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ABSTRACT

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SOCIOECONOMIC VARIABLES AS PREDICTORS OF SCHOOL
FINANCIAL REFERENDA VOTING BEHAVIOR

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ABSTRACT

Socioeconomic Variables as Predictors of School Financial Referenda Voting Behavior

The present study was initiated to investigate the relationship between voters' socioeconomic and attitudinal characteristics and their behavior in school district financial referenda. Using an instrument developed through pilot study application and factor analysis techniques, data were collected from 1,030 registered voters in three Kansas school districts that had held recent bond elections. Regression analysis revealed significant predictive relationships between socioeconomic variables and voting behavior in each district and for the combined sample, using both actual past and hypothetical future voting patterns. However, attitudinal variables were found to have limited predictive power. From a synthesis of variables with significant beta weights in the regression equations, a quasi Personalistic Socioeconomic Status Voting Theory was proposed as a partial way to explain and predict variations in voter responses to school financial referenda.

SOCIOECONOMIC VARIABLES AS PREDICTORS OF SCHOOL FINANCIAL REFERENDA VOTING BEHAVIOR

In one local election after another, voters have reacted negatively to school financial referenda. Pleas for increases in school levies for both capital and operational expenditures have frequently fallen on deaf ears. To compound the problem, these realities have surfaced concurrent with increasing educational system costs due to such factors as inflation, the special educational needs of handicapped and minority group youngsters, the rising cost of bond interest rates, and negotiated educator salary increases. To obtain necessary levels of funding for the public schools at least two significant methods emerge: (1) influence the legislature to increase school funding and (2) get the citizens of the district to vote for school financial referenda. Either of these methods, when operationalized, make school district leaders vividly aware of the political and economic issues associated with school funding. This is particularly true for the district referendum method. Because of the process of expressing at the polls individual preferences, either in support or nonsupport of the schools' financial proposals, the characteristics, attitudes, and behavior of voters in these referenda have become salient areas of interest which warrant further empirical investigation.

The study described herein had the following as its dual purpose:

- (1) to describe and analyze the relationship between socioeconomic variables and the way people vote in school district financial referenda; and
- (2) to investigate the importance of other factors as they may relate to voting behavior, specifically voter attitudes toward the public schools.

Based on these objectives and the study's theoretical framework, the

following was hypothesized: There exists no relationship between voting behavior on school bond referenda and a linear composite of selected socio-economic variables and specific voter attitudes toward the public schools.

THEORETICAL FRAMEWORK

Lipset¹ noted that voting is the key mechanism for achieving consensus in contemporary society, a process rivaled as a means for reaching collective decisions from individual choices only by sovereign consumers' expression of preferences in the markets of free enterprise. Voting, which is used by parliaments, courts, and legislative committees, has provided the modern state with a way of connecting the actions of government with the preferences of a mass citizenry. As the practice of casting votes has grown, interest has also grown in the study of this behavior in the social life of mankind. Political scientists, politicians, and the public itself have expressed interest in why people vote as they do, why some people vote and why others fail to exercise their voting privileges. Of major interest has been the proposition that persons with common characteristics tend to exhibit common voting behaviors.

Literature reporting results of voting behavior research leads one to believe that some type of relationship exists between socioeconomic variables associated with individuals and groups and the actions of these persons in both partisan and non-partisan elections.² The importance of these variables has been suggested by Lazarsfeld, Berelson, and Gaudet³ through their assertion that an individual's vote is a product of a number of social conditions such as income and religious preference. They indicate that, since socioeconomic variables remain relatively constant, the variables facilitate the explanation of voting behavior over time. This

view is also taken by McPhee and Glaser⁴ who conclude that the socioeconomic variables of age, income, ethnic origin, religion, and political party affiliation serve as predictors of individuals' expression of preference in the election booth. Soares⁵ also has indicated the importance of socioeconomic variables in explaining and predicting voter behavior, noting that the direction an individual votes is related to the person's composite structure of variables and that these variables not only have a different composition for different people but also have a different impact upon the political behavior of each. Additional support for the relationship between political activity and socioeconomic variables has been provided by Wilson and Banfield⁶ through their study of public-regardingness as a value premise in voting behavior.

Possible relationships between psychological, sociological, and economic variables and voting behavior have been explored by Burdick and Brodeck.⁷ They found a relatively high correlation between a person's socioeconomic status and the way he votes, and that socioeconomic variables account for more of the variance in voting behavior than other variables. From their research, they suggest that each voter is the center of a world of external pressures and that these pressures crowd in from all directions with varying intensity. Most of these pressures are subliminal to the voter as far as his voting intention is concerned. On some obscure level, they are measured, ignored, and valued; however, in the end, they are reconciled and the person votes in a certain manner. Burdick and Brodeck conclude that, since voting is a transitory event, since the decisions of voters are individual ones, and since socioeconomic classifications are relatively fixed concerning a person's relationship to

society, each socioeconomic variable tends to help account for voting behavior variance.

In his research into the voting patterns of school district residents, Carver⁸ found family income and education attainment levels of citizens to be significantly related to their expectations of school officials and their voting behavior in school district elections. He suggests that socioeconomic variables be given prime attention in efforts to predict actions of the public in educational decision making. Other researchers who have conducted studies on, and noted the importance of, socioeconomic variables and their impact on local referenda include Horton and Thompson⁹ in their classic study of voter powerlessness and political negativism, Pomper,¹⁰ Willis,¹¹ and Piele and Hall.¹² The most extensive effort to synthesize school referendum voting behavior research and to develop partial theories of this behavior is that by Piele and Hall. Their review of more than 100 research reports published since 1960 reveals a markedly high incidence of socioeconomic variables included by investigators in their attempts to describe, explain, and predict the voting behavior of district residents in school financial elections.

Conceptual underpinnings for the present study were largely based on the investigation of Albuquerque residents' voting behavior conducted by Hatley and Burlingame.¹³ On the basis of their use of relatively unsophisticated cross-tabulation data analyses, they conclude that supporters of school financial referenda differ from nonsupporters in terms of family composition, education attainment level, family income, geographical mobility, societal orientation (cosmopolitan versus localistic), amount of knowledge about the schools, satisfaction with school leaders, and perceptions of the role of education in contemporary society. Hatley and

Burlingame propose an educational life-style typology (dichotomized as high versus low on the above variables and referenda support) as a framework for analyzing voter reactions to school financial proposals.

Although both political science and education literature is replete with reports of voting behavior research, much of that literature is time-and-place specific and lacks conceptual clarity regarding variable inter-relationships. The present study takes into account the incidence of socioeconomic and attitudinal variables noted in prior investigations and attempts to systematically evaluate the explanatory and predictive power of these variables.

METHOD

Data source. Three school districts in Kansas which had held a bond election within the 24 months preceding the study were selected as areas from which to draw the study sample. These districts differ in size, rural versus urban characteristics, and percentage of favorable votes in the most recent school bond referendum (53%, 52%, and 42%). District A, urban, had 7,726 registered voters; District B, suburban, had 2,360 registered voters; and District C, rural, had 1,533. Fifteen percent of the registered voters in each district were randomly selected from the voter registration rolls, producing an N of 1,743. Of this number, 218 were selected at random for inclusion in a pilot study for instrument development; therefore, the effective sample size was 1,525. The initial mailing of the final survey instrument and two follow-ups resulted in 1,030 usable responses, an overall response rate of 68 percent. Response rates by district were: District A, 608 of 1,013; District B, 310 of 359; and District C, 174 of 202.

Of the 1,030 respondents, 512 had actually voted in their district's most recent school financial referendum and clearly indicated how they would likely vote in a hypothetical future election. Since the thrust of the present study was on how people vote rather than if they vote, the data collected from these 512 respondents were subsequently used in hypothesis testing data analysis. Data from all 1,030 respondents were used in conducting reliability checks on attitude instrumentation.

Instrumentation. Development of the instrument included a pilot phase and a retest application phase. The pilot instrument was constructed from a pool of 50 items relating to public attitudes toward education found in the various Gallup surveys¹⁴ and from the instrument used by Hatley.¹⁵ The instrument which was to subsequently form the basis for data collection in this study consisted of three distinct sections: (1) sixteen socioeconomic items; (2) thirty-one attitudinal items; and (3) four voting behavior items regarding both specific past financial referenda and projected financial referenda. Possible responses to the attitudinal items were Likert-scaled along five points ranging from "Strongly Disagree" to "Strongly Agree" with a "Neutral" mid-point.

The pilot instrument was administered by mail to a proportional random sample of 218 registered voters in the three Kansas school districts. Usable questionnaires were received from 115 of the sample, representing a 53 percent response rate. Responses to the 31 attitudinal items were subjected to Principle Components Factor Analysis with Varimax Rotation.¹⁶ For determining the number of factors present, Kerlinger's¹⁷ basic guidelines for factor analysis in behavioral research and Cattell's¹⁸ suggestions concerning the Scree Test and structure interpretability were

followed. Items were deleted from the factor structure if they did not achieve a loading of at least .300 on their principle factor or if they cross-loaded with differences of less than .200 between factors.

Multiple varimax rotations of the pilot study data resulted in the Measure of Attitudes Toward Education (MATE) instrument with three definable factors which accounted for 60 percent of the attitudinal variance. Table 1 presents MATE instrument items and their discrete loadings on the following: Factor I, Teacher Related Issues, consisting of six items concerning a person's opinion about issues directly concerning teacher personnel; Factor II, Organizational and Program Efficiency, consisting of seven items addressing a person's feelings regarding issues involving curriculum and money; Factor III, Administrative and Program Effectiveness, consisting of six items concerning a person's attitudes in the areas of school boards, administrators, and the existing programs. Based on Cronbach Alpha Coefficients¹⁹ (see Table 1 notes), the instrument's internal consistency was judged sufficient to warrant further development.

Table 1 about here

Following the above analyses, the instrument was modified to include 19 attitudinal items rather than the original 31 and was readministered to test its factor structure stability, conceptual interpretability, and reliability. In this case, the sample was the 1,525 registered voters remaining in the random sample of the three Kansas school districts after the pilot study. As noted earlier, the instrument was administered in the form of a mail questionnaire and produced 1,030 usable returns. The same statistical analyses and decision rules were applied to these data as in the pilot study phase, plus tests for homogeneity of variance.

Factor analysis of the attitudinal data collected from the retest respondents produced results markedly similar to those of the pilot study. (See Table 1.) The three factor structure again was revealed to be the most meaningful in terms of mathematical loadings of instrument items and in terms of conceptual interpretability of item clusters within factors. All 19 items maintained the same factor position as had been established in the pilot study. In addition, estimates of reliability were even higher than had been attained for the pilot study instrument's factor structure.

Data analysis. Following the guidelines established by Cooley and Lohmes²⁰ and using the SPSS²¹ computer program, data for each school district as well as the total sample were subjected to step-wise regression analysis, using both past and future voting behavior as criterion variables.

In a step-wise manner, each variable was entered into the regression model in the order of importance for prediction of the dependent variable. Thus, the relative importance of each variable was established. A one percent criterion for predictability was implemented in discontinuing the step-wise procedure when the addition of a new variable to the regression model would account for less than one percent of the dependent variable variance.

The independent variables used in the regression analysis were: an individual's age, family income, educational attainment level, religious preference, ethnic origin, sex, marital status, number of children in a household, number of children enrolled in the public schools, number of children enrolled in private or parochial schools, number of children enrolled in college, political-party affiliation, geographical mobility, overall attitude toward schools, MATE Factor I, MATE Factor II, and MATE Factor III.

The criterion variable used in this analysis relates to two aspects of voting behavior: (1) voting behavior in the most recent school bond election held within the respective school district and (2) hypothetical voting behavior in a future school bond election. For the purposes of this study, only responses indicating a "for" or "against" vote were used in the regression analysis. For each regression analysis, all individuals who did not respond, responded "don't recall" and those who responded "did not vote" were deleted from the sample. Thus, findings of the present study are restricted to that subset of individuals who specifically took a stand within the context of the questionnaire.

Table 2 presents means and standard deviations for each independent and criterion variable. These are presented for each school district's respondent group and for the combined group of 512 actual voter respondents.

Table 2 about here

REGRESSION ANALYSIS RESULTS

Regression analysis was used to determine the extent to which a linear composite of selected socioeconomic variables and specific voter attitudes toward the public schools relate to voter reactions to school financial referenda. In total, eight separate regression equations were computed, four regarding past voting behavior (one for each of the three districts and one for the combined 512 respondents) and a like number regarding possible future referenda.

A summary of regression analysis results is presented in Table 3 for the most recent bond election in which respondents had voted. All regression equation F ratios were significant at the .05 level. However, the

percent of explained variance and the number of variables with significant beta weights varied from district to district.

Table 3 about here

The greatest amount of variance explained (99 percent) was found in District C, the rural one, with nine variables having significant beta weights: sex, age, marital status, education level, home ownership, political party affiliation, years residence in the state and at current address, and number of children in the public schools. Next came the suburban district, District B, with 35.7 percent of the variance explained by the following seven variables: sex, marital status, education level, home ownership, religious preference, years residence in the state, and number of children in the public schools. Urban District A's explained voting behavior variance totaled 21.8 percent from seven variables in the regression equation: age, education level, years residence in the state and at current address, and number of children in the household, in nonpublic schools, and in college. Explained voting behavior variance for the composite grouping was 17.5 percent, with the following eight independent variables having significant beta weights: sex, marital status, education level, years residence in the state and at current address, number of children in the household and in college, and MATE Attitude Factor III.

Table 4 presents the summary of the four regression analyses regarding respondents' likely voting behavior regarding a hypothetical future school financial referendum. As in the case with past behavior regression analysis, all F ratios were significant at the .05 level. Again, the percent of explained variance and the number of significant explanatory variables differed from equation to equation.

Table 4 about here

The explained variance for urban District A totaled 30.5 percent, with nine variables having significant beta weights in the equation: sex, age, ethnicity, marital status, home ownership, religious preference, years residence at current address, and number of children in nonpublic schools and in college. For the suburban district, District B, eleven variables accounted for 45.2 percent of the criterion variable variance. However, only the following nine variables had significant beta weights: sex, home ownership, religious preference, political party affiliation, years residence in the state and at current address, number of children in the public schools, MATE Attitude Factor II, and overall attitude about the schools' performance. The District B variables in the regression equation with beta weights not significant were education level and number of children in nonpublic schools.

Thirteen variables, nine with significant beta weights, combined to account for 57.9 percent of the voting behavior variance in rural District C. These nine variables were: sex, age, marital status, education level, family income, home ownership, years residence at current address, and number of children in the public schools and in college. The amount of explained variance in District C must be viewed with caution given that religious preference, number of children in the household, MATE Attitude Factor II, and length of residence in the state served to account for variance but lack beta weight significance. Also, the analysis suggests that education level, home ownership, and length of residence at current address may be suppressor variables in this equation.

As indicated in Table 4, only three variables surfaced in the future voting behavior regression analysis for the 512 subjects combined. While the F ratio for this analysis is significant, the three variables of age, marital status, and number of children in college account for only 14.7 percent of the criterion variance.

On the strength of all regression analyses being significant, the research hypothesis is rejected in favor of the alternative: A significant relationship exists between voting behavior on school bond referenda and a linear composite of selected socioeconomic variables and specific voter attitudes toward the public schools. However, while the research hypothesis is not retained, it must be noted that voter attitudes toward school, as measured by the three-factor MATE instrument and overall reactions to school performance, failed to add consistently to the explanation of the voting behavior variance for both past and future elections.

DISCUSSION

This study furnishes public school leaders with information concerning the relationships occurring between socioeconomic characteristics of voters and their voting behavior on nonpartisan school financial referenda. Data were collected and analyzed relative to differing socioeconomic variables and attitudes toward the schools, their personnel, effectiveness, and efficiency. These data provide an improved means of assessing and predicting the voting potential of school district constituents. Another significant feature of this study is that the methodology used provides an instrument that other school districts can employ in efforts to obtain descriptive, explanatory, and potentially predictive data about voter

reactions to financial referenda. The resulting research instrument could aid educational leaders and administrators in collecting data and in predicting voter preference based on socioeconomic characteristics. This would enable the respective school districts to prepare strategies before a campaign designed to aid in the passage of their school districts' financial referenda. While found not to add to the prediction of voting behavior, the attitudinal part of the questionnaire (MATE factors), in and of itself, can be of value to school administrators by serving as an indicator of current patron viewpoint regarding programs, personnel, and administration of the school district. MATE instrument data lend themselves not only to discrete item analysis but also to analysis using conceptually clear and stable factor scores.

This study discloses a number of socioeconomic characteristics that may be advantageous to educational leaders as they seek to develop a better knowledge and understanding of voting behavior. The study demonstrates that it is possible to account for voting behavior variance in financial referenda by utilizing a linear composite of socioeconomic variables. Further research is required to determine how these variables relate to voting on non-money issues and in non-school, nonpartisan elections.

The present study reveals that certain socioeconomic variables, either alone or in combination with other variables, appear to be good predictors for the manner in which an individual votes. The incidence of these variables within regression equations (see Tables 3 and 4) resulted in the development of Table 5, which is broken down into five dimensions: (1) Personal, (2) Sociological, (3) Economic, (4) Attitudes toward Education, and (5) District Size.

Table 5 about here

Inclusion of specific variables within each dimension was based on whether the variable had a significant beta weight at the .05 level in any of the eight regression analyses. The Personal Dimension includes age, sex, marital status, and number of children. The last variable includes number of children in the household, in public schools, in private or parochial schools, and in college. The more discrete variables about children were collapsed into the more general classification because one or more of the discrete variables kept appearing in the regression equations, but the data were not sufficient to suggest specifically what particular aspect of number of children is most important. The Sociological Dimension includes ethnicity, political party affiliation, religion, and mobility. The last variable is a combination of length of residence at present address and length of residence in Kansas. The data indicate that these two variables are important across and within the selected school districts but were collapsed for reasons similar to those for collapsing the number of children variable into one. The Economic Dimension includes income, home ownership, and educational level. The last dimension, Attitudes Toward Education, includes the three MATE factors involving attitudes toward the personnel, efficiency, and effectiveness of the schools and the voter's overall attitude toward the public schools.

The usefulness of the synthesis of voting behavior predictor variables as proposed in the foregoing table resides primarily in its identification of potentially powerful predictor variables and of ones that are of only marginal or limited utility. The rating of each variable on a

high-to-low continuum of predictive potential, arbitrarily based on incidence of significant beta weights in the regression analyses, implies the relative importance of that variable in explaining and predicting voting behavior in school financial referenda. A rating of High indicates a variable that should be considered to have considerable predictive potential regarding future financial referenda and considerable explanatory power for past behavior of participating voters. Conversely, a rating of Low suggests at best only limited utility in predicting and explaining a person's voting behavior.

In one sense, then, the present study contributes to the development of a partial theory of school financial referenda voting behavior. Explanatory and predictive power of the theory would appear to reside with the sex, marital status, number of children, mobility, and educational level variables. The variables of age and home ownership are viewed as possible marginal contributors for purposes of explanation and prediction. Other variables considered in the present study and included in Table 5 must be viewed as questionable contributors to the theory.

The fact that income and attitudes toward school do not emerge as potentially powerful predictors must be noted as refutations to a considerable body of literature on nonpartisan voting behavior.²² Also, the notions about an educational life-style typology as proposed by Hatley and Burlingame²³ must be questioned. Much of their typology relative to voting behavior on educational money issues suggests the importance of the voter's attitude toward the schools, education in general, and specific types of educational programs. The factor structures on attitudes in the present study were largely developed from items that Hatley and Burlingame used in their Albuquerque study, but none of the factor variables proved to be of

much utility in predicting voting behavior or in explaining behavioral variances. However, parts of their life-style typology appear to be substantiated in that the present study also reveals the importance of number of children, education attainment, and mobility as important variables to consider in the study of both individual and group voting behavior.

The partial voting behavior theory which begins to emerge from the synthesis of predictor variables might be labeled the Personalistic Socio-economic Status Theory. This would appear to be a combination of the Economic Self-Interest Theory and the Socioeconomic Status Theory of electoral behavior in school financial elections as discussed by Piele and Hall.²⁴

It would appear that additional variables need to be identified and considered in further research-based theory-building efforts. One basis for this assertion is that after the analyses reported herein some major questions remain unanswered. For example, the fact that the same individual variables did not emerge with consistency in the regression analyses for each of the three school districts and for the total combined sample within and across past and future referenda raises concern as to the generalizability of the proposed Personalistic Socioeconomic Status Theory. The time-and-place and issue specific nature of school financial referenda may produce powerful intervening variables, for example: purpose and amount of bond issue, voter turnout, incumbent defeats in recent school board elections, school tax rate ratio to neighboring districts' rates, and results of previous referenda reflecting trend patterns. Intervening variable exploration remains for future research.

Also, the researchers are unable to account for the variations in the amount of variance explained by the predictor variables in the present study. On the one hand, to account for 99 percent of the variance with only nine variables gives reason to cheer. On the other hand, to be able to account for only 15 percent in another case brings the researchers quickly back to reality. Perhaps voting is largely a very personal, somewhat unpredictable, impulsive behavior lacking conscious rationality on the part of the electorate.

In sum, it is suggested that the proposed Personalistic Socioeconomic Status partial theory of voting behavior is sufficiently parsimonious to deserve further testing and development. Additional research should be conducted to explain the differences in prediction patterns as revealed by the synthesis. These variables in combination can be used as the groundwork for further attempts to precisely define those aspects of voters, their attitudes, and time-and-place specific circumstances which impact upon the process of preference expression regarding school funding proposals.

Hopefully, when all the data are analyzed and the computers have produced their last runs of significant regression F ratios and beta weights, not all the good predictor variables are socioeconomic ones. Hopefully, there are others which are amenable to manipulation by school district leaders. Otherwise, not much can really be done about the dismal track record of school financial referenda except attempt to keep individuals of certain socioeconomic status away from the polls -- an alternative contradictory to democratic ideals and likely impossible to pursue with much success.

NOTES

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22. For example, Piele and Hall, op. cit., p. 165, reference eleven separate studies since 1960 which report a significant relationship between voter income and voter reaction to school district bond proposals.
23. Hatley and Burlingame, op. cit., pp. 307-310.
24. Piele and Hall, op. cit., pp. 141-152.

TABLE 1

MATE: A Three Factor Measure of Public Attitudes Toward Education

Factor and Instrument Items**	Factor Loadings*	
	Pilot (N=115)	Retest (N=1,030)
FACTOR I, <u>Teacher Related Issues</u>		
Teachers are generally paid about what they are worth.	-.784	-.729
Disciplinary action should be applied to teachers who go out on strike.	-.756	-.831
Like everyone else, teachers have the right to strike.	.673	.805
In order that the school district attract and keep qualified teachers, teacher salaries should be adjusted upward.	.581	.743
The schools should employ teacher aides so that teachers are freed from "nonteaching" duties.	.541	.733
A school board should represent the desires of the public rather than the desires of the teachers.	-.493	-.510
FACTOR II, <u>Organizational and Program Efficiency</u>		
Additional funds for the support of public education should be provided largely at the state government level.	.699	.792
More money should be spent to lower the present classroom pupil-teacher ratio.	.575	.599
The schools should spend more money on classes like typing, electrical shop, homemaking, and auto mechanics.	.571	.551
The schools should spend more money on subjects like mathematics, foreign languages, chemistry, physics, and English literature.	.494	.455
Generally speaking, the schools in the particular neighborhood in which I live are <u>not</u> as up to date and well equipped as those in other areas of the school district.	.465	.336
The federal government should spend more money to provide a better in education in districts like ours.	.442	.699
Legal provisions should be developed that allow expenditure of national, state, and local taxes in support of private and parochial schools.	.339	.666

TABLE 1 (continued)

Factor and Instrument Items**	Factor Loadings*	
	Pilot (N=115)	Retest (N=1,030)
<u>FACTOR III, Administrative and Program Effectiveness</u>		
All things considered, the local school board is trying to do a good job.	.666	.566
In general, children attending our public schools receive an education that is equal to, if not better than, any in the state.	.516	.681
All things considered, the public school administration is trying to do a good job.	.517	.641
The school system is doing a good job of preparing students for college.	.495	.666
Tuition-free public kindergartens should be provided for all children in that age range.	.423	.457
The school system is doing a good job of preparing students for making a living.	.367	.468

*Cronbach Alpha Coefficients for the factor structures were as follow:

<u>Factor</u>	<u>Pilot</u>	<u>Retest</u>
I	.767	.830
II	.644	.700
III	.624	.640
Total	.707	.730

**Responses to MATE items are made along a five-point scale ranging from "one" for "Strongly Disagree" to "five" for "Strongly Agree." Items in Factor I with negative factor loadings must be reverse scored to produce a factor score. The higher the factor score for Factor I and III, the more positive the respondent's attitude toward the public schools. The lower the score for Factor II, the more positive the attitude.

TABLE 2

Variable Means and Standard Deviations, by District and Total Sample

Variable (Response Codes)	District A (n=271)		District B (n=160)		District C (n=81)		Total (N=512)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
<u>Independent Variables:</u>								
Sex (1=male; 2=female)	1.47	.50	1.36	.48	1.56	.50	1.46	.50
Age (1=21-; . . . ; 6=60+)	3.52	1.30	3.51	1.13	3.81	1.42	3.56	1.29
Ethnicity (1=white; 2=other)	1.27	.45	1.14	.35	1.08	.26	1.21	.41
Marital status (0=single, widowed, etc.; 1=married)	.92	.27	.95	.22	.95	.22	.94	.25
Education level (1=elem. only; . . . ; 8=graduate degree)	5.07	2.16	4.36	2.00	4.83	2.33	4.85	2.15
Income, family (1=\$20,000+; . . . ; 8=\$3,000-)	2.76	1.43	3.03	1.30	2.45	1.34	2.77	1.40
Home ownership (1=paid for; 2=buying; 3=renting)	2.04	.68	1.74	.65	1.87	.54	1.94	.66
Religious preference (1=Protestant; 2=non-Protestant)	1.41	.94	1.22	.86	1.19	.39	1.33	.86
Political party (1=Democrat; 2=Republican; 3=other)	2.15	1.24	1.83	1.20	2.10	1.21	2.06	1.23
Yrs. residence, state (1=1-; 2=1-5; 3=6-10;)	4.10	1.12	4.41	.83	4.13	1.17	4.16	1.09
Yrs. residence, current address (1=1-; . . . ; 4=10+)	2.62	1.10	2.26	1.00	2.43	1.02	2.60	1.06
No. children, household (0=0; . . . ; 8=8+)	1.85	1.83	1.64	1.47	1.34	1.24	1.70	1.69
No. children, public schools (0=0; . . . ; 8=8+)	1.12	1.36	1.19	1.36	1.02	1.31	1.12	1.34
No. children, nonpublic schools (0=0; . . . ; 8=8+)	.05	.40	.03	.18	.00	.00	.04	.31
No. children, college (0=0; . . . ; 8=8+)	.13	.35	.17	.38	.09	.28	.13	.35

TABLE 2 (continued)

Variable (Response Codes)	District A (n=271)		District B (n=160)		District C (n=81)		Total (N=512)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
MATE: Attitude Factor I (possible range, 6 to 30)	19.20	5.84	18.58	5.58	19.03	5.75	19.02	5.76
MATE: Attitude Factor II (possible range, 7 to 35)	22.47	4.54	21.64	4.83	21.98	4.48	22.19	4.61
MATE: Attitude Factor III (possible range, 6 to 30)	22.80	3.45	23.54	3.22	22.58	3.67	22.94	3.45
Overall attitude, schools' performance (1=very negative; . . . ; 5=very positive)	3.03	1.45	3.04	1.40	3.10	1.38	3.04	1.42
District size (1=large; 2=medium; 3=small)	1.00	.00	2.00	.00	3.00	.00	1.60	.76
<u>Dependent Variables:</u>								
Voter response to most recent school referendum (1=voted for; 2=voted against)	1.44	.50	1.30	.46	1.63	.49	1.43	.50
Voter response to hypotheti- cal future school referendum (0=undecided; 1=probably vote for it; 2=probably vote against it)	.95	.81	.95	.66	.90	.76	.94	.77

TABLE 3

Summary of Past Voting Behavior Regression Analyses: Variables and Significant Beta Weights, by District and Total Sample

Predictor Variable	Beta Weight, by Group (if .05 sig.)			
	Dist. A	Dist. B	Dist. C	Total
Sex	-	.398	.132*	.110
Age	.114	-	.414	-
Ethnicity	-	-	-	-
Marital status	-	.151	.417	.150
Education level	-.170	-.266	-.340	-.220
Income (family, annual gross)	-	-	-	-
Home ownership	-	-.140	-.262	-
religious preference	-	-.293	-	-
Political party affiliation	-	-	.233	-
Years of residence:				
In the state	-.205	-.205	-.649	-.132
At current address	-.240	-	-.242	-.285
Number of children:				
In the household	.138	-	-	.159
In the public schools	-	-.263	-.273*	-
In nonpublic schools	-.121	-	-	-
In college	.243	-	-	.144
MATE: Attitude Factor I	-	-	-	-
Attitude Factor II	-	-	-	-
Attitude Factor III	-	-	-	-.101
Overall attitude, schools' performance	-	-	-	-
District size	NA	NA	NA	-
<u>Regression Equation Statistics:</u>				
Total Multiple R	.467	.597	.999	.419
Total Multiple R Squared	.218	.357	.999	.175
F Ratio (All sig. at .05 level)	10.50	12.09	9530.45	13.44
df	7/263	7/152	9/71	8/504

*Possible suppressor variable since signs for Simple R and Beta differ.

TABLE 4

Summary of Hypothetical Future Voting Behavior Regression Analyses:
Variables and Significant Beta Weights, by District and Total Sample

Predictor Variable	Beta Weight, by Group (if .05 sig.)			
	Dist. A	Dist. B	Dist. C	Total
Sex	-.114	.219	-.404	-
Age	.335	-	.457	.351
Ethnicity	-.124	-	-	-
Marital status	.140	-	.323	.163
Education level	-	-	.278*	-
Income (family, annual gross)	-	-	.296	-
Home ownership	-.160	.278*	-.341*	-
Religious preference	.169	.244	-	-
Political party affiliation	-	.208	-	-
Years of residence:				
In the state	-	.307	-	-
At current address	-.161	.202	.313*	-
Number of children:				
In the household	-	-	-	-
In the public schools	-	.258	-.357	-
In nonpublic schools	.147*	-	-	-
In college	-.138	-	-.584	-.149
MATE: Attitude Factor I	-	-	-	-
Attitude Factor II	-	-.128	-	-
Attitude Factor III	-	-	-	-
Overall attitude, schools' performance	-	-.175	-	-
District size	NA	NA	NA	-
Regression Equation Statistics:				
Total Multiple R	.552	.673	.761	.383
Total Multiple R Squared	.305	.452	.579	.147
F-Ratio (All sig. at .05 level)	12.73	11.14	7.11	29.33
df	9/261	11/148**	13/67**	3/509

*Possible suppressor variable since signs for Simple R and Beta differ.

**Regression equation included variables with non-significant Beta weights, two for District B and four for District C.

TABLE 5

Synthesis of Educational Financial Referenda
Voting Behavior Predictor Variables

Dimension	Observed Predictive Power (Significant Beta Weights)								Overall Predictive Potential*	
	Past Election by Districts				Future Election by Districts					
	Total	A	B	C	Total	A	B	C		
<u>Personal Dimensions</u>										
Age				+	+	+	+			Medium
Sex	+		+	+		+	+	+		High
Marital Status	+		+	+	+	+		+		High
Number of Children	+	+	+	+	+	+	+	+		High
<u>Sociological Dimensions</u>										
Ethnicity						+				Low
Political Party				+			+			Low
Religion			+			+	+			Low
Mobility	+	+	+	+		+	+	+		High
<u>Economic Dimensions</u>										
Income								+		Low
Home Ownership				+		+	+	+		Medium
Educational Level	+	+	+	+				+		High
<u>Attitudes Toward Education</u>										
Factor I--Teacher Related Issues										Low
Factor II--Organizational Efficiency							+			Low
Factor III--Administrative and Program Effectiveness	+									Low
Overall Attitude							+			Low
<u>District Size</u>										
										Low

*Significant beta weights on fewer than four of the eight regression runs indicates Low.

Significant beta weights on four of the eight regression runs indicates Medium.

Significant beta weights on five or more of the eight regression runs indicates High.