Income community religion	Ine 027mme Need Household neight 0117-aue ethnic-racial neight neight hertage	Ine 027ime Ined Household noine 011/value 012/value 012/	More Optimum Optimum Optimum Inve Q2:Time lived Q107: Q2:Value Q11/2 income Q12/Value Q12/Value Q12/Value Q12/Value Q12/Value Delonic-racial Delong Delong
· 1	2.712	1.000		-02 8 P	20.										
ω	.385	2.654	.02	.0	.89										
4	.053	7.163	.96	.11	.05	.9	10								
 د د	5.126	1.000			3 2		2 9	-	19	.01	.01	.01 .01	.01 .01	.01 .01	.01 .01
ωı	.467	3.312	.0				8			0	.01	.01	.01	.01 .01	.0.
4	.213	4.900	.00	.0	.00				.14	.14 .52	.14 .52	.14 .52	.14 .52	.14 .52	.14 .52
5	.175	5.408	.00	.0	.e		.70	-	.30	.30 .00	.30 .00	.00	.30 .00	.30 .00	.30 .00
6	.090	7.562	.01	.0	.n	.6.	.0		.51	.51 .10	.51 .10	.51 .10	.51 .10	.51 .10	.51 .10
4~7	.035	12.146	.99	n		.28		-		00 .03 00 .36	.03 .36	.03 .36	.03 .36		
~ -	.923	3.215	00 is	.64					88	00.	00. 00.		10. 00. 00. 00. 00.	00. 10. 00. 00. 00. 00. 00.	
ω	.479	4.465	.00	.01	.82		.0		.01	.01 .01	.01 .01 .00	.01 .00 .00	00. 00. 00. 10. 00.	00. 00. 00. 00. 10. 10.	10. 00. 00. 00. 00. 10. 10.
4	.242	6.279	.00	.10	.04		.0		.06	.06 .29	.06 .29 .00	.06 .29 .00 .04	.06 .29 .00 .04 .16	.06 .29 .00 .04 .16 .00	.06 .29 .00 .04 .16 .00 .01
,	.206	6.010	.0	.03			- <u>5</u>		Dou	Double-click to	Double-click to 13 .00	Double-click to 10 .00 .00	Double-click to 13 .00 .03 .05	Double-click to 13 .00 .03 .05 .00	Double-click to
7 6	.158	9.023	8 8		д Э Э.	2 2	n 12			activate 00	activate 00 .00	activate 00 .00 .09	activate 00 .00 .09 .08	activate 00 .00 .09 .08 .00	activate 00 .00 .09 .08 .00 .00
	.104	9.578	.00	.02		8	0. 	-	.02	.02 .10	.02 .10 .01	.02 .10 .01 .43	.02 .10 .01 .43 .62	.02 .10 .01 .43 .62 .03	.02 .10 .01 .43 .62 .03 .00
g	.076	11.171	.00	.01	.01	<u>1</u> .	00.	-	.27	.27 .00	.27 .00 .00	.00 .00 .05	.27 .00 .00 .05 .05	.00 .05 .05 .00	.27 .00 .00 .05 .05 .00 .34
10	.070	11.642	.01	.01	.02				.03	.03 .07	.03 .07 .37	.03 .07 .37 .24	.03 .07 .37 .24 .00	.03 .07 .37 .24 .00 .21	.03 .07 .37 .24 .00 .21 .05
; =	990	13.030	: 2								.00 .00	.00 .46 .03		.00 .00 .46 .03 .00 .05	
12	.024	20.054	99.		.02			-		.00 .19	.19 .16	.00 .19 .16 .00			
⊶ د د	10.078	1.000	8 8		; ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;				; ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	.00	00. 00.		00. 00. 00. 00.		
ω r	.920	3.376	8 8	8 2	2.0				8 8	00	00 00				
4	.627	4.008	.00	.0	.01	.0	0.	-	.00	.00	00. 00. 00.	00. 00. 00. 00.	00. 00. 00. 00. 00.	00. 01. 00. 00. 00. 00.	00. 00. 00. 00. 00. 00.
Un	.448	4.743	.00	.01	.79		.0		.01	.01 .00	.00 .00	00. 00. 00.	.01 .00 .00 .00	00. 00. 00. 00. 00. 00.	.01 .00 .00 .00 .00 .00
6	.240	6.484	.00	.11	.03				.06	.06 .28	.06 .28 .00	.06 .28 .00 .04	.06 .28 .00 .04 .17	.06 .28 .00 .04 .17 .00	.06 .28 .00 .04 .17 .00 .01
8 ~	.201	7.074	8 8	a ia	3 8	2 3	2 5		.04	.04 .16	.04 .16 .00	.04 .16 .00 .02 47 n1 nn n8	.04 .16 .00 .02 .05	.04 .16 .00 .02 .05 .01 47 n1 nn n8 n8 n0	.04 .16 .00 .02 .05 .01 .01
9	.115	9.348	8	.0			0	-	.09	.09 .20	.09 .00	.09 .20 .00 .08	.09 .20 .00 .08 .01	.09 .00 .08 .01 .00	.09 .20 .00 .08 .01 .00 .55
10	.103	9.900	.00	.02	.01	.0	.0.	-	.02	.02 .09	.02 .09 .01	.02 .09 .01 .43	.02 .09 .01 .43 .63	.02 .09 .01 .43 .63 .03	.02 .09 .01 .43 .63 .03 .01
11	.075	11.554	.00	.01	.02	5	.0.		.30	.30 .00	.30 .00 .03	.30 .00 .03 .09	.30 .00 .03 .09 .04	.30 .00 .03 .09 .04 .02	.30 .00 .03 .09 .04 .02 .38
12	.069	12.126	.01	e in	3 .5		2 2	-	.8	.00	.00 .06 .36	.00 .06 .36 .22			
14	.023	20.737		 				-		.00 .19	.00 .19 .14	.00 .19 .14 .01	.00 .19 .14 .01 .01	.00 .19 .14 .01 .01 .00 .00 .00	









IV. Tabling

Table 1

Hierarchical Multiple Regression Predicting Political Participation

Block#				n ²
	Predictor	r	Final	^R ⁻ Change
	Variable		Beta	
1	Black: Q106	057	.032	.066**
	Sex(Femaleness dummy):Q109	082	006	
	Age: Q104	.245**	.146**	
2	Ruralness:Q1	.015	035	.059**
	Length of Residence in Neighborhood: Q2	.163	.077	
	Income:Q107	.221**	.191**	
3	Value of neighborhood:Q9	.261**	.210**	.145**
	Value of religion: Q10	033	069	
	Value of ethnic or racial heritage:Q11	.022	037	
	Value of American:Q12	.052	044	
	Value of political philosophy:Q15	.379**	.298**	
4	Political club:Q46	.217**	.134**	.030**
	Radio: Q101	.128	.114*	
Total equation:	,			
R ² =. 300	Adjusted R^2 =.269			

F (13,298)=9.801 , p<.001

Note: **p* <.05. ***p* < .01

V. The Writeup

Write up of results

In the prediction of political participation, a four-block hierarchical multiple regression analysis was conducted. Multicollinearity tests using condition index and regression coefficient variance-decomposition matrix, tolerances and VIFs indicated that the analysis has no multicollinearity problem (all tolerances \geq .60, VIFs \leq 1.62), and the analysis result indicates that 14 predictors explain 30.0% of the total variance of political participation (F_(13,298) = 9.08, *p* < .001).

First, block 1 including Black, sex (female) and age, explains 6.6 % of total variance of political participation ($F_{(3, 308)} = 7.24$, p < .001). Age is a significantly positive ($\beta = .146$, $p \le .001$) unique predictor of political participation. As a result, compared younger people, the older people show higher political participation, when controlling for all of the other 13 independent variables.

Second, block 2 including ruralness, length of residence in neighborhood and income, explains an additional 5.9% of total variance of the political participation ($F_{(3, 305)} = 6.83$, p < .001). Household income ($\beta = .19$, p < 001) is significant positive unique predictors of political participation. As a result, as household income increases, political participation increases, when all other predictors are controlled for.

Third, the third block, including value of neighborhood, value of religion, value of ethnic or racial heritage, value of American, value of political philosophy, explains an additional 14.5% of total variance of the political participation ($F_{(5, 300)} = 11.91$, p < .001). Value of neighborhood ($\beta = .21$, p < .001) and value of political philosophy ($\beta = .30$, p < .001) are significant positive unique predictors of political participation. As a result, as value of neighborhood and value of political philosophy increase, political participation increases, when all other predictors are controlled for.

Fourth, the media use block, including political club membership and radio listening, explains an additional 3% of total variance of the political participation (F_(2, 298) = 6.368, p < .005). Both Political club and Radio have significant unique contributions to Political participation ($\beta = .134$, p = .008, and $\beta = .114$, p = .023, respectively). As a result, as the frequency went to a political club increase, political participation increases, when all other predictors are controlled for. And, higher radio listening is associated with greater political participation, controlling for all other predictors.

Overall, this analysis found that four separate blocks of predictor variables—block 1 demographics, block 2 including ruralness, length of residence in neighborhood and income, values, and selected behaviors—all contributed a significant amount of variance to the prediction of political participation, as indicated by significant R2s for the total equation and for each block.

Also, the beta coefficients indicate that when controlling for the impact of all other variables in the final equation, there are six independent variables maintained significant unique contributions toward political participation. This is indicated by the five significant (p < .05) final betas: .146 for Age, .191 for Length of Residence in Neighborhood, .210 for value of neighborhood, .298 for Value of American, .134 for Political club, and .114 for Radio.