RACIAL CONSCIOUSNESS AND VOTER TURNOUT IN URBAN AMERICA

Kurt Schlichting, Fairfield University, Peter Tuckel, Hunter College, Richard Maisel, New York
University
Kurt C. Schlichting, Fairfield University, Fairfield, CT. 06430

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Previous research carried out by the authors of this paper have found that, after controlling for income, racially homogeneous block groups (black or white) located in surrounding areas that reflect their own racial composition have significantly higher levels of voter turnout than corresponding block groups located in areas which do not reflect their racial composition (Schlichting, Tuckel, and Maisel 1998). This finding runs counter to the work of Massey and Denton (1993), who argue that extreme racial segregation of minorities in urban areas leads to their withdrawal from the social and economic life of the larger society.

The finding that minority members living in racially isolated areas, after controlling for income, participate more at the polls than minority members living in more racially diverse areas raises two questions. First, what might account for this finding? Second, does the higher level of political participation by minorities who live in segregated areas extend to other forms of civic participation?

1. RACIAL CONSCIOUSNESS AND VOTER TURNOUT

One explanation which might account for the greater political involvement of minority members living in racially segregated areas is that they may have a greater sense of group consciousness which, in turn, would translate into higher levels of political participation. A number of recent studies, for example, have shown that blacks who possess a strong sense of group consciousness are far more likely to be politically active than those who lack a strong group identification (e.g. Guterbock and London 1983). If we can assume that psychological ties with one's racial group are likely to be stronger among minority members who live in areas populated mainly or exclusively with other members of the same racial group, then residential segregation might create a setting that fosters a higher degree of political activity.

To test this hypothesis, we examined data from the Voter File for the City of Philadelphia for the year 1997. The Voter File consists of both demographic and electoral data for each of the 936,912 voters who were registered in Philadelphia in that year. The data set includes the following variables: street address, age, sex (optional), race (optional), date of birth, date of registration, party registration, and voter history for the five election years spanning the period 1992 to 1996.

To measure voter turnout, a GIS system was used to geocode each registered voter. The geocoded records were then aggregated up to the census block group level. The proportions of registrants who voted in the 1992, 1994, and 1996 general elections were calculated at the block group level and an average measure of voter turnout was determined.

The measurement of racial consciousness we employed was based on the response to the question on the voter registration form that asked people to indicate, on an optional basis, their race. If an individual was willing to provide this information, we construed this as an indicant of racial consciousness. We calculated the proportion of registered voters who furnished information about their race for each block group. The average proportion was 70 percent.

Finally, we appended to the geocoded voter file records that had been aggregated up to the block group level a number of 1990 U.S. census variables at the block group level. Among the key variables added were the average family income and the actual racial composition of each of the block groups.

Results

Table 1 presents the proportion of registrants who voted in block groups of varying racial composition classified by both high and low degrees of racial consciousness and high and low median family income levels. For both high and low income levels, there is a clear association between level of racial consciousness and actual racial composition of the block groups. Block groups which are either

predominately black or predominately white are far more likely to have a higher level of racial consciousness than block groups with heterogeneous racial profiles. For both high and low income levels and across the entire range of block groups with varying racial composition, voter turnout is consistently higher in block groups characterized by a greater degree of racial consciousness.

Racial identification appears to be stronger in racially homogeneous areas and second, that racial identification itself promotes a higher level of voter participation.

2. RACIAL SEGREGATION AND CIVIC PARTICIPATION

The second question we consider in this paper is whether individuals living in segregated areas engage in other forms of civic participation, besides voting, at a comparatively higher rate. Those who contend that "hypersegregation" has deleterious consequences acknowledge that one benefit which might result from the extreme residential segregation of minority members is the development of effective voting blocs. Thus, voting at higher rates in segregated areas may not disprove the general point which these researchers make -- that residents in these areas tend to be isolated from the larger surrounding society. To address this question, we examined the impact of racial segregation on civic participation in two cities: Philadelphia and Baltimore.

a. Philadelphia

The analysis utilized three different measures of civic participation in addition to voter turnout. Philadelphia is a city characterized by Massey and Denton as "hypersegregated." The first measure was the initial mail response rate to the 1990 Census at the block group level. The second measure was the proportion of voters who indicated their sex on the voter registration cards at the block group level. The third measure was the proportion of registrants who disclosed their race on the voter registration cards. Here, the meaning we assigned to this variable was not degree of racial consciousness but the willingness of individuals to furnish information about themselves to a governmental agency.

Assuming these measures are different indicators of attachment to the larger society, we should expect to find a high degree of intercorrelation among them

(Table 2). Each of these four variables is strongly related to one another. The weakest of the bivariate relationships is .58, the one correlating the proportion who give information about their race and the proportion who initially mail back the Census form. The strongest relationship has a value of .83, relating the proportion who offer information about their sex on the registration cards and the proportion of registrants who vote.

A principal components factor analysis carried out on these four variables at the block group level confirms that each of these variables is tapping just one underlying dimension. The factor analysis produces only one factor which explains 78.6 percent of the variance. This finding is consistent with the results of other studies demonstrating a strong linkage between survey participation, voting, and other forms of civic involvement (Couper, Singer, and Kulka 1998). We termed this factor, "civic participation."

A multiple regression analysis examined the relationship between the racial composition of block groups and their scores on this "civic participation" factor (dependent variable). If residents of racially segregated areas have greater attachments to the larger society than residents of racially mixed areas, once income is controlled for, then we should find a positive relationship between the degree of residential segregation and scores on this "civic participation" factor [3.]

The independent variables, entered into the equation in a hierarchical fashion, were: (1) the average family income at the block group level (2) the percent Hispanic 18 years of age and over at the block group level, (3) the percent black 18 years of age and over at the block group level, (4) the percent black 18 years of age and over living within a one-third mile radius surrounding each block group, and (5) the interaction term between variables (3) and (4). The fourth variable, the percent black at the .33 mile radius, was designed to measure the racial composition of the surrounding community for each block group [1].

The model explains 46 percent of the variance (Table 3). Each of the independent variables is statistically significant. The most noteworthy finding, though, is the positive relationship which is obtained between the dependent variable and the interaction term between the percent black 18 years plus at the block group level and the percent black

18 years plus at the .33 mile radius level. What this indicates is that racially homogeneous block groups (white or black) embedded within surrounding areas which mirror their own racial composition have higher levels of civic participation than racially homogeneous block groups embedded within surrounding areas which do not reflect their own racial composition. Thus, it appears that residents in racially segregated areas, once income is controlled for, not only display higher levels of voter participation than residents in racially mixed areas but engage in other forms of community involvement at a comparatively higher rate.

This finding holds true even when we introduce other sets of control variables into the multiple regression equation. For example, one set of variables which has been used to analyze the initial mail response rates to the 1990 Census (Word 1997) includes: (1) "race-ethnicity" (2) percent renters, (3) percent of dwellings which are single family detached, and (4) percent of households which are "spousal." [6]. The addition of these variables (excluding "race-ethnicity" which was already incorporated into our model) brings up the value of the R square to .68. Importantly, the term measuring the interaction between the percent black 18 years plus at the block group level and the percent black 18 years plus at the surrounding .33 mile radius level is both positive and retains its significance. Even when a more comprehensive list of 12 additional census variables (based on the work of Robinson and Kobilarcik 1995) is introduced into the multiple regression equation first, the same basic finding persists. The R-square term now attains a value of .73, with the interaction term remaining both positive and significant.

In addition, block groups with less than predicted "civic participation" are geographically "clustered" in those areas of Philadelphia which are racially mixed.

b. Baltimore

The findings presented above conceivably could be due to certain idiosyncratic factors operating in the City of Philadelphia (e.g., the way people obtain and submit voter registration forms, etc.)

Baltimore was one of the cities in which we previously had found that minority members living in racially segregated areas tended to vote at higher rates than their counterparts living in racially mixed

areas, once controlling for income. A limitation is that the voter registration cards in Baltimore did not ask information about sex or race on a voluntary basis. The measure of "civic participation" was restricted to one variable: the initial mail response rate to the 1990 Census at the block group level.

The methodology employed in the Baltimore study closely paralleled that of the Philadelphia study. All registered voters (n=327,246) were geocoded to their respective 1990 Census block groups, aggregated up, and demographic variables appended.

A multiple regression analysis similar to the one for Philadelphia was carried out with initial mail response rate to the 1990 Census as the dependent variable The independent variables were the same as those employed in the Philadelphia analysis with average family income of those living within a .33 mile radius of each block group added as a variable.

The results of conform to the same pattern as in Philadelphia. The interaction effect between these two racial composition terms, once income has been controlled for, is positive and significant. Minority residents living in racially segregated areas are more likely to mail back their census forms than minority residents living in more racially diverse areas. Again, the interaction effect retains its significance even when the three additional variables utilized by Word (1997) are introduced as controls (Table 4).

3. PRACTICAL IMPLICATIONS

The data assembled can be used to identify the characteristics of block groups with varying levels of return rates to the 1990 Census. This information could be used in the planning of the upcoming decennial census.

In Philadelphia, the basic model included 5 independent variables: (1) the average family income at the block group level, (2) the percent Hispanic 18 years of age and over at the block group level, (3) the percent black 18 years of age and over at the block group level, (4) the percent black 18 years of age and over at the .33 mile radius level, and (5) the interaction between variables (3) and (4). Substituting the initial mail response rate to the 1990 Census as the dependent variable, the model has an R square value of .58. If we add to the measure of turnout (the average proportion of registered voters on a given block group who voted

in 1992, 1994, and 1996), the R square value jumps to .76 -- fully 18 percentage points.

The same basic results are obtained for the City of Baltimore. The addition of the turnout measure adds significantly to the proportion of variance explained in the 1990 Census mail response rate.

SUMMARY AND CONCLUSIONS

Two major findings have emerged from this study. First, we have found a higher degree of racial consciousness to exist in areas in which one racial group predominates. This heightened degree of racial consciousness, in turn, appears to underlie the positive relationship between voter turnout and degree of residential segregation, once income has been controlled for.

The second finding is that minority residents living in segregated areas not only vote at higher rates than those living in more racially mixed areas (once income is controlled for) but also engage in other forms of civic participation at comparatively higher rates. In Philadelphia individuals living in racially homogeneous areas are more apt to divulge information about their sex or race on a voter registration card or to mailback the 1990 Census form than those living in racially mixed areas. In Baltimore, too, individuals living in segregated areas display a greater likelihood of returning the mail census form than those living in racially diverse areas.

These findings suggest that racial segregation, rather than leading to a withdrawal from the social and economic life of the larger society, may, in fact, create a demographic setting which nurtures a sense of community and, with it, a more civic-minded disposition.

Finally, on a more practical note, this paper has produced evidence of a strong relationship between voter turnout and the initial mail response rate to the 1990 Census. Block groups which have high/low turnout rates have correspondingly high/low mail response rates. Importantly, turnout rates add significantly to the proportion of variance explained in mail response rates **over and above** what standard sets of demographic variables explain. Since turnout measures can be obtained on a wide geographic basis, it would seem beneficial to add this variable as a predictor of initial mail response

rates and, thus, improve the efficiency of data gathering for the 2000 Census.

Notes

(1) A specially designed, computer-based radius program was used to measure the racial composition of areas extending one-third of a mile beyond each block group. This program draws a geographic radius of a specified distance (in this case, .33 miles) around each block group and incorporates any block group whose centroid falls within the designated radius. Once the radial distance has been established, the program aggregates the values of selected variables (e.g., race) for all of the block groups falling within its radius -- excluding the block group at the center.

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Table 1

Philadelphia, PA Block Groups

Mean Proportion Voter Turnout (92, 94, 96)
Controlling for Racial Composition and Income (N = 1807)

% Non-Hispanic Black - Block Group	Income - Low % Indicate Race High	Income - Low % Indicate Race Low	Income - High % Indicate Race High	Income - High % Indicate Race Low
> 95 %	.47 (n=118)	.41 (n=136)	.56 (n=53)	.48 (n=35)
85 - 95 %	.47 (n=24)	.40 (n=76)	.58 (n=33)	.49 (n=36)
70 - 85 %	.47 (n=13)	.40 (n=41)	.55 (n= 8)	.46 (n=24)
30 - 70 %	.45 (n=16)	.35 (n=72)	.53 (n= 9)	.48 (n=63)
15 - 30 %	.46 (n= 7)	.34 (n=47)	.58 (n=10)	.41 (n=29)
05 - 15 %	.51 (n=13)	.35 (n=52)	.56 (n=28)	.45 (n=54)
< - 05 %	.52 (n=123)	.37 (n=65)	.60 (n=348)	.49 (n=68)

Table 2

Philadelphia, PA Block Groups

Correlation Coefficients

	Voter Turnout	90 Census Mail Response Rate	Prop. Indicate Sex	Prop. Indicate Race
Voter Turnout				
90 Census Mail Response Rate	.73			
Prop. Indicate Sex	.83	.70		
Prop. Indicate Race	.71	.58	.74	

Table 3

Philadelphia - Unstandardized Regression Coefficients of Income, Minority Composition of Block Groups & Neighborhood on "Civic Participation" Factor

	b	t	significance
intercept	.596	10.508	.000
average family inc. - block group	5.6E-06	5.002	.000
prop. black 18+ - block group	-2.261	- 16.328	.000
prop. Hispanic 18+- block group	- 2.250	- 13.641	.000
prop. black 18+ - .33 mile radius .33 mile radius	- 2.328	- 12.587	.000
interaction: prop. black 18+ block group * prop. black .33 mile radius	3.768	16.562	.000
R^2	.46		

Table 4

Baltimore - Unstandardized Regression Coefficients of Income, Minority Composition of Block Groups & Neighborhood on Mail response - 90 Census

	b	t	significance
intercept	68.916	31.140	.000
prop. black 18+ - block group	- 7.374	- 3.495	.001
prop. renter housing - block group	- 14.093	- 9.191	.000
prop. 'spousal' household - block group	7.819	3.445	.001
prop. single family - block group	1.492	1.039	.299
average family inc. - block group	1.4E-04	4.511	.000
prop. black 18+ - .33 mile radius	- 3.770	- 1.949	.052
average family inc. - .33 mile radius	1.6E-04	4.030	.000
interaction: prop. black block group * prop. black .33 mile radius	5.462	2.145	.032
interaction: average family inc. block group * av. family inc. .33 mile radius	- 1.5E-09	- 3.118	.002
R^2	.61		