4-1-1993

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Recommended Citation

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School Choice, Race, and Sparsity

by John A. Brown and Jess E. House

Public schools in America fail to the extent that they are unable to meet the educational needs of all children. While there are many factors that contribute to this problem situation, the remarkable similarity of schools across the country may be one of the leading causes. The uniform pattern of schooling and the enormous diversity in learner characteristics result, all too frequently in a profound mismatch between service and needs.

Proposals for the restructuring and decentralization of schools seek to redesign schools so that schools would become more responsive to the heterogeneous populations they serve. When the difficulties of organizational change and the historically sluggish response of public schooling are considered, the controversial alternative of school choice may be seen as a more desirable avenue to reform (Chubb & Moe, 1990; Nathan, 1990; Elmore, 1988; Raywid, 1988).

The conceptual arguments on both sides of the school choice debate are well developed (for example, see Lankford and Wyckoff, 1992) and choice has broad political support (per cent support by group as follows: 62 percent of the general public, 69 percent of minorities, 70 percent of inner-city residents, 71 percent of 18–29 year olds, 63 percent of Democrats and 57 percent of Republicans [Klenk, 1992]. Although scholarly debate on choice provides an important frame of reference, the views of parents faced with choice possibilities yield additional data that must also be considered. This study examines school choice using the beliefs and attitudes held by community members in school districts that are fundamentally and demographically dissimilar. The study attempts to identify important dependent and independent variables and to develop quantitative instruments for measuring them.

Equal Educational Opportunity: A Southern Perspective

Equal educational opportunity as a means of achieving social justice has been a persistent theme in American education. The concept implies that education will provide greater opportunity and "open doors" to minority youth and those from lower socioeconomic groups. However, the facts do not justify

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such optimism. Stevens and Wood (1992) cite "that among African Americans the gap between middle-and low income families has increased over the past twenty years. From 1976 to 1988 college enrollments of African Americans declined slightly as did the percent of those receiving a college degree. For low income whites, however, college enrollments rose during the same period" (p. 60).

Since the facts undermine claims of equal educational opportunity, it is easier to understand minority alienation from the "American dream" of educational opportunity. This alienation is manifested by hostile behavior in school, dropping out of school (Bennett and LeCompte, 1990), and avoiding the appearance of higher educational aspirations (Bianci, 1990).

School officials in the South cite incidents of racially motivated violence and scenes of voluntary segregation in lunchrooms and sports activities as evidence that the South has yet to overcome its racially troubled past. In a study of southern school desegregation, Wainscott (1990) identified three indicators of second generation discrimination: racial disproportion in the assignment of students to EMR (educable mentally retarded) classes; racial disparity in student suspensions and expulsions, and a dramatic increase of white enrollment (white flight) in private schools. Wainscott summarizes his study by stating "suspicion remains that the racial balance exhibited in enrollment reports is but a facade masking interracial conflict and invidious forms of discrimination within supposedly integrated schools" (p. 84).

Research Questions

The two research questions addressed in this study were: (1) Which of the 11 demographic variables (see Table 2) are the best predictors of the criterion scale (School Choice)?; and (2) Are the main and interaction effects of race, gender, and type of school district (urban or rural) statistically significant on the mean of the School Choice scale?

Methodology and Design

Sample

To better understand the politics of school choice legislation, a state was selected in the southeastern region of the country where school choice was being considered by the legislature. From a pool of five large, urban, public school districts in this state, one district, hereafter referred to as District A, was randomly selected for this study. All five districts provided students with some mechanism of intradistrict school choice using the magnet school concept and philosophy. Two of the districts (District A and one other) were under federal court order (desegregation) to provide intradistrict school choice for district residents.

The second pool (n=54) of public school districts was classified by the state department of education as being rural, and had the following three additional criteria: low student enrollment (less than 5,000 pupils); low educational expenditures (less than $3000 per pupil); and population sparsity (where more than 90% of the pupils are transported to school). The pool was further stratified (n=23) to control for communication bias and general political influences and minority student populations. Those school districts within a sixty mile radius of District A which received the same television and many of the same radio stations, and the newspapers of general distribution to District A residents were selected for inclusion in the study. A second school district, hereafter referred to as District B, was randomly selected from this stratified pool.

To ensure accurate representation, a stratified random sample (n=800) of teachers, administrators, and parents was selected for the study. In addition, a larger number (n=450) questionnaire were distributed in District A to compensate for population differences. Table 1 provides a summary of relevant school district and service area information.

Published by New Prairie Press, 2017

Table 1. School District and Service Area Information

	District A	District B
School District:		
School Enrollment	34,994	4,544
Percent Minority	61.3	56.4
Expenses Per Pupil	$3324	$2677
Pupils Transported	16,000	4,322
High Schools	5	4
Junior/Middle Schools	11	1
Elementary Schools	33	3
Private Schools	N=29	N=3
Enrollment	6,884	786
Percent Minority	5.6	2.4
School Service Area:		
Location	Urban	Rural
Population	292,517	21,892
Percent H. S. Graduates	49.2	45.1
Percent Minority	43.2	40.4
Residents Per Square Mile	371.8	28.1

Procedure

To reduce personnel bias, teachers in both districts were randomly selected. Parents were randomly selected from the class lists of those teachers not participating in the study. The endorsement of each school district superintendent was cited in a cover letter which was distributed to each participant. The cover letter ensured confidentiality and gave directions for completion of the survey. In addition, participants received a demographic information sheet and a survey instrument (attitudes on school choice and attitudes toward work).

Questionnaires (n=562 or 70.3%) were received from respondents representing the two school districts. The percentage returns were slightly higher for District B (249 or 71.1%) than for District A (313 or 69.6%). The typical respondent was female, African American, approximately 41 years old, had more than two years college training, was in good health, worked (includes categories for student and homemaker) approximately 40 hours per week, and had worked for approximately 17 years (10 in present position). The means and standard deviations for all independent and dependent variables are summarized in Table 2.

Instrument Design

The demographic information section solicited information concerning respondent school district (urban or rural), number of workers at respondent's work site, age, gender, race (white,

black or African American), level of educational attainment, years in current position, prior years experience in a comparable position, current physical health, hours worked per week, and type of work. Responses were entered as actual continuous values (e.g., age, number of years, hours worked, and so forth). A 5-point Likert-type scale (Borg & Gall, 1983) was used in the section on school choice. Respondents circled a response (SD=strongly disagree, D=disagree, N=neither disagree nor agree, A=agree, and SA=strongly agree) about each statement.

In the section on school choice, a brief description of the choice plan being proposed in the target state was included. In addition, thirty-five statements were included in the final instrument which solicited perceptions concerning "school choice." Before applying the statistical tests for each hypothesis, the question of the reliability of the scales was addressed with Internal Consistency Coefficient Alphas as defined by SPSS/PC based on the theory of Cronbach (1970). The School Choice scale consisted of 35 items and had a coefficient alpha of .68 estimated on this sample of 562 respondents.

Analysis and Results

The analysis of the first research question was conducted with stepwise multiple regression and simple product moment correlation coefficients. The primary interest was describing the relationships between the 11 demographic predictors and the criterion School Choice. The first regression employed the 11 demographic predictors. Means and standard deviations for this analysis may be seen in Table 2. Correlations between criterion and predictor variables are shown in Table 3.

Table 2. Total Means and Standard Deviations For All Independent and Dependent Variables
(n=562)

Variable	Mean	Standard Deviation
Type School	1.63	.48
Number of Workers	86.64	100.95
Age	41.29	7.35
Sex	1.72	.45
Race	1.42	.50
Educational Level	4.84	1.50
Years in Current Position	9.83	7.47
Prior Years Experience	7.27	7.03
Current Physical Health	3.39	.72
Hours Worked Per Week	41.64	11.05
Type of Work	3.61	1.69
School Choice Scale	3.46	.30

Table 3. Correlation Coefficients Among Dependent and Independent Variables

	Type School	Number Worker	Age	Sex	Race	Ed. Level	Years Cur. P.	Prior Exp.	Curr. Health	Hrs. Work	Type
	1	2	3	4	5	6	7	8	9	10	11
1	.00										
2	.00	1.00									
3	.21**	−.08	1.00								
4	.02	−.10	−.17**	1.00							
5	−.02	.07	−.04	.01	1.00						
6	.23**	−.07	.21**	.05	−.19**	1.00					
7	.06	−.02	.32**	−.08	.05	.02	1.00				
8	.08	.05	.26**	−.03	−.01	.03	.59	1.00			
9	.10	.09	−.02	−.10	−.22**	.16*	.08	.05	1.00		
10	.05	.02	.13	−.08	−.14	.18*	−.14	.08	−.01	1.00	
11	.12	−.07	−.05	.10	−.05	.50	.09	−.04	.00	−.11	1.00

* Significant at .05 Level   **Significant at .01 level

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The null hypothesis (there will be no statistically significant relationship between the criterion School Choice and the 11 demographic predictors) was rejected. Three predictors were significantly related to the School Choice scale: attitudes about work 1, type of work (defined as whether the respondent was a (1) teacher and student, $X = 3.45$, (2) management or administrator and government official, $X = 3.49$, (3) worker and housewife, $X = 3.56$) and race. The multiple $R = .46$ accounted for 22% of the variance in the School Choice scale. Table 4 presents the multivariate summary for this analysis.

Table 4. Multiple Regression Summaries for Both Equations With Raw Multiple Regression Coefficients, Standardized Coefficients, Beta Weights, and Multivariate T-Tests

Variables in Equation	Raw MR Coeff.	St. MR Coeff.	Beta Weights	T	Significance
Equation 1					
School Choice					
Total	.40	.05	.45	7.56	.000
Type Work	−.04	.01	−.24	−4.22	.000
Race	−.09	.04	−.15	−2.45	.015
Constant	2.32	.18		13.08	.000
Multiple $R = .46$, R SQ $= .22$, Standard Err $= .27$, $F = 23.16^{**}$, DF $= 3, 252$					

**Significant at .01 Level

Means for the School Choice scale by type of work indicate that workers and housewives favor School Choice significantly more than the other two groups. High values of the School Choice scale were associated with high values on educational level and race (African American) and to high values on educational level and age as can be obtained from the correlation coefficients in Table 3.

The statistical significance of the main effects and interaction effects on the School Choice scale was evaluated in a 2×2×2 analysis of variance. Assumptions of normality were investigated for these tests and appeared to be sufficient for the robustness of the test. The second hypothesis (there will be no statistically significant main or interaction effects on race, gender and type of school [rural or urban] on the means of the School Choice scale) was also rejected. Table 5 shows the means and standard deviations for the School Choice scale by race, type school and gender.

Table 6 presents the univariate stepdown results of each of the main effects and interactions between race, type of school and gender. The two-way interaction effect for race by type of school was significant as was the main effect for race. With a significant interaction effect, the simple effects must be plotted to understand the relationships which exist. Table 5 shows the means on the School Choice scale for each of the race by type of school groups. One-way analysis of variance with Scheffe' comparisons used to determine the significance between groups indicated that black rural respondents had significantly higher means on the School Choice scale than any other group thus indicating that they favored School Choice. White rural respondents had the lowest scores followed by the black urban and white urban. These three groups were not statistically different from each other. The questionnaire was coded so that the items were positively stated. A high score on the scales indicated a high agreement to the scales. Thus, black rural respondents may be said to feel that they will benefit in various ways by School Choice, whereas the black urban and all white respondents do not feel they will benefit by the plan. Rinehart and Lee (1991) indicate that minority parents, especially those who are economically challenged, view school choice as one method of closing both the economic and education gap. The inclusion of transportation services overcomes the transportation limitations cited by Witte (1990), Moore and Davenport (1990), the U.S. Department of Education (1990)

Table 5. Means and Standard Deviations for the School Choice Scale by Race, Type of School, Gender and Their Interactions (n=562)

	White				Black			
	Rural		Urban		Rural		Urban	
	(n=114)		(n=174)		(n=135)		(n=139)	
Choice	M=3.41	SD=0.31	M=3.47	SD=0.33	M=3.59	SD=0.29	M=3.44	SD=0.32
	Males	Females	Males	Females	Males	Females	Males	Females
	(n=31)	(n=83)	(n=49)	(n=124)	(n=38)	(n=95)	(n=36)	(n=102)
	M=3.38	M=3.42	M=3.43	M=3.48	M=3.65	M=3.58	M=3.46	M=3.43
	SD=.30	SD=.32	SD=.33	SD=.33	SD=.29	SD=.28	SD=.35	SD=.31

Table 6. Univariate Summary Analysis on the School Choice Scales By Race, Gender and Type School (Rural or Urban)

	Univariate Analysis			
	Hyp.MS	Err.MS	F	Sig. of F
Race	1.13	.10	11.40	.001**
Gender	.00	.10	.01	.939
Type School	.34	.10	3.43	.064
Race × Sex	.19	.10	1.95	.163
Type School × Race	1.34	.10	13.55	.000**
Type School × Race × Sex	.01	.10	.08	.784

*Significance at .05 Level   **Significance at .01 Level

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and American Association of School Administrators (1992). The low support for choice by white respondents could indicate satisfaction with the magnet concept in the urban school district (for example, Downey & Morehead, 1991; Glenn, 1992; Blank & Messier, 1987; and Price & Stern, 1987), or the preference of private schools overbusing their children long distances (Reynolds, 1984) for the rural school district. Although it was not the purpose of this study to report item analysis, areas of strong preference from the survey include:

(1) statewide responsibilities for monitoring education and paying all students' education related costs, including transportation;
(2) the guarantee of financial support for a high school education for all students, regardless of parental wealth or place of residence;
(3) transportation provisions for students (one-way limit of 90 minutes travel time);
(4) personal support for increased taxes (state income tax) to pay for the choice plan;
(5) increasing taxes on business corporations; and
(6) limiting (placing a cap on) handicapped student costs.

In general, respondents were opposed to parental responsibility for transportation (Moore & Davenport, 1990) and to the collection and distribution of funds by local agencies. It should also be noted that using state funds to support private schools was only mildly supported.

Implications and Conclusions

President Clinton has cast his personal vote for school choice. He enrolled his daughter in a private school in the Washington, D. C. area. Affluent persons have choice options that many others, especially those from lower socioeconomic classes, do not have. The more attention focused on choice, the more controversial it has become (Yanofsky & Young, 1992). Experts agree on surprisingly little, even though the number and range of experiments with choice is considerable (Witte, 1990).

This analysis provides some useful insights about the attitudes and beliefs held by community members in school districts that are dissimilar. Type of work by respondent, attitudes about work, and race were all significant general predictors of support for choice. The combination of these statistical factors will be useful for additional analysis of views concerning choice.

The interactions between race, gender and school location provide additional insights for reflection and additional analysis. Black (African American) respondents from the rural school district indicate a significantly high preference for choice. These results support the findings of Rinehart and Lee (1991) who assert that the economically challenged view choice as one method of closing both the economic and education gap. The study results are perhaps more surprising when we include the fact that the urban school district has a form of choice (magnet school).

To the extent that our nation continues to grow farther apart economically and racially, the practical implication for education is that all reforms become more difficult. Coupled with lower property wealth and fairly uniform levels of state aid, state–local financial support in many of the heavily black, rural districts is among the lowest in the state (Clark, 1987). Poor rural school districts cannot offer the diversity of curriculum that affluent, suburban school districts and inner-city magnet schools afford their students (Rinehart & Lee, 1991).

Findings from this study are not without limitations. Results from this study are based upon perceptions about school choice and the importance of work in our society as measured by instruments from a sample of community members in two districts in one southeastern state. Generalizations beyond this sample should be done with caution.

Finally, this study posits areas for additional research. Future research could delineate and refine the predictor variables for choice. Since most research has been locally oriented (Martin & Burke, 1990), a national or regional study of school choice would provide additional data. In addition, qualitative analysis of community members' views and beliefs would provide information from a different perspective.

Notes

[1]This predictor variable will be analyzed separately and reported in a forthcoming study by Brown and Siskind.

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