

DOCUMENT RESUME

ED 073 187

UD 013 206

AUTHOR Fortune, Jim C.; Hutchinson, Thomas E.
TITLE The Relationship Between Academic Disadvantage and Socioeconomic Disadvantage as Reported by Teachers on a National Sample Basis.
PUB DATE Sep 72
NOTE 25p.; paper presented at the American Psychological Association annual meeting, Honolulu, Hawaii, September 1972
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS Compensatory Education Programs; Disadvantaged Youth; *Economically Disadvantaged; Educational Background; *Educationally Disadvantaged; *Elementary School Students; Family Income; *National Surveys; Parental Background; Racial Differences; Sex Differences; *Socioeconomic Status; Student Participation; Unemployment; Welfare Recipients

ABSTRACT

The assumption is often made that economically and academically disadvantaged students constitute the same basic population within disadvantaged schools. This paper seeks to ascertain the relationship between these two target-group sectors and to identify the overlap of academically disadvantaged pupils with the other five prevalent target groups: (1) potential dropouts; (2) emotionally or mentally handicapped students; (3) migrant pupils; (4) neglected and delinquent pupils; and, (5) physically handicapped pupils. The paper proposes to use a data bank from the national 1970 Evaluative Survey of Compensatory Education to entertain the following four questions concerning the overlap between academic and economic disadvantage: (1) in what variables do children targeted as academically disadvantaged differ from the overall population in the eyes of their teachers? (2) in what variables do children targeted as socioeconomically disadvantaged differ from the overall population in the eyes of their teachers? (3) what is the overlap of these two categories? Are academic disadvantage and socioeconomic disadvantage highly related variables? and, (4) in relationship to the target groups--academically disadvantaged pupils, socioeconomically disadvantaged--what variables interact differently for cross-tabulation built upon these three categories and on the estimated national population? (Author/JM)

ED 073187

THE RELATIONSHIP BETWEEN ACADEMIC DISADVANTAGEMENT
AND SOCIOECONOMIC DISADVANTAGEMENT AS REPORTED BY
TEACHERS ON A NATIONAL SAMPLE BASIS

Jim C. Fortune, Educational Testing Service
Thomas E. Hutchinson, University of Massachusetts

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

Introduction

In April 1965, in response to the findings of the Presidential Task Force which documented the need for expanded compensatory education programs and the need to equalize educational opportunity, Congress passed the Elementary and Secondary Education Act. Title I of this act was the first federally-funded program ever directed toward addressing the broad educational problems of children from low income families. Title I represents the largest federal program, in both scope and amount of dollars, for compensatory education. In fact, Title I was described as being designed to "provide financial assistance . . . to local educational agencies serving areas with concentrations of children from low income families to expand and improve their educational programs . . . [to meet] the special needs of educationally deprived children."¹

A second precedent set by Title I is the financial delivery system. The format of this delivery system is a mixture of formula and proposal. The first step is federal delivery to the various states, who in turn sub-allocate the funds to local educational agencies who provide special programs for the targeted children. Federal appropriations to the states are based in part upon the state's average per-pupil expenditure or the national average per-pupil expenditure, whichever is greater. An amount of funds is

¹History of Title I ESEA. Washington, D.C.: Office of Education, U. S. Department of Health, Education, and Welfare, June 1969, p. 2.

UD 013206

given to each state in proportion to per-pupil expenditure for each economically disadvantaged child residing in the state. Economic disadvantage was at first defined to be \$2,000 per year as maximum family income. In 1968, this maximum was revised to \$3,000 per year. However, current state practice is not uniform relative to use of the \$3,000 criterion. A second criterion of aid to dependent children was included as another avenue through which economically disadvantaged children could be defined.

The states then allocate Title I funds to local educational agencies (LEA) upon the submission and approval of a proposal for a special education program to aid academically disadvantaged children and upon a similar head count of economically disadvantaged children. Within each LEA, schools are identified as Title I-eligible relative to their proportion of economically disadvantaged pupils.

The third precedent set by Title I is directly related to this duality of eligibility for participation. For a child to qualify for participation in Title I programs, he must (1) be deemed educationally disadvantaged as defined by the LEA professional and (2) be in a school which has a high concentration of economically disadvantaged children. This duality has led to much confusion about eligibility and is precedent-setting in that the two criteria are applied first to institutional and secondly to individual characteristics.

Problem

The third precedent is the source of the problem to be dealt with in this paper. Since the beginning of Title I ESEA, eligibility for

participation has been a controversial issue. The structure of the law says that the child who is eligible to participate is the child who can be deemed academically disadvantaged and attends a school which has a high concentration of children from low income families. Unfortunately, the law has been misinterpreted by many as intended solely for children from low income families.

Definitions of educational disadvantage were not provided by Congress and are very loosely defined in program operations. Even though the state provides a criterion for economic disadvantage, suitable and operationally consistent criteria for educationally disadvantaged children are still lacking.

Educationally disadvantaged children can be defined as those belonging to one of the following target groups: (1) potential dropouts--persons who are likely to leave school for any reason except death before graduation or completion of a program of studies, who have not attained age 18 and have not transferred to another school; (2) emotionally or mentally handicapped students--mentally retarded, seriously emotionally disturbed, or any other emotionally or mentally impaired children who, by reason thereof, require special education and related special services; (3) migrant pupils--children of migratory agricultural workers who have moved with their families from one school district to another during the past year in order that a parent or other member of the family might secure employment in agriculture or in related food-processing activities;

(4) neglected and delinquent pupils-- pupils residing in an institution for neglected and delinquent children; (5) physically handicapped pupils-- including hard-of-hearing, deaf, speech-impaired, visually handicapped, crippled, or other health-impaired children who by reason thereof require special education and related services; (6) academically disadvantaged pupils--pupils who cannot be described by any other target category and who display such poor academic achievement that their needs cannot be met without special or supplementary instruction or services.

The assumption is often made that economically and academically disadvantaged students constitute the same basic population within disadvantaged schools. This represents a hypothesis which was perhaps held by the legislators but cannot be inferred from the law. Economically and academically pupils may not be the same. This paper seeks to ascertain the relationship between these two target-group sectors and to identify the overlap of academically disadvantaged pupils with the other five prevalent target groups. The paper proposes to use a data bank from the national 1970 Evaluative Survey of Compensatory Education to entertain the following four questions concerning the overlap between academic and economic disadvantage: (1) In what variables do children targeted as academically disadvantaged differ from the overall population in the eyes of their teachers? (2) In what variables do children targeted as socioeconomically disadvantaged differ from the overall population in the eyes of their teachers? (3) What is the overlap of these two categories? Are academic disadvantage and socioeconomic disadvantage highly related variables?

(4) In relationship to the target groups--academically disadvantaged pupils, socioeconomically disadvantaged--what variables interact differently for crosstabulation built upon these three categories and on the estimated national population?

The variables to be investigated here will consist of three categories:

(1) general student characteristics, including common characteristics of the student and of the student's family; (2) problems identified by the teacher as those persisting in the student; and (3) teacher estimates or ratings of the student's behavior relative to the teacher's descriptions of the student.

Instrumentation

The data to be analyzed in dealing with the above questions were collected on the pupil form of the 1970 Survey of Compensatory Education. The 1970 Pupil-Centered Instrument (PCI) is one of two annual survey questionnaires jointly designated and administered by the Office of Education (Program Planning and Evaluation/Bureau of Elementary and Secondary Education) and a cooperating group of chief state officers often referred to as the Belmont Group. This Survey of Compensatory Education was designed to collect evaluative information concerning federal programming in compensatory education. The survey instrumentation was made up of four questionnaires designed by panels of consulting experts in early childhood education, educational sociology and psychology, and elementary education to elicit questions concerning characteristics of second, fourth, and sixth grade students, their teachers, the schools in which they teach, and the districts in which those schools are located.

In 1970 the four survey instruments were administered to a national sample consisting of approximately 800 school districts, 2300 schools, 22,000 teachers and 34,000 elementary pupils. The pupil sample was a multi-stage, quasi-random sample which consisted of a random sample of districts selected at fixed probability ratios within the bounds of five strata based upon their enrollment figures. Figure 1 is a display of the estimated district population, sample, and return for 1969-1970.

FIGURE I

PROFILE OF FOUNDATION OF DISTRICT SAMPLE FOR THE
1970 SURVEY OF COMPENSATORY EDUCATION

<u>Stratum and Enrollment</u>	<u>Population</u>	<u>Sample</u>	<u>Response</u>
I 135,000 and over	13	13	11
II 35,000 - 134,999	100	73	69
III 9,000 - 34,999	714	116	90
IV 3,000 - 8,999	2,288	254	204
V 300 - 2,999	8,161	351	305
Totals:	11,276	807	679

Each district in the sample was asked to select a number of schools participating and not participating in Title I. Once these schools had been selected, principals were sent the school questionnaire and each second, fourth, and sixth grade teacher in each school was asked to fill out a teacher questionnaire. Each teacher, relative to class size, was asked to select a matrix-fixed sample of students in each of his homeroom classes; i.e., if homeroom class enrollment was small the teacher would fill out questionnaires on three students selected on a present random-

number basis. If class size was very large, the teacher would select up to five pupils in each class and complete student questionnaires on each of them. The results are weighted to provide national projections for grades 2, 4, and 6, with the sampling error estimated to be less than .05 given the 80% response which was acquired.

Procedures

A major variable was created from the questions dealing with teacher identification of academic disadvantage and of socioeconomic disadvantage. The population was divided into four groups: a group of both academically and socioeconomically disadvantaged children; a group of academically disadvantaged children only; a group of socioeconomically disadvantaged children only; and a group of children rated neither academically nor socioeconomically disadvantaged. This variable was called the Pupil Classification Variable and was used as one of the two variables in each of a series of crosstabulations.

The first crosstabulations presented are the Pupil Classification Variable with pupil grade, sex, race, and teacher estimates of attitude and ability. This class of variables is termed "pupil characteristics" variables and also includes background characteristics information concerning the pupil's family, such as employment of the parents, whether or not the parents receive welfare, and educational level of the head of the household.

In pursuit of operational definitions of disadvantage, the paper also includes crosstabulations of the Pupil Classification Variable with the target group previously mentioned and with a series of 15

persistent problems also collected on the pupil instrument. The variables included in the persistent problem category include: problems in mathematics, reading, English, vision, hearing, speech, psychomotor, handicaps, chronic diseases, mental retardation, social and emotional problems, anti-social behavior, malnutrition, and family instability. The third set of variables include behavioral ratings and income levels.

A Title I participation-nonparticipation variable will be crossed with some of the variables of interest to see if participants differ from nonparticipants.

Results

Pupil background characteristics. Table I shows the breakdown of the Pupil Classification Variable across Title I participation.

TABLE I
PUPIL CLASSIFICATION BY TITLE I PARTICIPATION

	Title I	Non-Title I	Row Total
Not Disadvantaged	1265139	7006754	8271893
Row %	15.29	84.71	78.68
Col %	60.68	83.13	
Tot %	12.04	66.64	
Economically Only	326701	534868	861569
Row %	37.92	62.08	8.20
Col %	15.67	6.34	
Tot %	3.11	5.09	
Academically Only	239560	568298	807858
Row %	29.67	70.33	7.68
Col %	11.49	6.74	
Tot %	2.28	5.40	
Both	253402	318252	571654
Row %	44.35	55.65	7.44
Col %	12.16	3.79	
Tot %	2.41	3.03	
Column Total	2084802	8428172	10512974
	19.83	80.16	100.00

The number of academically and socioeconomically disadvantaged children seems surprisingly low, at least to this reviewer, and the overlap is indeed low. Only 13.6% of the population have been identified as economically disadvantaged and only 13.2% of the population have been identified as academically disadvantaged. Approximately 78.7% of the population have been identified as not belonging to either of the two target groups. Of this 78.7%, 8.6% can be identified as belonging to other target groups including migrant families, handicapped children, neglected-delinquent children, and potential dropouts.

Seventy percent of the nation's population in grades 2, 4, and 6 are estimated as belonging to no target group related to ESEA Title I. This percentage is surprisingly large and includes a relatively large number of Title I participants not belonging to target groups. Twelve percent of the total population have been identified as belonging to neither academically nor socioeconomically disadvantaged target groups but still participating in Title I. Of this 12%, only about 4% can be explained as belonging to other target groups. Therefore, at least 8% of the total population participates in Title I even though not identified as belonging to any particular group membership. This constitutes over one-third of the total number participating in Title I.

The relationship between economic and academic disadvantage and participating Title I is not nearly as strong a relationship as one might suppose. There is room to believe that the practice of identifying academic and economic disadvantage for Title I program participation may suffer a large variance across the nation. Approximately 13.5% of the total population are identified by the survey as economically and academically

disadvantaged but not participating in Title I. This population actually constitutes about 17% of the nonparticipants in Title I and constitutes a very large group of students not being served by ESEA Title I. Information does not permit the authors to determine whether this nonparticipation occurs through self-elimination or because of the unfortunate fact that large numbers of academically or economically disadvantaged children are located in schools or institutions not eligible for Title I participation.

Table II crosstabulates the distribution of the Pupil Classification Variable across grade level.

TABLE II
PUPIL CLASSIFICATION BY GRADE LEVEL

	2	4	6
Not Disadvantaged	2827295	2830363	2614235
Row %	34.18	34.22	31.60
Tot %	26.89	26.92	24.87
Economically Only	308977	285804	266788
Row %	35.87	33.17	30.97
Tot %	2.94	2.72	2.54
Academically Only	242612	278433	286813
Row %	30.04	34.47	35.50
Tot %	2.31	2.64	2.73
Both	175140	212140	184374
Row %	30.64	37.11	32.26
Tot %	1.66	2.02	1.76
Column Total	3554024 33.81	3606740 34.31	3352210 31.89

In Table II it is shown that socioeconomically disadvantaged pupils and non-target group pupils have very similar distributions, which are proportional to sampling percentages across grade level. Therefore one could assume that grade level and socioeconomic disadvantage are not associated. In the distribution of the academically disadvantaged children and in the distribution of the group of both academically and socioeconomically disadvantaged pupils across grade level, there appear to be some differences from the overall sampling distribution. Both of these groups appear larger in proportion in grades 4 and 6 and smaller in proportion in grade 2. Perhaps this observed relationship is due to the time factor, with the higher grades allowing greater opportunity for academic disadvantage to appear. Breaking the overall population into subgroups by Title I participation and nonparticipation does not change the observed relationships.

Table III shows very similar breakdowns with pupil sex as the variable of interest. Even though there are slightly more males than females in the sample--50.94% to 48.38%, with 0.67%¹ being undetermined because of failure to respond to the questionnaire item--there are a few more females than expected in the non-target group and in the socioeconomically disadvantaged group--49.72% and 51.16%. The similarity of these figures suggests that there is no large difference in males and females in these two groups or in the overall sample. In the two groups which were created by using academic disadvantage as a criterion (the academically disadvantaged only and the academic socioeconomically disadvantaged groups), both show a marked discrepancy between males and females. About 62.35%

¹70342, or 0.67%, did not identify sex

of the academically disadvantaged only group and 58.13% of the group labeled both academically and socioeconomically disadvantaged are males.

TABLE III
PUPIL CLASSIFICATION BY SEX¹

	Male	Female
Not Disadvantaged	4103353	4112698
Row %	49.60	49.72
Tot %	39.03	39.12
Economically Only	416214	440745
Row %	48.31	51.16
Tot %	3.96	4.19
Academically Only	503735	298839
Row %	62.35	36.99
Tot %	4.80	2.84
Both	332288	234759
Row %	58.13	41.07
Tot %	3.16	2.24
Column Total	5355590 50.94	5157383 48.38

This fact could be a reflection of anti-male bias in the elementary schools, could show the relationship of male identity characteristics to elementary school goals, or could be explained by a combination of these or by other alternative hypotheses. A Title I participation break does not create any change in the profile in Table III.

Table IV crosstabulates the Pupil Classification Variable with the race or minority group membership variable.

TABLE IV
PUPIL CLASSIFICATION BY RACE

	Indian	Black	Oriental	Spanish	None
Not Disadvantaged	29466	844566	88373	361779	6773952
Row %	0.35	10.21	1.07	4.38	81.89
Tot %	0.28	8.03	0.84	3.44	64.43
Economically Only	7686	380219	2511	123372	332888
Row %	0.89	44.13	0.29	14.32	38.64
Tot %	0.07	3.62	0.03	1.17	3.17
Academically Only	3130	205602	3121	51874	528728
Row %	0.38	25.45	0.39	6.43	65.45
Tot %	0.03	1.95	0.03	0.49	5.03
Both	7148	284862	1101	84046	186443
Row %	1.15	49.83	0.20	14.71	32.62
Tot %	0.07	2.71	0.01	0.80	1.78
Column Total	47430	1715249	95106	721071	7822011
	0.45	16.32	0.91	5.91	74.41

Table IV will first be discussed to ascertain any general relationships between the two variables, race and the Pupil Classification Variable. There are fewer American Indians, Blacks, and Spanish-surnamed pupils in the non-target group than would be expected from the sample distribution of these race categories. The Black discrepancy alone seems large enough to note: only 10.21% of the sample are Blacks. There are more non-minority

group members (white) and Oriental students in this non-target than would be expected from sample proportions. Again, only the non-minority group appears worthy of note: 81.89% to 74.41%. Both Blacks and Spanish-surnamed pupils are overrepresented in all three of the disadvantagement groups, and the non-minority group is underrepresented in these three groups. Overrepresentation and underrepresentation appear greater in groups using socioeconomic disadvantagement as the criterion for membership than in groups using only academic disadvantagement as the membership criterion.

The race crossbreaks are also subdivided by Title I participation-nonparticipation. The relationships remain similar, but the Title I participant group has fewer non-target group pupils across all racial categories participating than either the composite table or the nonparticipating group, indicating some targeting nonetheless. A peculiar phenomenon can be observed across the participation-nonparticipation subcategories. There is a tendency for Blacks and Spanish-surnamed pupils to have equally as much participation in economically disadvantaged subgroups as in academically disadvantaged subgroups. This is not true for the non-minority group, which suffers a drop in economic disadvantagement participation. Hence, part of the criteria for participation for Blacks and Spanish-surnamed pupils are apparently not extended to non-minority group members. The academic disadvantagement grouping criteria seem to apply to all races.

Table V contains background information on the parents of children in each of the four pupil classification groups. Pupils in the non-targeted group, or the group identified by teachers as being neither academically

nor socioeconomically disadvantaged, have parents who are most likely employed, least likely to be on welfare, and have three-to-one odds of having high school educations. The percentage of children from families on welfare in this group is less than half the percentage of children from families on welfare estimated for the total population. The same phenomenon is observed in the case of employment.

TABLE V

PUPIL CLASSIFICATION BY PARENTAL BACKGROUND INFORMATION

	On Welfare	Unemployed	No HS Education
Not Disadvantaged	237725	132324	2147441
% of category	2.87	1.60	25.96
% of children	2.26	1.25	20.44
Economically Only	248386	124172	676611
% of category	28.83	14.41	78.54
% of children	2.36	1.18	6.44
Academically Only	54242	31425	446055
% of category	6.72	3.89	55.22
% of children	0.52	0.30	4.24
Both	181474	98776	495340
% of category	31.75	17.28	86.65
% of children	1.72	0.94	4.71
Column Total	721287	386697	3765447

The number of children with parents not having a high school education is less in this group than would be expected from the total population estimates.

The socioeconomically disadvantaged group has a percentage of children with parents on welfare nearly 4.5 times that of the total population estimates: 28.82% to 6.86%. Unemployment also appears to be another prime related variable in economic disadvantage. This group has 4 times as many unemployed parents (14.41%) as does the total population (3.68%). Lack of a high school education is a strong identifying factor for this group, since 78.54% of the group have heads-of-the-household not holding high school diplomas. Only 35.83% of the national estimate fails to hold high school diplomas. These variable relationships hold true in the group identified as both academically and socioeconomically disadvantaged. Of the children's families in this group, 31.75% are on welfare, 17.28% are unemployed, and 86.65% do not have high school educations.

The academically disadvantaged group has percentages similar to the total population in regard to families on welfare and unemployed parents. This group does have a larger proportion of parents failing to hold high school diplomas (55.22%) than is found in the total population (35.82%).

In describing the relationship of these variables to the Pupil Classification Variable, it can be concluded that education level of the head-of-the-household is the best predictor of the three and is related to both classification variables. This variable appears more related to socioeconomic disadvantage, however, than to academic disadvantage. Both unemployment and receipt of welfare are predictor variables of socioeconomic disadvantage, but neither seem related to the academic criterion. These two variables, although related, are disappointing to an extent since so many of the children of welfare or unemployed parents

are members of the non-target group.

TABLE VI

PUPIL CLASSIFICATION BY POTENTIAL TO COMPLETE SCHOOL

	School Potential Attitude Poor	School Potential Ability Poor
Not Disadvantaged	593632	368624
% of category	7.17	4.47
% of children	5.66	3.50
Economically Only	279109	157366
% of category	32.39	18.28
% of children	2.66	1.50
Academically Only	382422	362666
% of category	47.33	49.90
% of children	3.64	3.45
Both	374479	318989
% of category	65.51	55.81
% of children	3.57	3.03
Column Total	1629642 15.50	1207645 11.49

Table VI indicates that teachers' ratings of student potential to complete school, based upon both ability and attitude, are consistent and are related to both of the criterion variables--academic and socio-economic disadvantage. Neither set of ratings, however, is related to the criterion variables in such a manner as to indicate that they are basic differentiating factors.

Tables VII and VIII show the crossbreaks of two variables which can be hypothesized to be most directly related to the criteria reflected in the Pupil Classification Variable. Table VII shows the relationship of estimated minimum parental income to the group classifications. Economic disadvantage, previously defined by legislation, has as a criterion a family income of less than \$3,000 per year. Table VIII shows the relationships of reading proficiency to the group classifications. In this case reading would be hypothesized as a major source of academic deficiency; this hypothesis will be confirmed in Table X.

TABLE VII
PUPIL CLASSIFICATION BY MINIMUM INCOME

	Below 3000	3000- 6000	6000- 10000	Over 10000
Not Disadvantaged	911084	2646670	2535700	1837533
Row %	11.01	32.00	30.65	22.21
Tot %	8.67	25.18	24.12	17.43
Economically Only	489183	273311	44313	4279
Row %	56.78	31.72	5.14	0.50
Tot %	4.65	2.60	0.42	0.04
Academically Only	192252	336678	174318	64916
Row %	23.80	41.68	21.58	8.03
Tot %	1.83	3.21	1.65	0.62
Both	369946	157190	17917	1875
Row %	64.72	27.50	3.13	0.33
Tot %	3.52	1.49	0.17	0.01
Column Total	1962465 18.67	3413849 32.47	2772248 26.37	1908603 18.15

TABLE VIII
PUPIL CLASSIFICATION BY READING PROFICIENCY

	CFB	NC-D	NC-N	CFW
Not Disadvantaged	4960961	876918	2189264	71261
Row %	59.98	10.60	26.46	0.86
Tot %	47.19	8.34	20.83	0.68
Economically Only	575911	161066	93436	14990
Row %	66.85	18.70	10.85	1.74
Tot %	5.48	1.53	0.89	0.14
Academically Only	469427	289274	13179	21615
Row %	58.11	35.80	1.64	2.67
Tot %	4.46	2.75	0.13	0.21
Both	322186	199789	13680	22321
Row %	56.36	34.94	2.39	3.91
Tot %	3.07	1.90	0.13	0.21
Column Total	6328485	1527047	2309359	130187
	60.20	14.52	21.96	1.24

The non-target group in Table VII has 11.01% of its members categorized as from families making less than \$3,000 per year. The two groups which include socioeconomic disadvantage as a criterion show a strong but not totally inclusive relationship to this income criterion. The socioeconomically disadvantaged only group has 56.78% of its members in this income bracket, and the group identified as both socioeconomically and academically disadvantaged has 64.72% of its members showing incomes below the \$3,000 per year level. The group identified only as academically disadvantaged has only 23.80% under the \$3,000 level. This occurrence in the academically disadvantaged group and the number indicated in the non-target group could be considered as the difference between pure economics and social economics.

The relationship of poverty to academic disadvantage is apparent even in the academically disadvantaged only group. Income becomes an even better indicator of socioeconomic disadvantage at the \$6,000 income level. Only 4.15 % of the pupils identified in this category have parents earning more than \$6,000 per year. The total population contains 44.52% having incomes greater than \$6,000 per year.

Table VII indicates that the two groups having been identified as academically disadvantaged contain over 38% of the pupils not progressing satisfactorily in reading proficiency, in comparison to only 11.46% in the non-target group and 19.44% in the socioeconomically disadvantaged only group. Considering that these are teachers' ratings of student progress in reading proficiency, the largest percentages point even more strongly to the relationship. Test scores were too sparse to generate population estimates, but results run on the small sample of scores (approximately 5% of the data) are in the same direction, with slightly higher potential relationships.

Table IX shows the overlap of the academic and socioeconomic disadvantage groups with other target groups. The horizontal dimension is formed by membership in other target groups included in the survey. As one can see, three of the other target groups are virtually too small for discussion. Of these three groups, the physically handicapped variable appears related to academic disadvantage and the migrant and neglected-delinquent groups appear related to the socioeconomic criterion. However, as previously mentioned, target group sizes are very small in these three groups.

Both the non-Standard English speaking and emotionally handicapped target groups are large enough for comment, but do not present any startling results. The non-Standard English speaking variable does not appear related to either of the two target group designators in question. The emotionally handicapped group appears slightly related to the socioeconomic disadvantage criterion and more directly related to the academic disadvantage standard. The relationships appear additive, since the greatest percentage of overlap is in the group meeting both criteria under discussion. This relationship holds true for the potential dropout group, which appears very similar to the emotionally handicapped variable. The academically gifted variable does not appear related to socioeconomic disadvantage and may in fact be inversely related to the academically disadvantaged group, although 521 cases of overlap were identified.

Table X reports the frequency of reported persisting needs among the four categories of the Pupil Classification Variable. Interestingly, all groups seem to have members in each of the persisting needs categories; however, some very definite relationships do exist. Persisting problems in math, reading, and English language arts all appear as strong indicators of academic disadvantage, as would be expected. There is an 85% overlap between the group having reading as a problem and the academically disadvantaged group. All three of these problem variables have a greater relationship than would be expected by chance to socioeconomic disadvantage also. Social immaturity is a persisting problem which is also related to academic disadvantage and is somewhat related to socioeconomic disadvantage. Both emotional problems and anti-social behavior as

persisting problems are related to each of the criteria of interest, but not to a strong prediction level. Family instability appears to be more related to socioeconomic disadvantage, but is related to both. The remaining persisting problems do not seem related to the two criterion variables of interest.

Table XI reports the teachers' ratings of students on four forms of behavior related to school goals: attentive behavior, disruptive behavior, self-concept, and educational aspirations. All appear related to the two criterion variables in similar manners, although more related to academic than to socioeconomic disadvantage. None of these relationships seem to be of great interest, since problems in these areas are also prevalent in the non-target group at a smaller percentage level.

TABLE IX

TARGET GROUP MEMBERSHIP

	Academic Gifted	Non-Eng Speaking	Potential Dropout	Emot-Men Handicap	Migrants	Negl & Delinq	Physical Handicap	Row Total
Not Disadvantaged	799839	254820	301749	232628	18267	77642	67279	8271894
Row %	9.67	3.08	3.65	2.81	0.22	0.94	0.81	78.68
Col %	96.55	57.68	31.88	45.92	31.01	32.97	64.74	
Tot %	7.61	2.42	2.87	2.21	0.18	0.74	0.64	
Economically Only	26564	86077	150273	58182	17895	61056	10840	861565
Row %	3.08	10.00	17.45	6.76	2.08	7.08	1.26	8.20
Col %	3.21	19.48	15.83	11.48	30.38	25.93	10.43	
Tot %	0.25	0.82	1.42	0.56	0.17	0.58	0.10	
Academically Only	521	31462	221461	110638	7100	24198	14770	807856
Row %	0.01	3.90	27.41	13.70	0.85	2.99	2.83	7.68
Col %	0.06	7.12	23.40	21.84	12.05	10.28	14.21	
Tot %	0.00	0.30	2.11	1.05	0.06	0.23	0.14	
Both	1497	69452	273120	105136	15646	72594	11037	571652
Row %	0.26	12.15	47.77	18.39	2.73	12.70	1.93	5.44
Col %	0.17	15.72	28.85	20.75	26.56	30.83	10.62	
Tot %	0.02	0.66	2.50	1.00	0.15	0.69	0.10	
Column Total	828421	441811	946603	506584	58908	235490	103926	10512967
	7.88	4.20	9.00	4.82	0.56	2.24	0.99	100.00



TABLE XI
PUPIL CLASSIFICATION BY RATINGS OF BEHAVIOR

	Attentive Behavior	Distruptive Behavior	Self- Concept	Educational Aspirations
Not Disadvantaged	1528727	1198479	1273451	1308503
% of category	18.48	14.50	15.39	15.82
% of children	14.54	11.40	12.11	12.45
Economically Only	228458	177352	245811	297930
% of category	26.52	20.58	28.66	34.58
% of children	2.17	1.69	2.35	2.83
Academically Only	350905	224740	305394	392444
% of category	43.44	27.82	37.80	48.57
% of children	3.35	2.15	2.91	3.74
Both	253645	165303	253407	322224
% of category	44.01	28.92	44.33	56.37
% of children	2.40	1.56	2.41	3.07
Column Total	2359735 22.45	1765874 16.80	2079063 19.77	2321101 22.08

TABLE X
PUPIL CLASSIFICATION BY PERSISTING PROBLEMS

	Math	Reading	English	Poor Vision	Poor Hearing	Speech Def.	Psycho-Motor Def.	Physical Handicap	Chronic Disease	Mentally Retarded	Socially Immature	Emotional Problems	Anti-Social Behavior	Malnutrition	Family Instab.	Total
Disadvantaged	1110356	1386326	821838	184725	75941	240486	80248	48415	71941	39846	812616	681277	308688	11453	627037	8271894
% of category	13.42	16.76	9.93	2.23	0.91	2.91	0.97	0.59	0.94	0.48	9.83	8.24	3.73	0.15	7.58	78.68
% of children	10.56	13.18	7.82	1.76	0.72	2.29	0.76	0.45	0.74	0.38	7.73	6.48	2.94	0.10	5.97	
Emotionally Only	241706	324627	229485	41759	13062	39020	12819	6711	11292	17069	160987	161161	86840	25711	298759	861565
% of category	28.04	37.68	26.63	4.84	1.52	4.53	1.48	0.77	0.54	1.59	18.69	18.70	10.08	2.99	34.67	8.20
% of children	2.30	3.09	2.17	0.39	0.12	0.37	0.12	0.07	0.12	0.17	1.54	1.54	0.81	0.34	2.84	
Intellectually Only	567616	700402	549844	44805	18230	70187	36894	10395	1353	58749	201891	155414	78369	7893	142607	807856
% of category	70.26	86.70	68.06	5.54	2.25	8.69	4.57	1.29	0.64	7.27	24.99	19.23	9.70	0.99	17.65	7.68
% of children	5.40	6.66	5.23	0.43	0.17	0.67	0.35	0.09	0.12	0.55	1.93	1.48	0.75	0.08	1.35	
Special	409799	475187	413168	35875	11176	45371	177 6427		1601	59120	169922	153354	90197	34634	240270	571652
% of category	71.69	83.13	72.27	6.28	1.96	7.94	3.11	1.12	1.50	10.35	29.72	26.83	15.78	6.07	42.04	5.44
% of children	3.90	4.51	3.93	0.33	0.11	0.43	0.17	0.06	0.08	0.56	1.62	1.45	0.85	0.33	2.21	
Totals	2329477	2886542	2014335	307164	118409	395046	147731	71904	111087	174784	1345416	1151206	564094	79771	1308673	10512967
	22.16	27.45	19.17	2.92	1.12	3.76	1.41	0.68	1.07	1.66	12.80	10.94	5.37	0.76	12.45	100.00