

PUBLIC SUPPORT FOR EDUCATIONAL SPENDING:
TRENDS, RANKINGS, AND MODELS, 1971-1978

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While Proposition 13 brought the tax revolt to the attention of the national leadership and media, education has been facing its own "tax revolt" for more than a decade. To recite the familiar, there was apparently after World War II a substantial level of support for increased educational spending. Floating on this ground swell of support, educational expenditures rose steadily from 2.0 percent of the gross national product in 1945 to a peak of 7.8 percent of the GNP in 1971. During the mid-to-late sixties, however, signs of an ebbing of support appeared. In 1964-65, 79.4 percent of all public school bond issues passed. This approval rate steadily slipped to 62.5 percent in 1967-68 before plunging to 43.6 percent the next year. Similarly in Oregon the budget approval rate slid from 96.4 percent in 1964-65 to a low of 48.9 percent in 1969-1970. Since then the approval rates have stopped falling, but have remained at a level (typically 45 to 55 percent) far below that achieved in the early sixties. At least partly as a result of this dissipation of support, actual expenditures have peaked or declined in the seventies (student expenditures per full-time-equivalent student in higher education topped at \$3,254 in 1973-74 and per-pupil spending in primary and secondary education leveled-off in 1976-77 at \$1,798--both in 1976-1977 constant dollars).¹

Given the possible ramifications of changes in support for education on the allocation of public funds for primary, secondary, and higher education, it would be desirable to have an understanding of public attitudes towards education in general and educational expenditures in particular.

¹Saalfeld, 1972; Golladay, 1977; Golladay and Noell, 1978.

In this paper, an attempt is made to evaluate 1) trends in public support for educational spending, 2) preferences between educational spending and spending for other public and private goods and services, and 3) the socio-demographic correlates of support for educational spending.

Data

To assess the trends, ranking, and structure of public attitudes towards educational expenditures, the following item was analyzed:

We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount. First (READ ITEM A) . . . are we spending too much, too little, or about the right amount on (ITEM)? READ EACH ITEM; CODE ONE FOR EACH.

- A. The space exploration program
- B. Improving and protecting the environment
- C. Improving and protecting the nation's health
- D. Solving the problems of the big cities
- E. Halting the rising crime rate
- F. Dealing with drug addiction
- G. Improving the nation's education system
- H. Improving the conditions of blacks
- I. The military, armaments and defense
- J. Foreign aid
- K. Welfare

This item was developed by Roper in 1971 and adopted by the General Social Survey (GSS), National Opinion Research Center in 1973. It has been asked a total of eight times, by Roper in 1971 and 1973 and by the GSS annually from 1973 to 1978. Each survey samples the adult (18+), noninstitutionalized

population of the contiguous United States. The data were collected via personal interviews. The Roper and 1973-1974 GSS surveys were area probability samples with quotas at the block level. The 1975-1976 GSS surveys were split surveys, half probability-with-quotas and half full-probability. The 1977 and 1978 GSS surveys were full-probability samples.

The question asks the public to evaluate the current spending level on eleven designated topics and to decide whether "too much," "too little," or "about the right amount" is being spent. Formally each item is being evaluated separately in terms of what resources should be allocated to deal with each topic. By comparing the balance of people favoring more spending versus those favoring less spending on a particular topic, support for spending in that area can be compared both over time from 1971 to 1978 and with the other ten topics covered.²

Trends

Table 1 gives the proportion replying "too little," "about right," and "too much" as well as the net support proportion (the proportion saying that too little is being spent minus the proportion saying that too much is being spent) for each of the spending areas from 1971 to 1978. To analyze the trends in support, the proportions were fitted to a series of trend models. First, the proportions were fitted to a no change or constant model. If the data points did not significantly deviate from the pooled (average) proportion, then a constant model was accepted. If the constant model did not adequately fit the series, then the best

²This question does not 1) explicitly inquire about spending priorities, 2) refer to the actual level of expenditures, 3) specify how much the spending should be changed, 4) ask whether government expenditures in toto should change, nor 5) present either/or choices between conflicting alternatives (e.g., should the government spend more on guns or butter?).

TABLE 1
MARGINAL TRENDS FOR SPENDING ITEMS, 1971-1978

Items	Surveys							
	Roper 7/1971	GSS 3/1973	Roper 12/1973	GSS 3/1974	GSS 3/1975	GSS 3/1976	GSS 3/1977	GSS 3/1978
<u>Improving the nation's educational system</u>								
Too little	.487	.512	.487	.527	.513	.518	.495	.537
About right	.409	.394	.409	.384	.370	.384	.404	.350
Too much	.104	.094	.104	.089	.118	.097	.101	.113
Little-much	+.383	+.418	+.383	+.438	+.395	+.421	+.394	+.424
N =	(1,341)	(1,434)	(1,649)	(1,418)	(1,420)	(1,449)	(1,469)	(1,472)
<u>Space exploration program</u>								
Too little	.066	.078	.037	.080	.077	.094	.107	.123
About right	.239	.308	.258	.286	.315	.287	.366	.373
Too much	.695	.614	.705	.634	.608	.619	.527	.503
Little-much	-.629	-.513	-.668	-.554	-.531	-.525	-.420	-.380
N =	(1,416)	(1,432)	(1,673)	(1,427)	(1,425)	(1,459)	(1,440)	(1,436)
<u>Improving and protecting the environment</u>								
Too little	.648	.648	.502	.632	.569	.574	.512	.553
About right	.290	.274	.334	.285	.328	.328	.369	.346
Too much	.061	.079	.165	.083	.103	.098	.119	.101
Little-much	+.587	+.569	+.337	+.549	+.466	+.476	+.393	+.452
N =	(1,288)	(1,413)	(1,615)	(1,378)	(1,398)	(1,425)	(1,414)	(1,448)
<u>Improving and protecting the nation's health</u>								
Too little	.618	.630	.641	.662	.652	.626	.585	.577
About right	.338	.322	.310	.291	.295	.323	.342	.351
Too much	.044	.048	.049	.047	.053	.051	.073	.072
Little-much	+.574	+.582	+.592	+.615	+.599	+.575	+.512	+.505
N =	(1,332)	(1,445)	(1,646)	(1,426)	(1,425)	(1,441)	(1,454)	(1,471)
<u>Solving the problems of the big cities</u>								
Too little	.562	.548	.558	.585	.562	.483	.469	.445
About right	.298	.312	.293	.286	.297	.297	.305	.339
Too much	.140	.139	.149	.129	.141	.221	.226	.217
Little-much	+.422	+.409	+.409	+.456	+.421	+.262	+.243	+.228
N =	(1,098)	(1,319)	(1,360)	(1,258)	(1,241)	(1,318)	(1,311)	(1,334)

TABLE 1--Continued

Items	Surveys							
	Roper	GSS	Roper	GSS	GSS	GSS	GSS	GSS
	7/1971	3/1973	12/1973	3/1974	3/1975	3/1976	3/1977	3/1978
<u>Halting the rising crime rate</u>								
Too little	.730	.688	.702	.702	.696	.693	.700	.673
About right	.225	.262	.249	.246	.246	.224	.237	.264
Too much	.045	.050	.049	.051	.058	.084	.063	.064
Little-much	+.685	+.638	+.653	+.651	+.638	+.609	+.637	+.609
N =	(1,247)	(1,405)	(1,600)	(1,405)	(1,400)	(1,413)	(1,431)	(1,460)
<u>Dealing with drug addiction</u>								
Too little	.709	.703	.640	.635	.596	.630	.595	.581
About right	.242	.232	.305	.296	.313	.288	.313	.326
Too much	.049	.064	.055	.069	.091	.081	.092	.092
Little-much	+.660	+.639	+.585	+.566	+.505	+.549	+.503	+.489
N =	(1,301)	(1,399)	(1,591)	(1,396)	(1,370)	(1,390)	(1,410)	(1,452)
<u>Improving the condition of blacks</u>								
Too little	--	.348	--	.331	.292	.294	.273	.262
About right	--	.421	--	.447	.449	.434	.459	.466
Too much	--	.231	--	.222	.259	.272	.267	.272
Little-much	+.117	+.117	--	+.109	+.033	+.022	+.006	-.010
N =		(1,402)		(1,379)	(1,372)	(1,392)	(1,402)	(1,417)
<u>The military, armaments, and defense</u>								
Too little	.181	.119	.170	.181	.178	.258	.252	.292
About right	.402	.478	.477	.486	.490	.450	.485	.471
Too much	.417	.403	.353	.333	.332	.292	.262	.236
Little-much	-.236	-.284	-.183	-.152	-.154	-.034	-.010	+.056
N =	(1,235)	(1,407)	(1,555)	(1,380)	(1,387)	(1,395)	(1,430)	(1,413)
<u>Foreign Aid</u>								
Too little	.044	.044	.023	.032	.057	.031	.037	.041
About right	.153	.213	.146	.181	.174	.186	.253	.253
Too much	.803	.743	.832	.787	.768	.783	.711	.706
Little-much	-.759	-.699	-.809	-.755	-.711	-.752	-.674	-.665
N =	(1,295)	(1,421)	(1,638)	(1,422)	(1,416)	(1,438)	(1,421)	(1,444)
<u>Welfare</u>								
Too little	.199	.207	.185	.231	.247	.139	.130	.135
About right	.209	.255	.278	.331	.301	.234	.242	.259
Too much	.591	.538	.537	.438	.452	.626	.628	.606
Little-much	-.392	-.331	-.352	-.207	-.205	-.487	-.498	-.471
N =	(1,319)	(1,432)	(1,620)	(1,422)	(1,405)	(1,429)	(1,449)	(1,473)

linear model was tried. If the linear model fit the data points without significant variation, then this linear model was accepted. If the linear model fit the data better than the constant model, but there was still a significant amount of unexplained variation, then the series has a linear component. If neither the constant nor the linear model fits the series, then it is non-linear.³

In Table 2 the results of these tests are given for each of the spending areas and the trends are illustrated in Figure 1. Only two items show constant trends. Education has been the least variant of all the items with the net support averaging .406 each year.⁴ Also showing no significant change is crime prevention with net support averaging .640. All of the remaining areas show significant variation over time. Net support for foreign aid, space exploration, and defense all move upwards (either linear trend or linear component). Net support for blacks, cities, the environment, drug addiction, and health care all decline. Welfare also shows a declining linear component, but the unexplained variation was so large that it is perhaps better to think of it as a non-linear trend showing a rise from 1971 to 1974/75 and a decline since then.

³For the details of this method see Taylor, 1976.

⁴From 1969 to 1972 the Gallup poll of attitudes towards education asked, "Suppose the local public schools said they needed much more money. As you feel at this time, would you vote to raise taxes for this purpose, or would you vote against raising taxes for this purpose?" The proportion supporting a tax increase declined from .479 in 1969 to .398 in 1970, .435 in 1971, and .391 in 1972 (Don't knows excluded from analysis). Over the four years this series shows a significant linear decline of .023 per annum. The decline is, however, almost all between 1969 and 1970 with the 1970 to 1972 points not varying significantly from the pooled estimate of .407 for these years. This short series apparently catches the end of the decline in public support for education evidenced by the bond/budget revolt of the sixties and the beginning of the stable level of support for education shown by the Roper/GSS series for the 1971-1978 period (Elam, 1977).

TABLE 2
TRENDS IN SPENDING ITEMS

Spending Area	Probability		Model
	p = C	p = a+bx	
<u>Education</u>			
Too little	.050	--	Constant, p = .509
Too much	.196	--	Constant, p = .102
<u>Space</u>			
Too little	<.001	<.001	Linear component, p = .042 +.009
Too much	<.001	<.001	Linear component, p = .738 -.028
<u>Environment</u>			
Too little	<.001	<.001	Linear component, p = .689 -.037
Too much	<.001	<.001	Non-linear
<u>Health</u>			
Too little	<.001	<.001	Linear component, p = .659 -.008
Too much	.003*	--	Constant, p = .053
<u>Cities</u>			
Too much	<.001	<.001	Linear component, p = .616 -.020
Too little	<.001	<.001	Linear component, p = .099 +.016
<u>Crime</u>			
Too little	.109	--	Constant, p = .698
Too much	.003*	--	Constant, p = .058
<u>Drugs</u>			
Too little	<.001	.003*	Linear, p = .724 -.020
Too much	<.001	<.207	Linear, p = .043 +.007
<u>Blacks</u>			
Too little	<.001	.668	Linear, p = .373 -.017
Too much	.003*	--	Constant p = .253
<u>Defense</u>			
Too little	<.001	.001	Linear component, p = .102 +.023
Too much	<.001	.319	Linear, p = .455 -.028
<u>Foreign aid</u>			
Too little	<.001	<.001	Non-linear component, p =
Too much	<.001	<.001	Linear component, p = .829 -.014
<u>Welfare</u>			
Too little	<.001	<.001	Linear component, p = .789 -.014
Too much	<.001	<.001	Linear component, p = .498 +.013

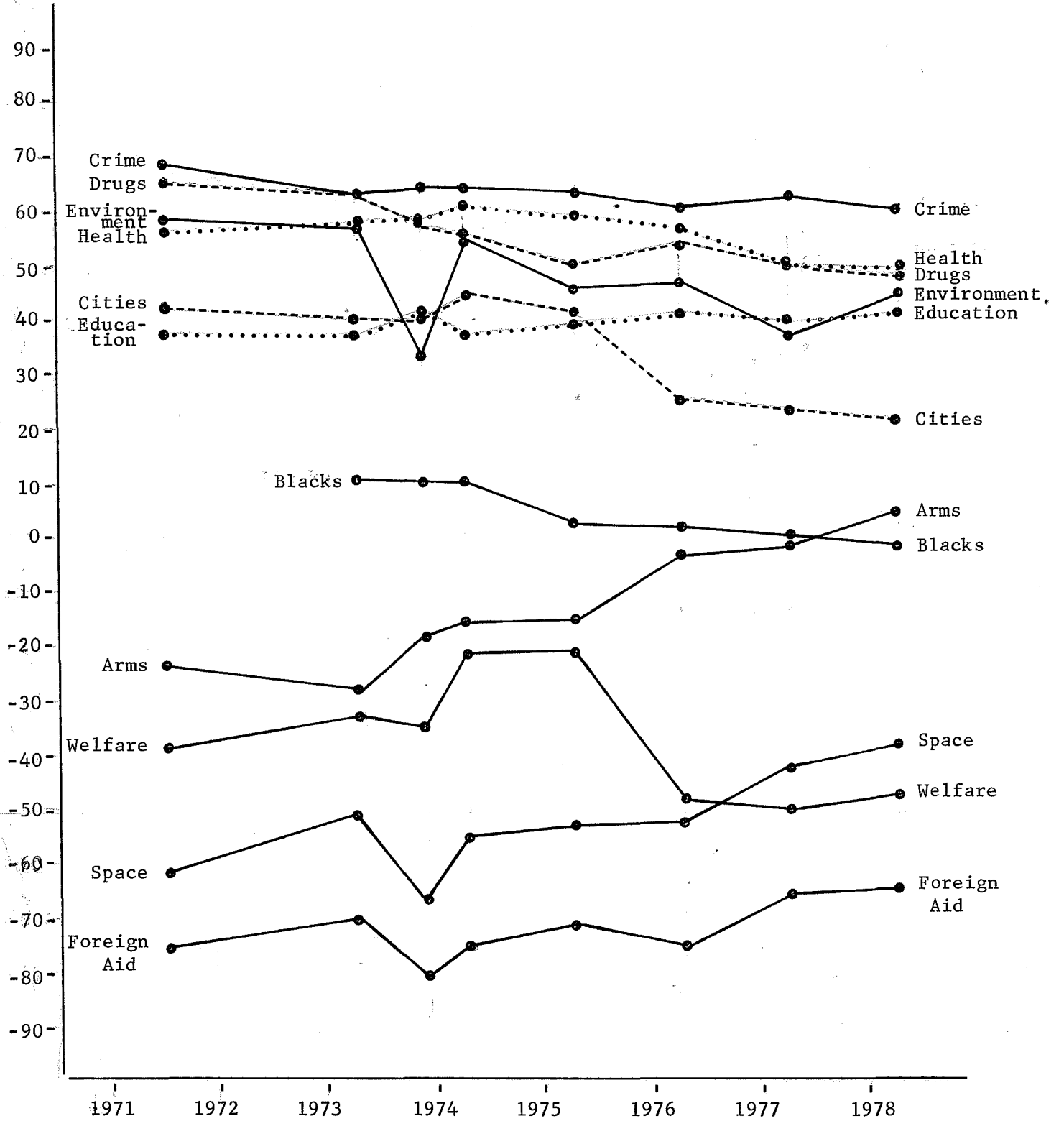
* Not significant at the .05 level when adjusted for multi-stage sampling.

p = proportion

c = constant

Figure 1

Trends in spending items, 1971-1978
(Too little - too much)



In Table 3 the trends across all spending areas and in some topical groupings of spending items are examined. Overall there has been a slight decline in the mean propensity to spend. This results from a decline in social welfare spending and a smaller increase in national security spending. Educational spending has, however, held steady despite the general retreat of support for social welfare spending.⁵

Rankings

Next, the relative ranking of spending priorities are considered. To determine the ranking of spending areas, analysis was made of spending items from various Harris and Gallup surveys in addition to the Roper/GSS series. (Since none of these Harris or Gallup items form a series they were not considered in the preceding analysis of trends.)

Now in comparing the Roper/GSS series items with the five other similar items from Harris and Gallup, there are methodological pitfalls large enough to trap a mastodon. What all the questions have in common is that they generally inquire about spending priorities and that they all fall between 1971 and 1978. There, however, the similarity stops. Without going into a detailed analysis of the construction of each item, it is clear that the items differ in many significant aspects. For example, they vary in:

⁵For further discussion of general spending trends see Davis, 1977, 1978.

TABLE 3

CHANGES IN AGGREGATE MEAN SPENDING AND
IN OTHER SELECTED AREAS

Area	1971 ^a	1972	1973 ^b	1974	1975	1976	1977	1978
All areas ^c	NA	2.07	NA	2.08	2.07	2.04	2.04	2.04
All areas (excluding blacks)	2.14	2.07	NA	2.08	2.07	2.04	2.04	2.05
National security area ^d	1.47	1.49	NA	1.52	1.54	1.57	1.65	1.67
Social welfare area	NA	2.31	NA	2.34	2.30	2.22	2.18	2.19
Social welfare (excluding education)	NA	2.28	NA	2.32	2.28	2.18	2.14	2.15
Education	2.38	2.42	2.38	2.44	2.40	2.42	2.39	2.42

^a Does not include the black spending item.

^b Raw data not available for computing scale means.

^c With the exception of the education area each of the areas examined here consists of a simple additive scale using the indicated items.

^d A factor analysis revealed that the first principal component factor was a social/welfare group consisting of education, welfare, blacks, cities, the environment, and health, and that defense, foreign aid, and space formed a national security factor.

1. the unit of government referred to (Roper-GSS is not explicit about this while the Harris and AIPO items all mention the federal government);
2. the standard by which spending priorities are evaluated (Roper-GSS asking, if we're spending "too much, too little, or about the right amount," Harris Item A (see Table 4) asking about the areas in which one would most or least like to see cuts, Gallup D) asking about the distribution of new federal funds, and so forth);
3. the number and content of spending areas mentioned (coverage ranges from Harris C which compares eight areas, to Harris E, which includes 17 topics); and
4. how the spending areas are described in each item (e.g., for education, the descriptor on Roper-GSS is "Improving the nation's education system," and on the Harris and Gallup surveys
 - a. "Federal aid to education,"
 - b. "Aid to public schools,"
 - c. "On federal aid to education,"
 - d. "Public-school education," and
 - e. "Education."

Each of these differences in format could have significant impact on how items were ranked. For example, comparing the 1971 and 1976 points on Harris A shows how a change in the number and content of spending areas listed can influence the results. The 1976 survey contained the nine spending areas listed in the 1971 survey plus four new areas. Two of the new areas ("Social Security payments" and "Health care") proved to be highly popular and ranked respectively first and second. This naturally lowered the comparative ranking of all the old items (e.g., moving education from first to third). This alteration of the list also had other less obvious ramifications. Looking at education shows that in 1971 it received a score of .62 but in 1976 it rated only .36. This decline also resulted from the addition of the two items in the 1976 list that proved to be

TABLE 4

ALTERNATIVE RANKINGS OF SPENDING PRIORITIES

A. Here is a card which lists areas of federal spending. Which three or four areas on this list would you MOST like to see cut? Now, which three or four areas would you LEAST like to see cut?

(% least like to cut - % most like to cut)

	<u>June, 1971</u>	<u>November, 1976</u>
Social Security payments	NA	.67
Health care	NA	.49
Federal aid to education	.62	.36
Pollution control	.54	.23
Defense spending	-.14	.16
Farm subsidies	-.03	.01
Federal aid to cities	.21	-.02
Federal highway financing	.06	-.06
Spending for mass transportation	NA	-.06
Food stamp program	NA	-.13
Space program	-.37	-.38
Federal welfare spending	-.16	-.41
Foreign military and economic aid	-.58	-.52

Source: Harris

B. Would you like to see the federal government increase the amount of money spent on (READ LIST), cut back, or not change the amount of money spent?

(Proportion increase - proportion cut back)

	<u>January, 1971</u>
Air and water pollution	.813
Drug abuse control	.743
Crime prevention	.691
Aid to public schools	.615
Aid to health care programs	.500
Aid to cities	.489
Aid to the poor	.487
Support prices for farmers	.303
New welfare program	.236
Programs on racial equality	.225
Building up of national defense	.170
Control of pornography	.120
ABM systems	-.279
The space program	-.333
Foreign aid	-.560
War in Vietnam	-.613

Source: Harris, "not sures" excluded from analysis.

TABLE 4--Continued

C. If you had to chose, would you rather see increased spending (READ LIST) or no further spending increases by the federal government?

(Proportion for increased spending)

	<u>December, 1972</u>
To curb air and water pollution	.710
On federal aid to education	.710
On helping the poor	.667
To help states and local governments	.489
For improving highways	.446
For subsidies for farmers	.425
On the country's defense research and development	.382
For people on welfare	.242

Source: Harris, "not sures" excluded from analysis.

D. If and when more federal money from Washington is available, which one of the areas on this card do you think should be given first consideration when these funds are distributed? And which one of these areas do you think should be given second consideration? And which of these do you think should be given third consideration?

(First, second, and third choices combined)

	<u>June, 1975</u>
Health care	.53
Public-school education	.48
Law enforcement	.41
Welfare and aid to poor	.32
Public housing	.26
Pollution, conservation	.24
Mass transit (trains, buses)	.19
Military defense	.16
Agricultural aid	.15
Highway improvement	.13
Foreign aid	.03

Source: Gallup.

TABLE 4--Continued

E. How serious a loss do you feel it would be if the federal government cut back its programs in (READ FIRST ITEM) by one-third of what they are today - a very serious loss, only a moderate loss, or hardly a loss at all?

(Proportion very serious - proportion hardly at all)

	<u>August, 1976</u>
Social security	.798
Health	.745
Law enforcement	.656
Education	.653
Jobs for unemployed	.577
Defense	.432
Aid to cities	.247
Farm subsidies	.189
Pollution control	.181
Highway construction	.074
Business regulation	.067
Revenue sharing	.051
Building dams and other engineering projects	.043
Welfare	-.125
Space programs	-.253
Foreign economic aid	-.473
Foreign military aid	-.511

Source: Harris, "not sures" excluded from analysis.

more popular than educational spending ("Social Security payments" and "Health care"). Respondents were asked in part to name the three or four areas in which they would least like to cut spending. With these two new items added to many people's lists, education naturally was forced off many lists. As a result, the proportion naming education among the least-like-to-cut items dropped from .66 to .41. (The most-like-to-cut rankings of education were not notably affected by the changes in the number and content of spending areas and the proportion putting education in this group changed only from .04 to .05.)

Two other examples demonstrate how important the particular descriptors used can be. In Harris B the area "Aid to the Poor" got a score of .487 and ranked seventh, but the closely related area "New Welfare Program" scored only .236 and placed ninth. Even more noteworthy in Harris C "On Helping the Poor" scored .667 and ranked third, but "For People on Welfare" rated only .242 and finished last (eighth). In sum, the ranking and absolute scoring of the various spending areas are very much functions of the format of the particular question. Because of this any direct comparison across different questions either of absolute score or absolute rank is impossible.

Yet some meaningful comparison is possible and it is actually possible to benefit from the great diversity in question format. We can successfully compare across surveys by making a series of two-way comparisons between education and each of the other spending areas and determining which out-ranked the other in a particular survey. The result of these comparisons (or contests) can be toted up across surveys to give a summary score of relative popularity. The diversity of format allow us to determine if the rankings are consistent across various stimuli or are peculiar to a particular format or wording.

In general there is a high degree of correspondence across surveys (see Table 5). In all years on the Roper-GSS series and on all the Harris-Gallup surveys education outranks defense, welfare, space, foreign aid,

TABLE 5
COMPARISON BETWEEN EDUCATIONAL SPENDING AND OTHER AREAS

(Education Greater Than Other/
Other Greater Than Education)

<u>Education by</u>	<u>Roper-GSS</u>	<u>Harris-Gallup</u>
Defense	8/0	6/0
Welfare	8/0	6/0
Space	8/0	4/0
Foreign Aid	8/0	5/0
Blacks	6/0	1/0
Farmers	---	6/0
Highways	---	5/0
Mass transportation	---	2/0
Cities	4/4	4/0
Environment	2/6	4/1 (+ 1 tie)
Drugs	0/8	0/1
Health	0/8	1/3
Crime	0/8	1/2
Social Security	---	0/2

SOURCE: Tables 1 and 4.

and blacks. Education also consistently ranks higher than farmers, highways, and mass transportation on the Harris/Gallup surveys. There is less agreement on the next two areas. On Roper/GSS cities and education generally rank next to each other with education on top half the time and cities the other. On Harris-Gallup, however, education always tops the cities, often by a wide margin. On the environment versus education, the Roper/GSS series ranks environment above education 6 to 2, while the Harris/Gallup

surveys show the environment losing to education 1 to 4 with one tie. Because of these discrepancies it is difficult to state whether the cities, the environment or education has higher public priority.⁶ Education does, however, clearly seem to rank lower than spending for crime prevention, drug regulation, health care, and social security. Of the fourteen areas that education is compared to in Table 4, it has generally outranked eight areas (defense, welfare, space, foreign aid, blacks, farmers, highways, and mass transportation) split uncertainly with two areas (cities and the environment) and been outplaced by four areas (drug regulation, crime prevention, health, and social security). This would seem to put educational spending in a middling position, lower than such sacrosanct or crises areas as social security and crime prevention, but above such favorite targets such as space, foreign aid, and welfare.⁷

Formation of Educational Spending Attitudes

In considering factors that might help form attitudes towards educational spending several restraints were imposed. First, consideration was restricted to largely individual or household level variables. The question being examined then is what personal characteristics influence

⁶Since on the Roper/GSS series education tops cities each time from 1976 to 1978, the two series do agree that education is rated above cities during the later part of the period examined here.

⁷In addition to these national surveys two state level surveys were located that rated spending priorities. A 1974 Tennessee survey found that net support was highest for mental health (.741), followed by law enforcement (.675), education (.668), medical services (.548), agriculture (.544), the environment (.387), industrial development (.356), highways (.217), cities (.114), and welfare (-.043). See Smith, 1977. A 1978 Nebraska survey ranked items according to which the government should "do" more or less in and got the following rankings: drug abuse (.67), crime prevention (.56), energy resources (.51), conditions of the elderly (.51), conditions of the farmers (.45), water resources (.36), public elementary and secondary education (.35), and health of the people of Nebraska (.22). See Booth and Welch, 1978.

public attitudes toward educational spending. Context or macrolevel effects were generally not examinable. The general exclusion of this type of variable does not reflect any decision that they are unimportant, but merely the fact that such variables were not present in the data at hand. Similarly, even among the rich and varied mixture of microlevel variables, there were a few theoretical propositions for which no suitable measure was available in the data set. While no major factors were unexamined because of this, some subsidiary concepts were untested because of this. Third, many of the attributes that were available for analysis were in far from optimum form. The net result is that not all of the theoretically conceivable shapers of attitudes towards educational spending could be proposed and tested. It appears, however, that all microlevel factors could be considered in at least an adequate if not optimum fashion. A review of the educational spending literature,⁸ general socio-political theories of attitude formation, and armchair speculating led to the consideration of five major factors that would shape attitudes towards educational spending: 1) socio-economic status, 2) political ideology, 3) self-interest, 4) socio-political attachment, and 5) cultural/demographic position.

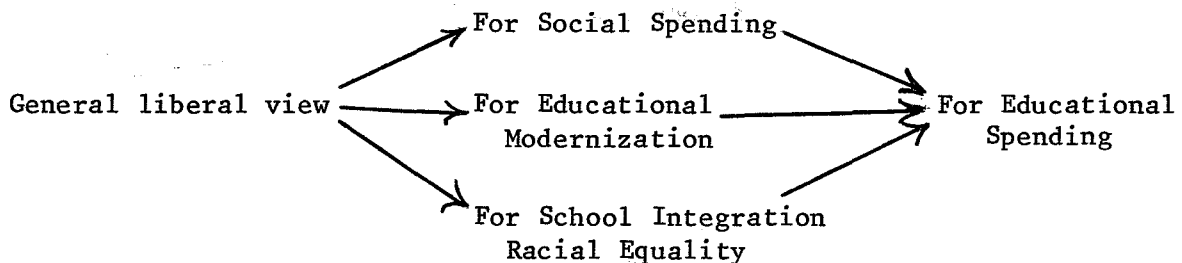
Socio-economic status (SES) is of course the standard explanatory variable in social research. SES has been related to educational spending in several different and even contradictory ways. The "tax burden" argument suggests that the upper class pay for more public services than they consume so that they will oppose more spending since it has a high cost to benefit

⁸An excellent summary of prevailing theories and studies appears in Pick and Hall, 1973.

ratio for them. The "ability-to-pay" argument contends, however, that the upper class will support more spending since they have more surplus funds beyond what is needed for essential private consumption than the lower ranks. Moving beyond the strict economic side of SES, the "center/periphery" perspective argues that the upper class will support more spending because it is more committed to the maintenance of community institutions in general and more likely to hold leadership positions in these institutions. Finally, the "familiarity breeds support" argument claims that since the upper class has enjoyed more education and therefore better realizes its important role in both individual and societal advancement, it will be more likely to support educational spending. On balance it appears that prevailing theories tend to argue (i.e., three theories to one) that the upper class should favor more spending (Campbell and Eckerman, 1964; Piele and Hall, 1973; Hall and Piele, 1976; Rubinfeld, 1977; Barkome, 1977; and Elam, 1978).

The second factor argues that attitudes towards educational spending are not independent of other socio-political attitudes but are at least in part influenced by a person's political ideology and world view. The ideology that is both most prevalent in modern America and conceptually closely related to educational spending is general liberalism. At one end of this ideology are the social liberals advocating governmental engineering to reduce inequality, increase social services, and the protection of minority groups. The social conservatives at the opposite end of the scale oppose more government involvement, favor more private initiative, and worry more about property rights than minority rights. Thus, we would expect to find conservatives opposing and liberals supporting educational spending. General liberalism is also related to two other attitude clusters,

racism and educational traditionalism, that might be related to educational spending. For historical and coincidental reasons more than because of an integral connection, conservatives tend to be less supportive of racial equality and civil rights in general and school integration in particular. If those opposed to school integration view educational spending as being used for this purpose, then it might be expected that they would oppose educational spending. Also, social conservatives tend to oppose programs for educational innovation or modernization, favoring instead a program of traditional, basic education. Again, if these conservatives see educational spending as promoting or at least as permitting such innovations, they would probably oppose spending. In sum, the following model would seem to apply:



One's general liberal/conservative ideology shapes in part one's attitudes on public social spending, educational policies, and race relations. These attitudes in turn help to forge one's support/opposition to educational spending (Agger and Marshall, 1971; Wilson and Banfield, 1971; Piele and Hall, 1973; and Hall and Piele, 1976).

In the third major factor, self-interest, reference is to direct, personal, material benefits from educational spending. One group that obviously derives more benefits is those using the public schools. Unlike police protection or streets and sanitation, which provide some direct and tangible

benefits to nearly all members on the community, educational spending overwhelmingly benefits families that use public education. Logic suggests that the parents of school children (public elementary, secondary, or higher) and the students themselves should in turn support educational spending. The second group to have a self interest in educational spending are employees of public education, primarily teachers but also support personnel such as administrators, counselors, and service workers. Since their employment security and income level are directly tied to the level of educational funding, they should be boosters of educational spending. (Piele and Hall, 1973; Hall and Piele, 1976; Owings, 1977; and Elam, 1978).

Fourth, several political theorists have noted that citizens who are either apathetic about government in general or education in particular or actively hostile to them will oppose educational spending. They either are passively disinterested and uninvolved with the community or actively cynical about and alienated from the community and its leadership. In neither case are they likely to support more spending although the apathetic group might support the status quo (and thus current spending levels) out of their sheer political inertia, while the actively alienated and cynical would probably favor reduced spending. This factor of course is closely interrelated to the center/periphery argument about SES (Saalfeld, 1972; Piele and Hall, 1973; and Hall and Piele, 1976).

Fifth, the cultural/demographic factor is a pluralistic and miscellaneous factor. It is based on the simple fact that because of differences in cultural background (race, religion, and ethnicity) or geographic variations (region and community type), people's values are shaped by differing heritages (culture) or influenced by differing objective conditions regarding government and education spending and organization (community and region).

In examining the impact of SES on attitudes towards educational spending three objective measures (years of education, family income, and the Hodge-Siegal-Rossi measure of occupational prestige) and three subjective measures (financial satisfaction, financial changes in the recent past, and relative financial ranking) were used.⁹ Education showed the strongest relationship with the better educated supporting more educational spending and income showed a similar, but weaker relationship, with the wealthier supporting more spending (see Table 6 for measures of statistical significance and the magnitude of association). Occupational prestige, while showing a significant relationship, showed no direction. The major variation among prestige groups was for the proportion saying spending was "about right" to be higher among the lower prestige groups. Similar findings in later analysis (see discussion of socio-political attachment) suggests that this might be the result of an acquiescence effect. In brief, on the objective indicators the findings appear consistent with the ability-to-pay, exposure to education, and center/periphery theories.

The subjective measures show a less consistent picture, however. Despite the fact that financial satisfaction is directly related to objective SES, it is negatively related to educational spending (i.e., the satisfied favor less spending). Financial improvement is weakly associated with favoring more spending, as expected, and relative rank shows essentially no association.

⁹For the exact wordings of each of these and subsequent items see Davis, Smith, and Stepheson, 1978 and the list of variable names in Table 6.

TABLE 6

SUMMARY OF ZERO-ORDER ASSOCIATES OF EDUCATIONAL SPENDING
 (A positive sign for gamma indicates that being high on the
 independent variables tends with being for more spending)

Factors	Gamma
1. SES	
A. Objective	
1) Education (EDUC) ^a	.124
2) Income (INCOME)	.048
3) Occupational Prestige (PRESTIGE)	.001
B. Subjective	
1) Financial Satisfaction (SATFIN)	-.119
2) Financial Improvement (FINALTER)	.038
3) Relative Financial Rank (FINRELA)	(-.016)
2. Political Ideology	
A. General	
1) Political Ideology, Self Rank (POLVIEWS-- extreme liberal...extreme conservative)	-.175
2) Political Party(PARTYID--Democrat, Independent, Republican) ^b	-.163
B. Spending Scale ^c	.496
C. Race Relations (whites only)	
1) General	
a) Intermarriage (RACMAR--legal, illegal)	-.173
b) Pushing for Rights (RACPUSH--approve, disapprove)	-.131
2) School	
a) Principle of Integration (RACSCHOL-- favor, oppose)	NS
b) Busing (BUSING-- favor, oppose)	-.052
c) Integration Scale ^d	-.085
D. Educational Policies	
1) Prayers in Schools (PRAYER,PRAYERY-- favor, oppose)	-.064
2) Sex education (SEXEDUC--favor, oppose)	-.286
E. Miscellaneous	
1) Letting Communist Speak (SPKCOM--yes, no)	-.193
2) Letting Communist Book (LIBCOM--yes, no)	-.253
3) Letting Communist Teach (COLCOM)--yes, no)	-.150
3. Self-Interest	
A. Utilization	
1) Life Cycle Stage Scale ^e	-.155
2) Student Status Scale ^f	.266
3) Age (AGE)	-.242
B. Employment	
1) Works for Schools Scale ^g	.127

TABLE 6--Continued

Factors	Gamma
4. Socio-Political Attachment	
A. Attitudinal	
1) General	
a) Anomia Scale ^h	.025
b) Alienation Scale ⁱ	NS
c) Political Confidence Scale ^j	-.014
2) Educational	
a) Confidence in education (CONEDUC--great deal, some, hardly any)	-.035
B. Behavioral	
1) General	
a) Wallace Vote (PRES68--other, Wallace)	(-.211)
b) Not Voting in 1968 (VOTE68--voted, did not vote)	(.062)
c) Not Voting in 1972 (VOTE72--voted, did not vote)	-.010
d) Not Voting in 1976 (VOTE76--voted, did not vote)	.088
e) Membership in Organizations Scale ^k	(.006)
2) Education	
a) Member of School Group (MEMSCHL--no, yes)	.188
5. Cultural/Demographic	
A. Heritage	
1) Race (RACE--white, black)	.405
2) Religion (RELIG) ^l	NS
3) Ethnicity (ETHNIC) ^m	.033
B. Geographic	
1) Community Type (XNORCSIZ) ⁿ	-.120
2) Region (REGION) ^o	-.106

^aThe upper case mnemonic in parenthesis is the GSS variable name for the question used. The exact wording of the item is given in Davis, Smith, and Stephenson, 1978.

^bWhen the order of categories are not implicit for a variable, they are given after the mnemonic with the low value first and the higher values following.

^cAdditive scale of the five social welfare spending items: welfare, health, the environment, blacks, and cities excluding education itself dichotomized into low and high spending support.

^dFive-point scale measures willingness to send child to a school that has a few blacks, half blacks, or mostly blacks. Scale runs: 1) objects to few, 2) objects to half, 3) objects to most, 4) does not object to half and unsure if objects to most, 5) does not object to most. (RACFEW, RACHAF, RACMOST)

TABLE 6--Continued

^eThree-point scale runs as follows: 1) has school-age children, preschool children or expecting children, 2) no school age children, preschool children, and not expecting any, but have had children (mostly post-school age), 3) have never had children and do not expect to. (CHLDMORE, BABIES, PRETEEN, TEENS, CHILDS)

^fFour-point scale measures degree of student involvement of adults: 1) neither spouse nor respondent is student, 2) spouse is student, respondent is not, 3) respondent is student, spouse is not, 4) both respondent and spouse are students. (WRKSTAT, SPWRKSTA)

^gFour-point scale measures degree of family employment by school: 1) neither employed by schools, 2) spouse is employed, respondent is not, 3) respondent is employed, spouse is not, 4) both are employed by schools

^hAdditive scale of nine Leo Srole anomia items. (ANOMIA1-ANOMIA9)

ⁱAdditive scale of six Harris alienation items. (ALIENAT1-ALIENAT2)

^jAdditive scale of confidence in U.S. Supreme Court, Congress, and executive branch of the federal government. (CONJUDGE, CONLEGIS, CONFED).

^lRun as Protestant vs. Catholic, there is no significant relationship. Run as Jew vs. non-Jew shows significant gamma of $-.342$.

^mBased on previous research (Smith, 1978a, 1978b), an ethnic heritage variable classified non-blacks as being of old stock, middle stock, or new stock based on period when group immigrated to America.

ⁿThis variable distinguishes ten community types. The largest difference appears between central cities over 250,000 (net support = $.542$) and rural areas (net support = $.342$). Gamma calculated on a four category cut: big city, suburbs, small towns, and rural areas.

^oThe results were broken down by the nine 1970 Census divisions and then regrouped as south vs. non-south.

NS = not statistically significant at .05 level. Gammas in parentheses are not significant when adjusted for multistage sampling.

To examine the multivariate relationships, the variables were cross-tabulated and d-system analysis was used to measure the associations. In d-systems the variables are placed in a causal model (like in path analysis) and the associations between categories are measured by the differences in proportions (unlike path analysis which is based on interval level analysis). To illustrate, in the bivariate analysis between education and educational spending the proportion favoring more spending was .315 among the less than high school educated, .375 among high school graduates, and .407 among those with some college. With less than high school selected as the base, the d's for high school graduates and those with some college are .060, and .092. When a control is introduced, the d's for each category of the preceding variable are calculated (these are conditional d's) and they are averaged to get the partial d. For example, with sex as a control the d on spending more for education between the less than high school group and the high school graduates is .026 for men and .058 for women and the association between educational level and spending net of sex is .045. This is smaller than the bivariate d of .060 but still statistically significant which indicates that sex fails to explain away the association between educational level and spending attitude. The advantages of d-system analysis are that 1) it measures the magnitude of associations with differences in proportions which are conceptually easy to understand, 2) it allows for interactions, 3) it does not demand interval level variables, and 4) it can be presented in form of categorical linear flow graphs. The main drawbacks are that 1) it has a large appetite for cases, which means that it cannot adequately handle models with as many variables as are commonly tried in multiple regression analysis and 2) it does not produce a term similar to the R^2

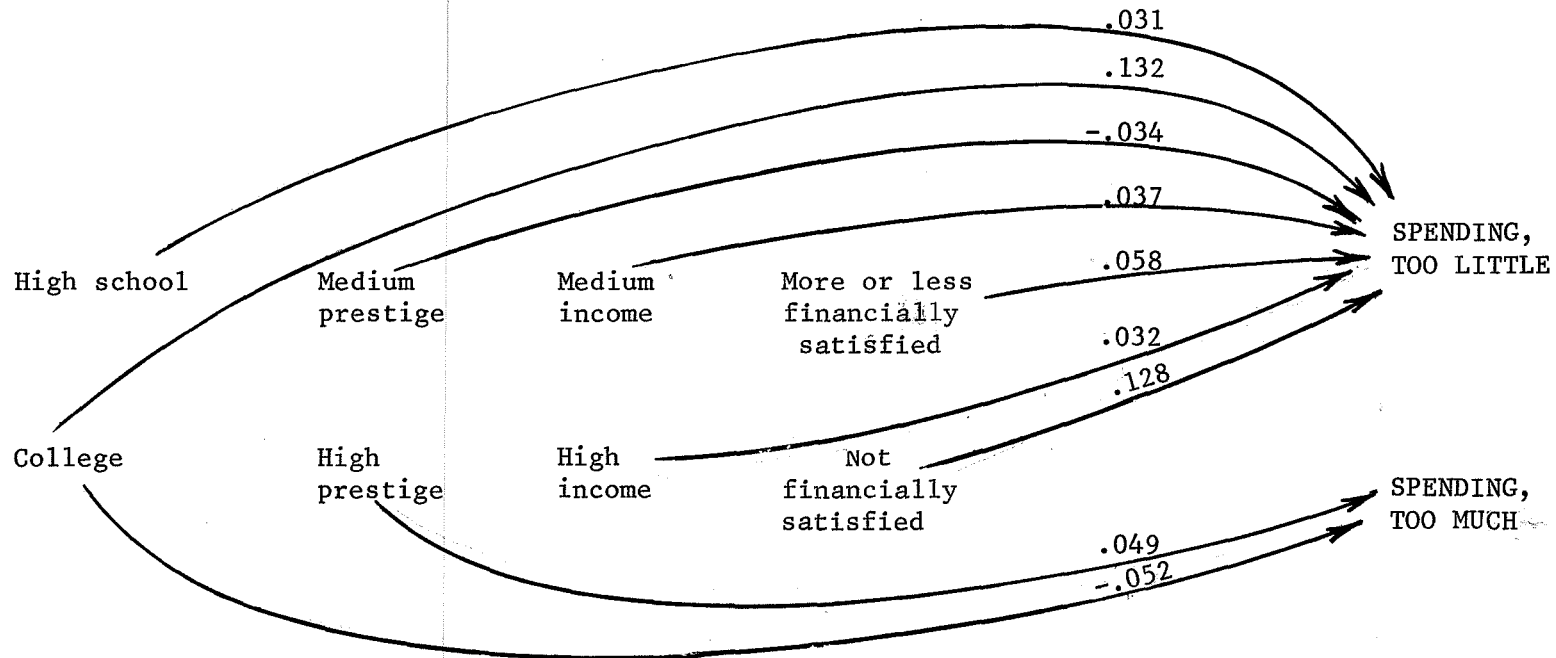
term in multiple regression which calculates the total percent of variance explained by the model. (For more details on d-system analysis see Davis, 1975.)

Figure 2 shows a standard SES model with education the exogenous variable, occupation the first intervening variable, income the second intervening variable, financial satisfaction the third intervening variable and educational spending the dependent variable.¹⁰ Omitting all the intervening paths in the model (i.e., all associations among the independent variables are excluded and only direct paths to educational spending are retained), the model reveals that net of the intervening variables (occupation, income, and satisfaction) education is still positively related to spending. High school grads favor more spending by .031 points over those with less than high school and the college educated favor more spending by .132. Similarly the college educated are less likely to favor cuts in education ($d = -.052$). Income shows a similar positive association but occupation had a weak negative association with spending. This suggests that there is no unidimensional SES factor shaping attitudes toward education. It may also help to explain why SES has been offered as both a positive and negative associate of educational spending in prevailing theories.

The financially satisfied remain less supportive of spending net of the objective SES factors. This association is consistent with the direction shown by occupational standing (the well-off/satisfied being less supportive of educational spending), but is notably stronger than the objective

¹⁰ In this and subsequent multivariate models, the variables used in the bivariate analyses were screened for inclusion in the multivariate model. Those that showed the strongest bivariate relationship and/or filled an important causal link in the multivariate model were selected.

Figure 2
Socio-Economic Factor*



* Only significant direct paths to educational spending shown.

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measure. One possible explanation for this is that satisfaction with ones personal financial situation leads to satisfaction with other situations such as the level of educational spending. This notion receives support from the fact that financial satisfaction is associated with opposing more spending, but it is unrelated to reducing spending.

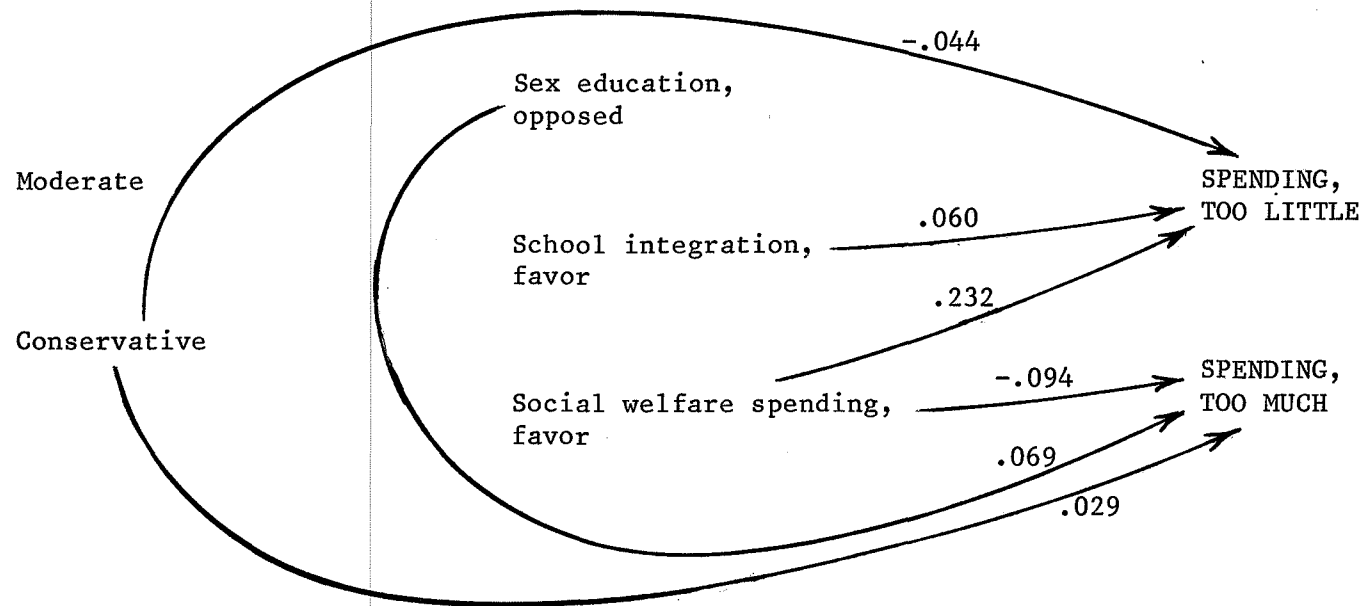
Moving on to the second factor, it appears that political ideology is definitely related to educational spending attitudes. Two measures of general ideological orientation indicate that spending is favored by Democrats and liberals. A spending scale that divides people into those favoring high and low spending on social welfare measures (excluding education) has a strong association ($\gamma = .496$) between support for social welfare spending in general and support for educational spending in particular.¹¹ Among whites racial liberalism also appears to be related to favoring educational spending. The association between two measures of general racial liberalism (support for intermarriage and approval of blacks pushing for civil rights) are more strongly related to spending than are school-specific measures. This may indicate that it is general racial attitudes that are forming the association between

¹¹Of course some of this relationship might be part of a response set since all of the spending items are part of one question and the response categories are of course identical for all. When educational spending was compared to a classic measure of liberalism, the three Stouffer civil liberty questions for Communists, moderate relations of .150 to .253 were found. If such distantly related aspects of general liberalism as educational spending and civil liberties are associated to this degree, it does not appear unreasonable to expect such closely related aspects as social welfare spending and educational spending to be related to an even higher degree.

school integration and spending more than school related concerns themselves. On the third subarea of liberalism, educational traditionalism versus modernism, those who favor prayers (the traditional stance) are less supportive of more spending while those who favor sex education (a modern stance) favor more spending. It is unfortunate that there were not available more measures of the tradition/modern split (e.g., inquiring about such matters as open classrooms, non-graded classes, new math, or basics/electives) to examine this association further. (See Agger and Marshall, 1971.)

In building a multivariate model of political ideology various groupings were tried. Party preference or political ideology were used as the exogenous variable; spending, sex education, and either racial mixing or intermarriage were used as the intervening variables (no causal order was inferred between these three subareas of liberalism); and educational spending was of course the dependent variable. Each of the tested models showed approximately the same results. It was found that both party preference and racial intermarriage fail to have significant direct effects on educational spending. As a result for the basic model, political ideology was selected as the exogenous variable, racial mixing, spending, and sex education, as the intermediate variables, and educational spending as the dependent. As Figure 3 shows, all variables have direct influence on educational spending. Conservatives are less likely to favor more spending and more like to favor reductions than liberals. Those opposed to sex education in the schools (educational traditionalists) are more likely to favor a reduced spending level, but not less likely to favor increasing. Integrationists favor more spending, but the relationship does not show up

Figure 3
Political Ideology*



*Only significant direct paths to educational spending shown.

on the reduction side. By far the strongest relationship is on social welfare spending where liberal spenders favor more spending by .232 points over conservative non-spenders and are less likely to favor reductions ($d = -.094$). In brief, support is found for each of the theories on the influence of ideology on educational spending attitudes, with the strongest influence coming from ones propensity towards social welfare spending.

On the self-interest factor considerable exploratory work was done on the parental/life cycle variable. Marital status, total number of school age children, total expected number of children, and various combinations were tried. The final variable that was used as the best concise representative of this was a life cycle scale that classed people as 1) expecting children or with school-age (under 18) children, 2) not expecting and not having any school-age children but having had children-- now mostly grown, and 3) never having had nor expecting children. The major weakness of this variable is that it does not separate those with public school children from others with kids in private schools (roughly 5-10 percent of parents) and it does not allow the identification of families with children in higher education. Despite these weaknesses the scale distinguishes basic life cycle stages in regards to childbearing and school useage. The data show that as one moves from school parent to former-school parent to never parent support for education drops.

Similarly the educational involvement of respondents and their spouses are also related to favoring more spending. Age, which measures both maturation and birth cohort and is highly interrelated with such other matters as life cycle stage and student status, is inversely related to spending with the older more opposed to more spending. On the employment

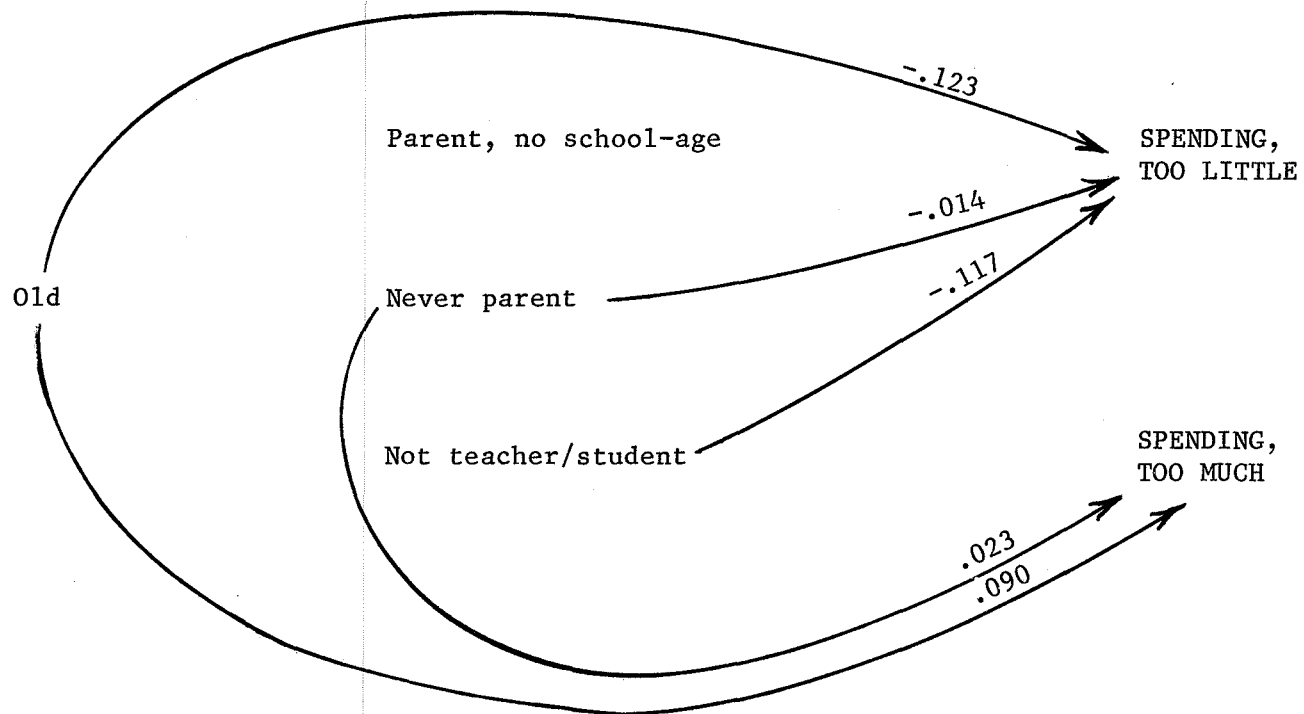
variable working in education leads to more support for educational spending. In brief, on all three direct measures of self-interest, the group benefiting from educational spending (parents of school-age children, students and/or spouses of students, and employees of schools) favors more spending for education.

Looking at the multivariate relationship reveals one wrinkle in this pattern of self-interest (Figure 4). Age is much more strongly related to educational spending than life-cycle is. The virtual disappearance of the parents factor is not surprising in light of other evidence indicating that this factor has been losing influence in recent years (Hall and Piele, 1976; Elam, 1978). What is more interesting is that age, net of life stage and the other variables, has such a strong impact. The other measure of self-interest, student and employment status, continues to show direct associations with support for spending. In brief, self-interest is a partial explainer of spending attitudes but having school-age children is not a major source of support for spending.

The fourth factor, socio-political attachment appears to have little linear association with educational spending. Either when the concept is measured by attitude scales (Srole's anomia, alienation, or political confidence) or via behavior (membership in voluntary associations or voting), there is little linear association between degree of attachment and spending.¹² The weak associations that are significant indicates that the disattached are slightly more supportive of spending than the attached.

¹² An exception would appear to be voting for George Wallace in the 1968 presidential election. Wallace supporters, who are generally seen as alienated, were less supportive than non-Wallace voters (for Hubert Humphrey or Richard Nixon). The strongest difference in educational spending did not occur between Wallace and non-Wallace voters, however, but between Humphrey and non-Humphrey voters. Since Wallace voters evidence both a political ideology and an alienation, it is doubtful that the relationship detected is really tapping alienation more than ideology or other dimensions.

Figure 4
Self-Interest Factor*



* Only significant direct paths to educational spending shown.

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Closer inspection of the association between attachment and educational spending indicated an acquiescence effect. Those with low participation and low attachment were more likely to say that spending was "about right." As Table 7 shows, the level of membership involvement

TABLE 7

EDUCATIONAL SPENDING AND ATTACHMENT

Spending Level	Memberships (mean)	Anomia (mean)	Political Cynicism (mean)
Too little . . .	1.75	13.65	6.02
About right. . .	1.58	13.85	6.29
Too much . . .	1.84	13.59	4.67

is lowest and anomia and cynicism are highest for those saying that spending is "about right." Likewise more non-voters say spending is "about right" than voters. Apparently many of the people with low involvement and negative evaluations of personal efficacy and leaders have not mobilized their disattachment into active opposition but are rather willing to endorse the status quo. They thus fit the mold of being apathetic rather than obstructionist (either radical or reactionary).

Turning to the two measures of socio-political attachment specifically related to education, we see that membership in educational organizations is clearly related to supporting educational spending ($\gamma = .188$). Confidence in the educational leadership did not have a similar linear relationship to spending, however. As Table 8 shows, those with a great deal of confidence were most likely to say that spending was "about right." Rather than favoring more spending because of their confidence

TABLE 8

CONFIDENCE IN EDUCATION BY EDUCATIONAL SPENDING
(N = 8,548)

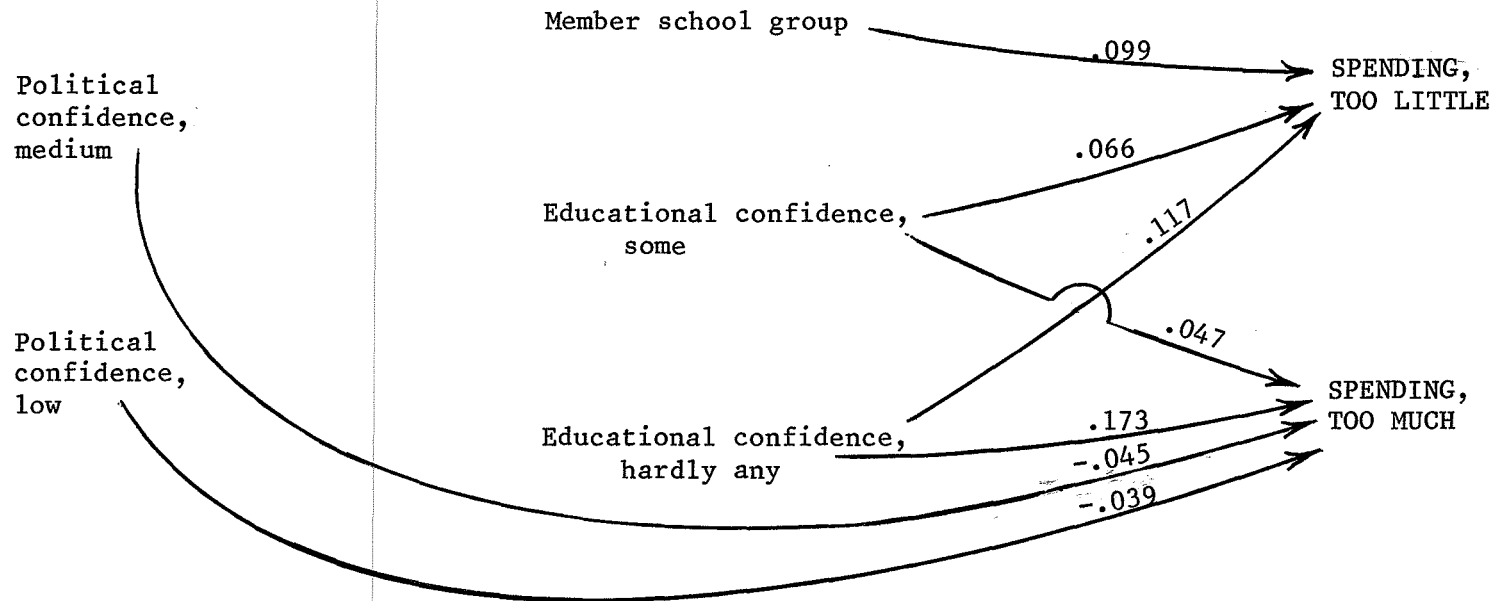
Confidence	Too Little	About Right	Too Much
Great deal470	.471	.059
Only some542	.356	.102
Hardly any565	.197	.237

in the leadership (i.e., give them more money since they are competent people doing a good job), confidence leads people to decide that since the leaders are competent and doing a good job they must be spending the right amount of money. This is of course not quite the pattern that was expected but certainly a logical one. At the other end of the confidence scale those with "hardly any" confidence are least likely to say that current spending is "about right" and most likely to favor both more and less spending. These cynics thus consist of two distinct groups, those who presumably think that inadequate resources are being used to achieve adequate education and those who probably think education is wasting money.

In Figure 5, the multivariate model sets political confidence as the exogenous variable, membership in school associations and confidence in education as intervening variables and educational spending as the dependent variable. The multivariate relationships are similar to the bivariate associations discussed above. Those with low and medium confidence oppose reductions, members of school groups favor more spending, and those with some or hardly any confidence both favor more spending and less spending than those with a great deal of confidence.

Figure 5

Socio-Political Attachment*



*Only significant direct paths to educational spending shown.

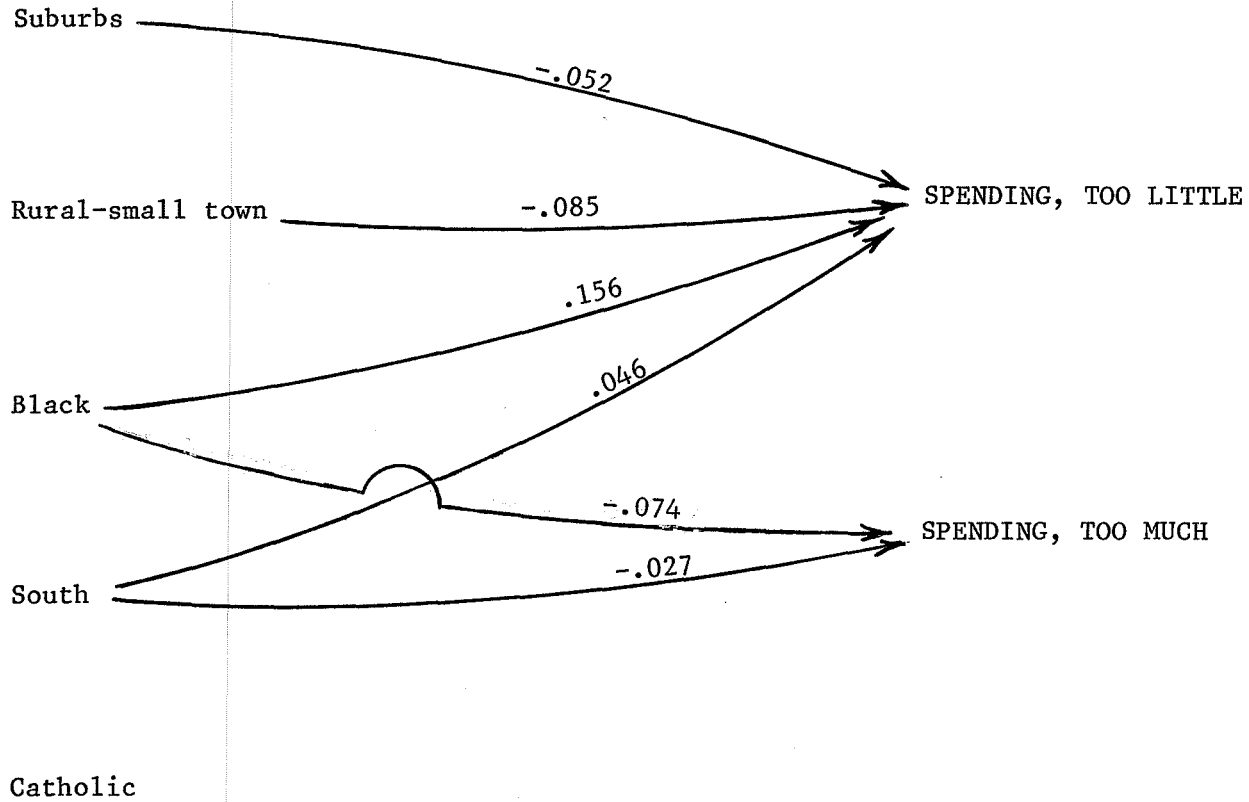
In sum, it appears that socio-political disattachment does not lead to attacks on educational spending but mainly to acquiescence with current spending and a slight tendency to favor more spending. Similarly, confidence in educational leaders does not lead to the favoring of more spending, while cynicism about leaders leads to favoring either more or less spending. Only membership in school groups is related in the simple, linear fashion that theory had predicted.

Turning to the last factor, we find that several demographic factors are related to educational spending attitudes. Blacks are much more in favor of spending than are whites. Given the traditional "separate and unequal" status of black education and the strength of social liberalism among blacks this is not too surprising. On religion there is no significant differences between Catholics and Protestants. Jews, the best educated of all ethno-religious groups and along with blacks one of the most liberal of subgroups, are again without surprise more supportive of educational spending than non-Jews. Other cultural differences of an ethnic, racial, or religious nature failed to materialize among the white population. On geography we find that spending is favored by those in big cities and opposed by those in small towns and favored by the South and less favored by the other regions.

As Figure 6 shows, a multivariate testing of these relationships indicates that race, region, and community each have an independent effect, while religion exercises no appreciable effect.

Figure 6

Cultural/Demographic Factor*



* Only significant direct paths to educational spending shown.

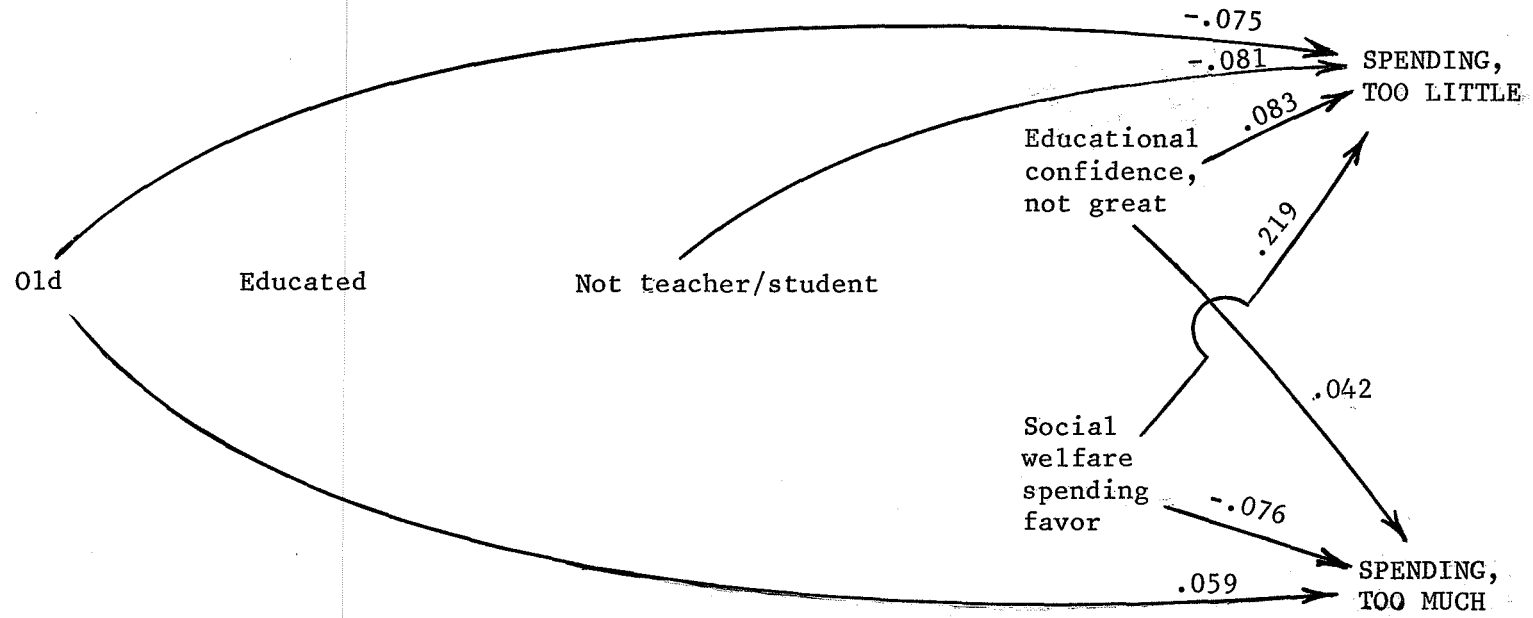
Composite Model

In the course of our analysis we have seen several of the proffered theories for attitudes on educational spending sustained, several rejected, and several modified. So far we have considered each factor separately. Actually each factor is not encapsulated from the others, but to a greater or lesser degree they are intertwined. Unfortunately it is impossible to consider all the variables that were found to be related to the five factors examined since the data basis will not bear such comprehensive analysis. As a compromise, we took the variable from each factor that had the strongest association to educational spending: education from SES; spending from ideology; from self-interest, age (which really does not fit the strict definition of the factor) and school employment/attendance (which does); confidence in education from socio-political attachment; and race from culture/demographics.¹³ This selection does not, of course, imply that other variables found to have a significant role are not really exercising an effect on educational spending but rather represents a compromise to practical limitations.

In Figure 7 the results of this model are shown. The graph shows the relationship for non-blacks only. Since race had a strong impact on spending it was desirable to control for this factor, but there were unfortunately too few blacks to crosstabulate with all the intervening variables so analysis was restricted to non-blacks. We see that age remains inversely related to spending with the old being both less in favor of more spending and more in favor of reducing spending. Why age is

¹³ Several other variables were tried in this general model, but case bases were too thin to adequately cover more complex models.

Figure 7
 Composite Factors*
 (Non-Black)



*Only direct significant paths to educational spending shown.

negatively related to educational spending is uncertain. One possibility is that age summarizes many life course changes that associate with lower support for spending, such as post-parenthood, high school taxes (due to high rates of home ownership), disengagement, and so forth. The trouble with this approach is that age has either remained independently related when controls have been made for some (but not all) of these age-related attributes (e.g., stage in education cycle) or the related attributes themselves have proved not to be related to educational spending (e.g., disengagement/disattachment). A second possibility is that age is inversely related to educational spending because of some unspecified characteristic of aging. Perhaps educational spending is a future oriented concern and with aging one becomes oriented towards the present or past. A third possibility is that the relationship is a cohort effect. The old differ from the young not only in their current age, but also in their birth cohort and thus the conditions and experiences they grew up under. There is some evidence, for example, that members of pre-New Deal cohorts tend to be more conservative (Smith, 1977). This would tend to explain their opposition to more educational spending except for the fact that we have controlled for general social welfare spending and age is still independently related to educational spending. A more specific explanation might be that the earlier cohort was raised and educated in an era when education was much simpler and less expensive. The members of the earlier cohort not only received less education but were also exposed to a much less costly form of education. Perhaps their exposure to such a simple, low-cost system of education makes them doubtful of the advantages of the present modern, high-cost educational system.

Next, we see that education has no direct, independent association with educational spending. The positive relationship observed earlier thus appears to be spurious (resulting in part because the young and liberal are better educated) and the exposure to education theory is no longer substantiated. Connection with education via school employment or attendance is still related to supporting educational spending, however. Confidence in education also shows the same non-linear relationship noted before with people lacking a great deal of confidence both favoring more spending and reductions. Finally, political ideology, as measured by social welfare spending, remains the major explanatory variable with liberal spenders strongly favoring more spending on education and rejecting cuts. In sum, the relationships described in the individual factor models remain intact with the notable exception of education.

The Future

In considering what this model might tell us about future levels of support for educational spending, our ability to predict is tied directly to the stability of the currently observed relationships. Historical events can occur and social movements can develop that can either completely invalidate existing relationships or cause a large across the board shift towards more or less spending while leaving existing associations intact. Keeping this large caveat in mind we can make some limited predictions about future support for educational spending.

In part our predictions hinge on whether the age effect is a function of maturation or birth cohort. If the age effects comes from maturation we would expect, ceteris paribus, that it would remain constant. If it comes from cohort, then we would expect support to rise as the older,

anti-spending cohorts died to be replaced by younger pro-spending cohorts. Secondly, future support for educational spending depends on the strength of liberalism in general and support for social welfare spending in particular. For most of the post World War II period, liberalism gained ground in America, but lately there have been signs of a conservative swing (Smith, 1978b; Davis, 1977; Ladd, 1978). The decline in spending for social welfare issues has been one sign of this shift. So far, of course, we have seen that education has resisted the slide in popularity suffered by other social welfare items, but if such a general shift continues, education will eventually either follow suit or it will have to distinguish itself from the social welfare spending constellation and show that it produces special social and economic advantages (e.g., promotion of citizenship, the training of doctors, or the solving of technological problems) that are distinct from its social welfare functions (equalization of opportunity, decreasing racial disparities, etc.).

Finally, future support for educational spending will depend on education itself. Support is directly related to such school-related matters as the teaching program (e.g., traditional versus modern, basics versus electives, etc.), membership in school associations, and confidence in educational leadership. As we saw from the examination of the relationship between confidence and leadership, the connections can sometimes be complex, but they are always present. Presently, it is difficult to say in just what direction these school-related items are moving spending, since their trend is uncertain. These items, however, are not determined by large exogenous societal and demographic forces (as age and liberalism are, for example), but are susceptible to at least partial direction by the educational leadership. It appears

that the situation that will likely produce strong support levels is that of an educational system with high and measurable educational attainment (e.g., high achievement scores or a high rate of success on a competency examination), with a modern educational system that still emphasizes basics, with a dedicated, competent staff, and with a fiscal frugality and aura of limited resources that carries the message that current expenditures are being well spent and that with more expenditures even more measurable, no-frill educational improvements can be achieved.

With a few historical breaks and a constructive response by the educational leadership to current public concerns and preferences, education should be able to continue to maintain its level of popular support and hold or even improve its relative ranking among spending priorities.

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