

Multiple Regression--FORCED-ENTRY HIERARCHICAL MODEL

I. The Model

National community study 2006

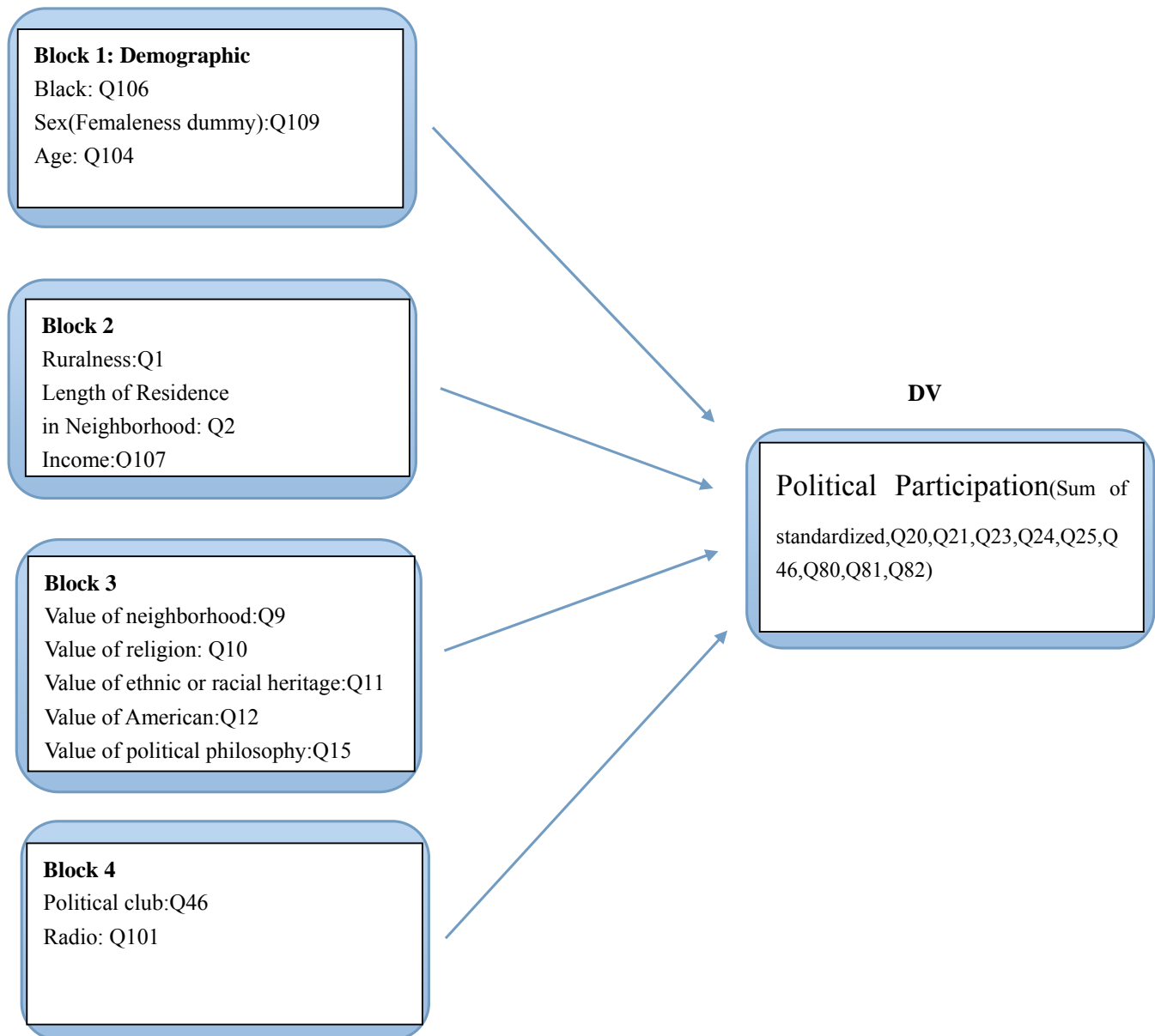
National RDD survey conducted by CATI, communication Research Center at Cleveland State University

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Date: March 4, 2014

I. MODEL

IV



DV

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)

2) Select dependent variable
Click variable name->arrow

The screenshot shows the SPSS software interface. At the top, there is a menu bar with 'Analyze', 'Direct Marketing', 'Graphs', 'Utilities', 'Add-ons', 'Window', and 'Help'. Below the menu bar is a toolbar with various icons. The main area displays a list of variables with columns for 'type', 'Width', 'Decimals', 'Label', 'Values', 'Missing', 'Columns', 'Align', 'Measure', and 'Role'. The variables listed include 'COMPUTE Or...', 'Zscore: Q100...', 'Zscore: Q102...', 'COMPUTE N...', 'COMPUTE Ex...', 'COMPUTE C...', 'COMPUTE S...', 'COMPUTE T...', 'COMPUTE E...', 'COMPUTE Or...', 'COMPUTE O...', 'COMPUTE C...', 'EastDrinkTalk...', 'OrgTPActivity2...', 'OutsideActivity...', 'COMPUTE C...', 'EastDrinkTalk...', 'OrgTPActivity...', 'OutsideActivit...', 'CommercialV...', 'COMPUTE W...', 'dummy code', 'rural', 'COMPUTE W...', 'dummy code [...]', 'rural [RC1]', 'Female', and 'PP'. The 'PP' variable is highlighted with a red circle. A 'Linear Regression' dialog box is open in the foreground, showing a list of variables on the left. The 'Dependent:' field is empty, and the 'Independent(s):' field is also empty. A red arrow points from the 'PP' variable in the list to the 'Dependent:' field. Another red arrow points from the 'PP' variable to the 'Independent(s):' field. The 'Method:' dropdown is set to 'Enter'. On the right side of the dialog box, there are buttons for 'Statistics...', 'Plots...', 'Save...', 'Options...', and 'Bootstrap...'. At the bottom of the dialog box, there are buttons for 'OK', 'Paste', 'Reset', 'Cancel', and 'Help'.

type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
ric	8	2	COMPUTE Or...	None	None	13	≡ Right	Scale	Input
ric	11	5	Zscore: Q100...	None	None	11	≡ Right	Scale	Input
ric	11	5	Zscore: Q102...	None	None	11	≡ Right	Scale	Input
ric	8	2	COMPUTE N...	None	None	9	≡ Right	Scale	Input
ric	8	2	COMPUTE Ex...	None	None	8	≡ Right	Scale	Input
ric	8	2	COMPUTE C...	None	None	11	≡ Right	Scale	Input
ric	8	2	COMPUTE S...	None	None				
ric	8	2	COMPUTE T...	None	None				
ric	8	2	COMPUTE E...	None	None				
ric	8	2	COMPUTE Or...	None	None				
ric	8	2	COMPUTE O...	None	None				
ric	8	2	COMPUTE C...	None	None				
ric	8	2	EastDrinkTalk...	None	None				
ric	8	2	OrgTPActivity2...	None	None				
ric	8	2	OutsideActivity...	None	None				
ric	8	2	COMPUTE C...	None	None				
ric	8	2	EastDrinkTalk...	None	None				
ric	8	2	OrgTPActivity...	None	None				
ric	8	2	OutsideActivit...	None	None				
ric	8	2	CommercialV...	None	None				
ric	8	2	COMPUTE W...	None	None				
ric	8	2	dummy code	None	None				
ric	8	2	rural	None	None				
ric	8	2	COMPUTE W...	None	None				
ric	8	2	dummy code [...]	None	None				
ric	8	2	rural [RC1]	None	None				
ric	8	2	Female	None	None				
ric	8	2	PP	None	None				

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

The image shows the SPSS Linear Regression dialog box overlaid on a data list. The dialog box has a 'Dependent' field containing 'PP'. Below it, 'Block 1 of 1' is shown with 'Previous' and 'Next' buttons. The 'Independent(s):' field is empty, and a red arrow points from the 'dummy code' variable in the list to this field. Another red arrow points from the 'Female' variable to the same field. The 'Method' dropdown is set to 'Enter'. There are also fields for 'Selection Variable', 'Case Labels', and 'WLS Weight'. Buttons for 'OK', 'Paste', 'Reset', 'Cancel', and 'Help' are at the bottom. On the right side of the dialog, there are buttons for 'Statistics...', 'Plots...', 'Save...', 'Options...', and 'Bootstrap...'. The background data list has columns for Width, Decimals, Label, Values, Missing, Columns, Align, Measure, and Role.

Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
8	2	COMPUTE Or...	None	None	13	Right	Scale	Input
11	5	Zscore: Q100...	None	None	11	Right	Scale	Input
11	5	Zscore: Q102...	None	None	11	Right	Scale	Input
8	2	COMPUTE N...	None	None	9	Right	Scale	Input
8	2	COMPUTE Ex...	None	None	8	Right	Scale	Input
8	2	COMPUTE C...	None	None	11	Right	Scale	Input
8	2	COMPUTE S...	None					
8	2	COMPUTE T...	None					
8	2	COMPUTE E...	None					
8	2	COMPUTE Or...	None					
8	2	COMPUTE O...	None					
8	2	COMPUTE C...	None					
8	2	EastDrinkTalk...	None					
8	2	OrgTPActivity2...	None					
8	2	OutsideActivity...	None					
8	2	CommercialVe...	None					
8	2	COMPUTE W...	None					
8	2	dummy code	None					
8	2	rural	None					
8	2		None					
8	2		None					

4) Move to the next block Click next

The image shows a screenshot of the SPSS Linear Regression dialog box overlaid on a data list table. The dialog box is titled "Linear Regression" and has several sections:

- Dependent:** A list box containing "PP".
- Block 1 of 1:** A section with "Previous" and "Next" buttons. The "Next" button is circled in red.
- Independent(s):** A list box containing "dummy code [Race]", "Female", and "Q104: Age [q104]".
- Method:** A dropdown menu set to "Enter", which is also circled in red.
- Selection Variable:** An empty text box with a "Rule..." button.
- Case Labels:** An empty text box.
- WLS Weight:** An empty text box.

At the bottom of the dialog box are buttons for "OK", "Paste", "Reset", "Cancel", and "Help". On the right side of the dialog box are buttons for "Statistics...", "Plots...", "Save...", "Options...", and "Bootstrap...".

The background data list table has the following columns: Width, Decimals, Label, Values, Missing, Columns, Align, Measure, and Role. The rows contain various computed variables and their properties.

Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
8	2	COMPUTE Or...	None	None	13	Right	Scale	Input
11	5	Zscore: Q100...	None	None	11	Right	Scale	Input
11	5	Zscore: Q102...	None	None	11	Right	Scale	Input
8	2	COMPUTE N...	None	None	9	Right	Scale	Input
8	2	COMPUTE Ex...	None	None	8	Right	Scale	Input
8	2	COMPUTE C...	None	None	11	Right	Scale	Input
8	2	COMPUTE S...	None					
8	2	COMPUTE T...	None					
8	2	COMPUTE E...	None					
8	2	COMPUTE Or...	None					
8	2	COMPUTE O...	None					
8	2	COMPUTE C...	None					
8	2	EastDrinkTalk...	None					
8	2	OrgTPActivity2...	None					
8	2	OutsideActivity...	None					
8	2	CommercialVe...	None					
8	2	COMPUTE W...	None					
8	2	dummy code	None					
8	2	rural	None					
8	2		None					
8	2		None					

5) Select independent variables for block2

Click variable name->arrow

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

The screenshot shows the SPSS Statistics Data Editor interface. The main window displays a list of variables with columns for Width, Decimals, Label, Values, Missing, Columns, Align, Measure, and Role. A 'Linear Regression' dialog box is overlaid on the data editor. The dialog box is titled 'Linear Regression' and shows 'Block 2 of 2'. The 'Dependent:' field contains 'PP'. The 'Independent(s):' field is empty. The 'Method:' dropdown is set to 'Enter'. The 'Selection Variable:' field is empty. The 'Case Labels:' field is empty. The 'WLS Weight:' field is empty. The 'Independent(s):' list includes the following variables: status\$, time\$, timeans\$, plaid\$, intro, Q1: Where live, Q2: Time lived, Q3: Deciding f..., Q4: Communit..., Q5: Neighbor..., Q6: Value fami..., Q7: Value wor..., Q8: Value frien..., Q9: Value neig..., Q10: Value reli..., Q11: Value eth..., and Q12: Value bei... A red circle highlights 'Q2: Time lived' and a red arrow points to the arrow icon next to it, indicating the selection process.

Variable	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
COMPUTE Or...	8	2	COMPUTE Or...	None	None	13	Right	Scale	Input
Zscore: Q100...	11	5	Zscore: Q100...	None	None	11	Right	Scale	Input
Zscore: Q102...	11	5	Zscore: Q102...	None	None	11	Right	Scale	Input
COMPUTE N...	8	2	COMPUTE N...	None	None	9	Right	Scale	Input
COMPUTE Ex...	8	2	COMPUTE Ex...	None	None	8	Right	Scale	Input
COMPUTE C...	8	2	COMPUTE C...	None	None	11	Right	Scale	Input
COMPUTE S...	8	2	COMPUTE S...	None	None				
COMPUTE T...	8	2	COMPUTE T...	None	None				
COMPUTE E...	8	2	COMPUTE E...	None	None				
COMPUTE Or...	8	2	COMPUTE Or...	None	None				
COMPUTE O...	8	2	COMPUTE O...	None	None				
COMPUTE C...	8	2	COMPUTE C...	None	None				
EastDrinkTalk...	8	2	EastDrinkTalk...	None	None				
OrgTPActivity2...	8	2	OrgTPActivity2...	None	None				
OutsideActivity...	8	2	OutsideActivity...	None	None				
CommercialVe...	8	2	CommercialVe...	None	None				
COMPUTE W...	8	2	COMPUTE W...	None	None				
dummy code	8	2	dummy code	None	None				
rural	8	2	rural	None	None				
	8	2		None	None				
	8	2		None	None				

6) Statistics setting

6.a Click statistics

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

The screenshot shows the SPSS Linear Regression dialog box with the Statistics sub-dialog box open. The Statistics sub-dialog box has the following options checked:

- Estimates
- Model fit
- R squared change
- Descriptives
- Part and partial correlations
- Collinearity diagnostics

The 'Continue' button is highlighted with a red circle and an arrow pointing to it from the 'Estimates' checkbox. The 'OK' button is also highlighted with a red circle and an arrow pointing to it from the 'Continue' button.

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.
```

2.Regression

Descriptive Statistics			
	Mean	Std. Deviation	N
PP	39.6538	11.56786	312
dummy code	.1346	.34186	312
Female	.5160	.50055	312
Q104: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
Q10: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

	PP	Female	Q04Age	Q1Where live	Q2Time lived there	Q107Household income	Q03Value relig-com	Q10Value religion	Q11Value ethnic-racial heritage	Q12Value being American	Q13Value personal-pol philosophy	Q06Belong pol clubs, orgs	Q10Hours listened to radio yesterday
Pearson Correlation	1.000	-0.082	0.246	0.015	1.033	0.221	0.281	-0.033	0.222	0.052	0.379	0.217	1.000
PP	-0.057	1.000	-0.203	-0.152	-0.107	-0.205	-0.015	0.134	-0.082	-0.082	0.018	0.108	-0.043
Female	0.082	0.006	-0.025	-0.066	-0.044	-0.078	0.068	0.172	0.148	0.172	-0.085	-0.148	-0.044
Q04Age	0.246	-0.303	1.000	0.171	0.376	0.003	0.105	0.095	0.053	0.212	0.209	0.081	0.184
Q1Where live	0.015	-0.152	-0.056	1.000	0.152	-0.047	0.080	0.133	-0.026	0.009	0.051	0.079	-0.095
Q2Time lived there	0.103	-0.107	0.376	0.152	1.000	-0.001	0.226	0.190	0.080	0.241	0.079	0.089	0.050
Q107Household income	0.221	-0.205	0.003	-0.047	0.001	1.000	-0.005	-0.106	-0.180	-0.049	0.074	0.023	-0.052
Q03Value relig-com	0.281	0.015	0.006	0.080	0.081	0.005	1.000	0.254	0.469	0.339	0.087	0.087	-0.073
Q10Value religion	-0.033	0.134	0.085	0.008	-0.036	-0.108	0.254	1.000	0.489	0.339	0.087	0.087	-0.073
Q11Value ethnic-racial heritage	0.222	0.119	0.053	-0.036	0.241	-0.180	0.259	0.469	1.000	0.339	0.087	0.087	-0.041
Q12Value being American	0.062	-0.082	0.149	0.011	0.241	-0.049	0.281	0.373	0.339	1.000	0.166	0.099	0.119
Q13Value personal-pol philosophy	0.379	0.018	-0.085	-0.095	0.079	0.074	0.023	0.097	0.175	0.166	1.000	0.115	0.059
Q06Belong pol clubs, orgs	0.217	0.118	0.081	-0.095	0.088	0.067	0.023	-0.041	-0.041	0.087	0.115	1.000	0.021
Q10Hours listened to radio yesterday	1.208	0.943	-0.084	0.059	0.089	-0.052	0.047	-0.075	0.054	0.019	0.059	0.021	1.000
PP	1.57	1.57	0.075	0.000	0.002	0.000	0.000	0.279	0.447	0.180	0.000	0.000	0.112
Female	0.075	0.457	0.457	0.003	0.029	0.000	0.308	0.009	0.000	0.139	0.379	0.000	0.222
Q04Age	0.000	0.000	0.332	0.163	0.221	0.004	1.116	0.002	0.001	0.004	0.087	0.004	0.472
Q1Where live	0.398	0.003	0.163	0.001	0.000	0.400	0.001	0.066	0.132	0.000	0.000	0.077	0.950
Q2Time lived there	0.002	0.029	0.221	0.004	0.004	0.206	0.079	0.437	0.283	0.421	0.184	0.047	1.159
Q107Household income	0.000	0.000	0.084	0.480	0.000	0.076	0.000	0.009	0.000	0.000	0.083	0.445	1.113
Q03Value relig-com	0.000	0.398	0.116	0.079	0.000	0.484	0.484	0.000	0.001	0.192	0.086	0.118	0.181
Q10Value religion	0.279	0.009	0.002	0.066	0.437	0.030	0.000	0.000	0.000	0.007	0.000	0.344	0.204
Q11Value ethnic-racial heritage	0.247	0.000	0.001	0.133	0.000	0.001	0.000	0.000	0.000	0.000	0.044	0.088	0.033
Q12Value being American	1.000	1.798	0.004	0.421	0.000	1.192	0.000	0.000	0.000	0.000	0.002	0.040	0.398
Q13Value personal-pol philosophy	0.000	0.379	0.067	0.000	1.004	0.096	0.007	0.044	0.001	0.002	0.021	0.021	1.400
Q06Belong pol clubs, orgs	0.000	0.378	0.004	0.077	0.445	0.118	0.344	0.088	0.233	0.040	0.021	0.021	1.400
Q10Hours listened to radio yesterday	0.112	0.222	0.472	0.050	1.113	1.161	0.204	0.093	0.170	0.369	1.440	0.356	3.566
PP	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Female	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q04Age	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q1Where live	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q2Time lived there	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q107Household income	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q03Value relig-com	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q10Value religion	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q11Value ethnic-racial heritage	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q12Value being American	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q13Value personal-pol philosophy	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q06Belong pol clubs, orgs	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12
Q10Hours listened to radio yesterday	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12

Correlations

Double-click to activate

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Q104:Age, Female, dummy code	.	Enter
2	Q1:Where live, Q107: Household income, Q2: Time lived there	.	Enter
3	Q15:Value personal-pol. philosophy, Q10: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

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

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.257 ^a	.066	.057	11.23494	.066	7.235	3	308	.000
2	.353 ^b	.125	.107	10.92894	.059	6.830	3	305	.000
3	.519 ^c	.270	.243	10.06617	.145	11.905	5	300	.000
4	.547 ^d	.300	.269	9.89075	.030	6.368	2	298	.002

a. Predictors: (Constant), Q104:Age, Female, dummy code
 b. Predictors: (Constant), Q104:Age, Female, dummy code, Q1:Where live, Q107:Household income, Q2:Time lived there
 c. Predictors: (Constant), Q104: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
 d. Predictors: (Constant), Q104: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	Sig.
1	Regression	2739.642	3	913.214	7.235	.000 ^a
	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 ^c
	Residual	30398.337	300	101.328		
	Total	41616.615	311			
4	Regression	12464.209	13	958.785	9.801	.000 ^d
	Residual	29152.407	298	97.827		
	Total	41616.615	311			

a. Predictors: (Constant), Q104:Age, Female, dummy code

b. Predictors: (Constant), Q104:Age, Female, dummy code, Q1:Where live, Q107: Household income, Q2:Time lived there

c. Predictors: (Constant), Q104: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

d. Predictors: (Constant), Q104: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

e. Dependent Variable: PP

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error	Beta			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	
	Q104: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	
	Q104: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	
	Q104: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	
	Q10: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						
	Black	1.095	1.882	.032	.582	.561	-.057	.034	.028	.760	1.316	
	Female	-.148	1.175	-.006	-.126	.900	-.082	-.007	-.006	.910	1.099	
	Q104:Age	1.052	.408	.146	2.577	.010	.245	.148	.125	.710	1.364	
	Q1:Where live	-.221	.322	-.035	-.685	.494	.015	-.040	-.033	.810	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	
	Q10: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	.131	.111	.949	1.054		

a. Dependent Variable: PP

.760	.910	.773	.919	.776	.912	.839	.702	.619	.734	.880	.931	.949
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Excluded Variables^d

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics			
					Tolerance	VIF	Minimum Tolerance	
1	Q1:Where live	-.032 ^a	-.559	.576	-.032	.956	1.046	.913
	Q2:Time lived there	.080 ^a	1.345	.180	.077	.857	1.167	.808
	Q107:Household income	.228 ^a	4.129	.000	.229	.949	1.054	.889
	Q9:Value neigh-community	.230 ^a	4.209	.000	.234	.959	1.042	.897
	Q10:Value religion	-.046 ^a	-.803	.423	-.046	.939	1.065	.906
	Q11:Value ethnic-racial heritage	.021 ^a	.345	.730	.020	.845	1.184	.814
	Q12:Value being American	.013 ^a	.220	.826	.013	.931	1.074	.889
	Q15:Value personal-pol. philosophy	.340 ^a	6.383	.000	.342	.944	1.059	.885
	Q46:Belong pol. clubs, orgs	.191 ^a	3.479	.001	.195	.970	1.030	.923
	Q101:Hours listened to radio yesterday	.152 ^a	2.769	.006	.156	.991	1.009	.924
	2	Q9:Value neigh-community	.219 ^b	4.035	.000	.225	.924	1.083
Q10:Value religion		-.043 ^b	-.775	.439	-.044	.923	1.084	.796
Q11:Value ethnic-racial heritage		.026 ^b	.438	.661	.025	.803	1.245	.775
Q12:Value being American		.003 ^b	.057	.954	.003	.897	1.115	.786
Q15:Value personal-pol. philosophy		.323 ^b	6.183	.000	.334	.936	1.068	.767
Q46:Belong pol. clubs, orgs		.179 ^b	3.315	.001	.187	.954	1.048	.793
3	Q101:Hours listened to radio yesterday	.156 ^b	2.914	.004	.165	.973	1.028	.788
	Q46:Belong pol. clubs, orgs	.138 ^c	2.719	.007	.155	.932	1.073	.621
	Q101:Hours listened to radio yesterday	.118 ^c	2.347	.020	.135	.949	1.053	.619

- a. Predictors in the Model: (Constant), Q104:Age, Female, dummy code there
b. Predictors in the Model: (Constant), Q104:Age, Female, dummy code
c. Predictors in the Model: (Constant), Q104: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
d. Dependent Variable: PP

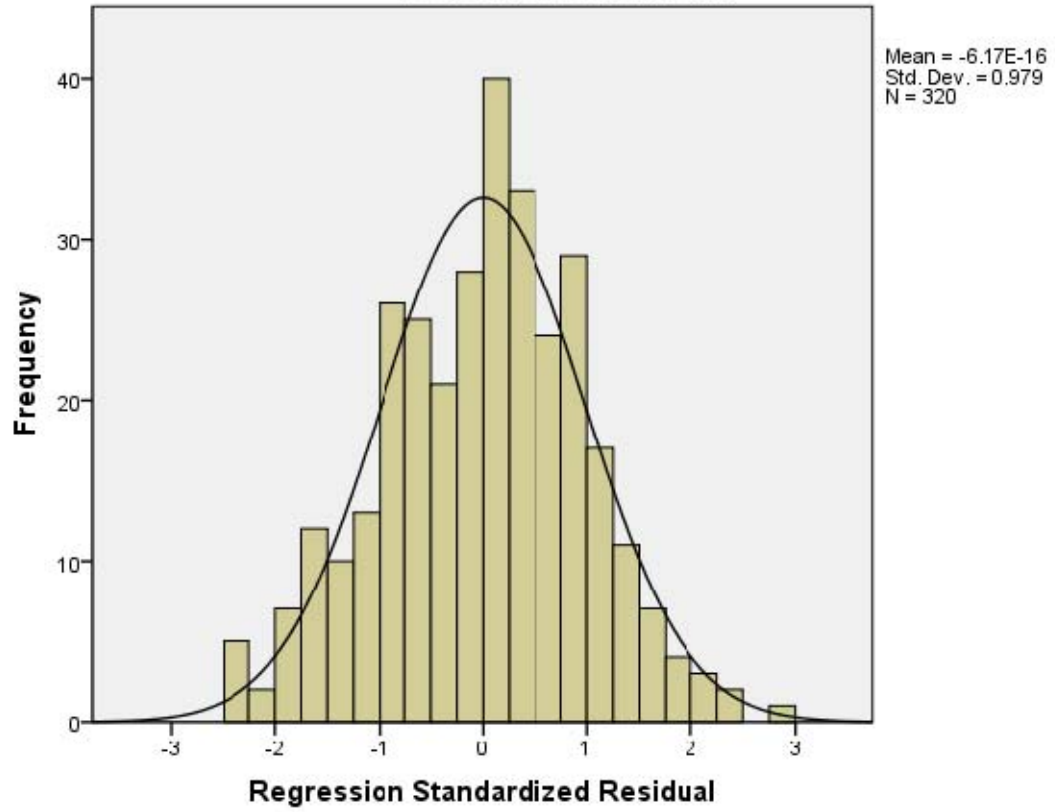
Cohort Descriptives^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions																	
				(Constant)	dummy code	Female	Q10-Age	Q10-Where live	Q2-Time lived there	Q107-Household income	Q9-Value neigh- community	Q10-Value religion	Q11-Value ethnic-racial heritage	Q12-Value being American	Q15-Value personal-pol philosophy	Q16-Being pol. clubs, orgs	Q107-Hours spent to ratio yesterday				
1	1	2,712	1,000	.01	.02	.05	.01														
2	2	890	1,787	.00	.88	.02	.01														
3	3	.385	2,654	.02	.00	.89	.06														
4	4	.053	7,163	.96	.11	.05	.92														
2	1	5,126	1,000	.00	.00	.01	.00	.01													
2	2	894	2,394	.00	.81	.00	.00	.00	.00	.00	.00	.00									
3	3	.467	3,312	.00	.01	.89	.00	.02	.01	.01	.01	.01									
4	4	.213	4,800	.00	.00	.00	.01	.11	.14	.14	.52										
5	5	.175	5,408	.00	.00	.00	.03	.70	.30	.30	.00										
6	6	.090	7,562	.01	.00	.01	.67	.05	.51	.51	.10										
7	7	.035	12,146	.99	.17	.08	.29	.12	.03	.03	.36										
3	1	9,544	1,000	.00	.00	.00	.00	.00	.00	.00	.00	.00									
2	2	923	3,215	.00	.64	.00	.00	.00	.00	.00	.00	.00	.00								
3	3	.479	4,465	.00	.01	.82	.00	.01	.01	.01	.01	.01	.00								
4	4	.242	6,219	.00	.10	.04	.00	.02	.06	.06	.29	.00	.00								
5	5	.206	6,013	.00	.05	.04	.00	.57	.13	.57	.00	.00	.03								
6	6	.158	7,775	.00	.06	.03	.04	.24	.24	.24	.00	.00	.09	.08							
7	7	.117	9,023	.00	.11	.06	.03	.03	.22	.22	.00	.09	.09	.22	.54						
8	8	.104	9,578	.00	.02	.01	.02	.04	.02	.02	.10	.01	.43	.62	.03	.00					
9	9	.076	11,171	.00	.01	.01	.66	.00	.27	.27	.00	.00	.05	.05	.00	.00	.34	.05			
10	10	.070	11,642	.01	.01	.02	.15	.01	.03	.03	.07	.00	.24	.00	.21	.05					
11	11	.066	13,030	.00	.01	.00	.00	.01	.00	.00	.00	.46	.03	.03	.65	.00	.00				
12	12	.024	20,654	.99	.08	.02	.05	.08	.00	.00	.19	.16	.00	.01	.10	.04					
4	1	10,078	1,000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	2	925	3,301	.00	.63	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	3	884	3,376	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	4	.627	4,008	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	5	.448	4,743	.00	.00	.79	.00	.02	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	6	.240	6,484	.00	.11	.03	.00	.03	.06	.06	.28	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
7	7	.201	7,074	.00	.05	.05	.01	.51	.04	.04	.16	.00	.00	.02	.05	.01	.01	.01	.01	.01	.01
8	8	.156	8,034	.00	.07	.02	.04	.26	.47	.47	.01	.00	.08	.08	.01	.00	.00	.00	.00	.00	.00
9	9	.115	9,348	.00	.00	.00	.07	.04	.09	.09	.20	.00	.08	.08	.01	.00	.00	.00	.00	.00	.00
10	10	.103	9,900	.00	.02	.01	.01	.04	.02	.02	.09	.00	.43	.01	.03	.03	.01	.01	.00	.00	.00
11	11	.075	11,554	.00	.01	.02	.51	.01	.30	.30	.00	.00	.03	.09	.04	.00	.00	.00	.00	.00	.00
12	12	.069	12,126	.01	.01	.01	.31	.00	.00	.00	.06	.00	.22	.22	.17	.00	.00	.00	.00	.00	.00
13	13	.056	13,469	.00	.01	.00	.00	.01	.00	.00	.00	.45	.03	.03	.00	.00	.00	.00	.00	.00	.00
14	14	.023	20,737	.99	.08	.02	.05	.07	.00	.00	.19	.14	.01	.01	.10	.03	.00	.00	.00	.00	.00

a. Dependent Variable: PP

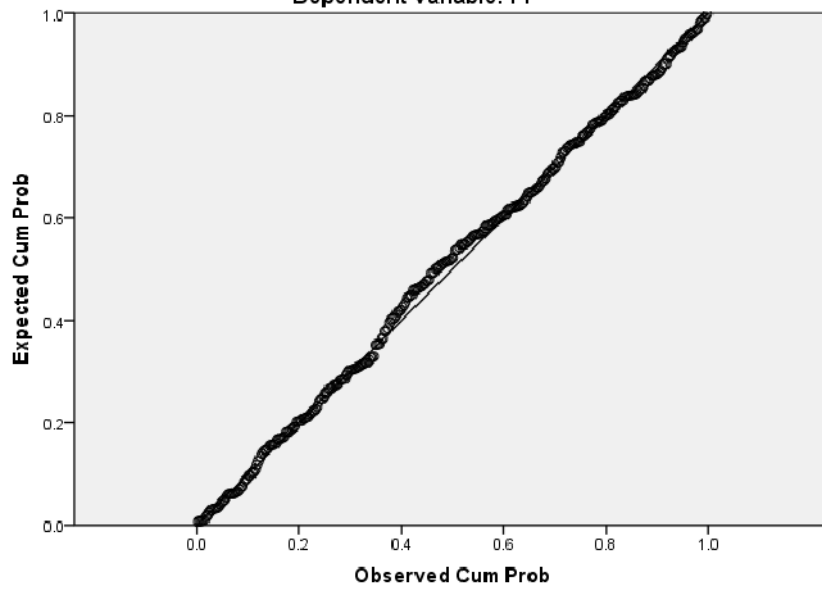
Histogram

Dependent Variable: PP



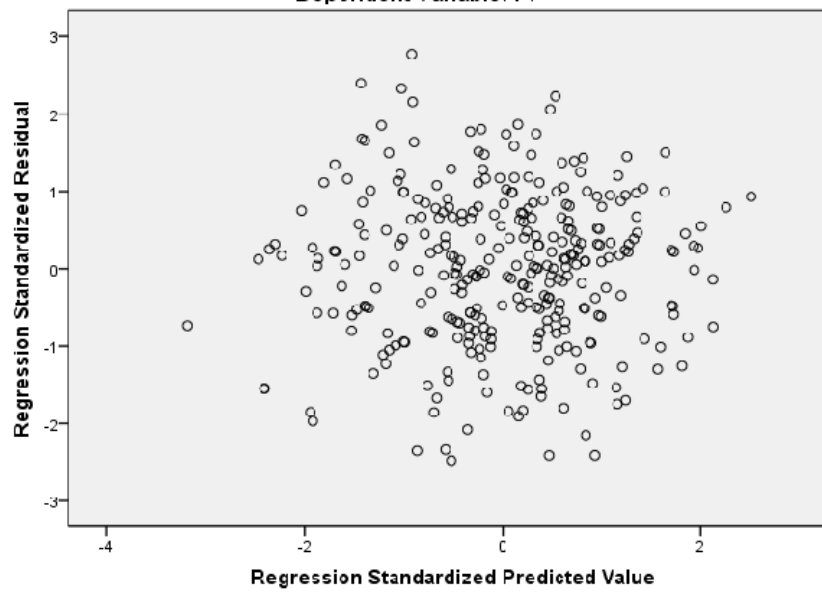
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: PP



Scatterplot

Dependent Variable: PP



IV. Tabling

Table 1
Hierarchical Multiple Regression Predicting Political Participation

Block#	Predictor Variable	r	Final Beta	R^2 Change
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 ≤ 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 ($\beta = .146, p \leq .001$) 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.