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ABSTRACT

The study examined educationally relevant aspects of the home environments of 56 elementary school students with mild educational handicaps. Thirteen aspects of the home environment were examined for the extent to which differences existed among the three categories of handicapped students (educable mentally retarded, learning disabled, and emotionally/behaviorally disturbed) and 17 nonhandicapped students. The 13 aspects included nine home factors (predictable routine, lack of stress, security, opportunities for the child to develop responsibility, realistic parental expectations, valuing of education by family members, support for completion of school work, support for school policies, and a safe, orderly physical environment). Four out of school time factors concerned provision of structure by parents, child's involvement in productive activities, time spent watching television, and time spent reading. Differences among groups also were examined as a function of socioeconomic status. Differences in home environments emerged most often between nonhandicapped students and one or more of the handicap groups. The home environments of nonhandicapped students were rated significantly higher on nine of 13 variables. Copies of the home interview form, the criteria for rating home factors, and the criteria for rating out-of-school-time factors are included. (JDD)

University of Minnesota

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Abstract

Development of educational competence in students is an outcome of interrelationships among student characteristics and complex factors in the school setting and the home and family environment. The purpose of the present study was to examine educationally relevant aspects of the home environments of students with mild educational handicaps. Thirteen aspects of the home environment were examined for the extent to which each differed for three categories of mildly handicapped students (EMR, LD, EBD) and nonhandicapped students. Differences among groups also were examined as a function of socioeconomic status (SES). Differences in ratings of the home environment as a function of categorical group were primarily differences between a specific categorical group and nonhandicapped students. SES differences were found on 5 of 13 variables, but only for students with handicaps. Implications for an ecological approach to assessment and intervention for students experiencing problems with academic progress are discussed.

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Home Environments of Mildly Handicapped and Nonhandicapped Students

Of the more than 39 million young people enrolled in public schools, it has been estimated that some 20 to 30 percent, or over seven million students, are having difficulty acquiring academic skills and making adequate school adjustment (Will, 1986). Over the past two decades, there has been a proliferation of legislation and federally funded "special," "compensatory" and "remedial" education programs designed to ensure academic success for students who are failing to thrive from usual educational practice. Along with these developments has been the generation of a substantial body of research on effective teaching and the instructional practices that best facilitate the acquisition of academic skills by students with different learning characteristics (Brophy & Good, 1986; Rosenshine & Stevens, 1986). There has been a recognition that academic achievement is determined by a range of variables, including student characteristics, the instructional environment, home and family factors, and the relationships among these single domains. Accordingly, research and assessment practices have become more ecological in perspective and more responsive to the complex interaction of factors within a student's total learning environment as determinants of academic achievement.

From the middle 1960s, researchers have shown that the school performance of children is strongly influenced by their home background, which traditionally has been defined in terms of global social status variables (i.e., parental income, education, occupation) and family structural characteristics (i.e., family size, birth order). Although the relationship of school performance to global social status variables and family structural characteristics is one of the most robust in social science research (Coleman, 1966; Mosteller & Moynihan, 1972), it has not been particularly useful for educational policy development (Benson, 1980) or

development of strategies that families might use to support or facilitate the educational growth of their children.

The trend in environmental research has been away from crude measures of socioeconomic variables and global IQ toward more subtle intra-family and inter-personal process variables and more specific child outcomes. Wolf (1964) examined 13 process variables in three categories (press for achievement motivation, press for language development, and provision for general learning) and concluded that family process variables accounted for 50% of the variance in children's IQs. In subsequent research, Marjoribanks (1979) examined relationships between children's intellectual abilities and the social-psychological characteristics of the home environment, including degree of press for achievement, activeness, intellectuality, independence and language stimulation. He concluded that family process variables are more highly related to children's mental ability scores than are gross, structural indicators such as family size, socioeconomic status, and birth order.

Consistent with the shift in focus toward more psychosocial, process aspects of home and family life as correlates of children's school performance, researchers have focused on those variables that are potentially manipulable by families and school personnel. Moderate to strong correlates of academic success include mothers' and fathers' ambitions for the child (Keeves, 1972), mothers' attitudes toward education (Keeves, 1972), parents' general expectations (Crandall, Dewey, Katkovsky, & Preston, 1964), parents' specific expectations about years of schooling and occupational attainment (Parker, 1967; Woelfel & Haller, 1971), and students' perceived parental expectations (Gigliotti & Brookover, 1975). The positive effects of parental support for their children's academic success (e.g., encouraging schoolwork, listening to children read, participating in learning activities at home, providing rewards for improvements on daily in-class assignments, providing opportunity and supplies for learning at home) on children's academic achievement

have been documented in several studies (Epstein, 1984; Hewison & Tizard, 1980; Tizard, Schofield & Hewison, 1982; Witt, Hannafin, & Martens, 1983; Wolf, 1964).

Research on the effects of parental directiveness and control of out of school time is difficult to interpret because definitions of parental control are varied. However, several studies include some measure of parental control and report correlations with children's academic performance. Positive academic correlates include use of authoritative control (Baumrind, 1973), use of imperatives in disciplinary situations (Hess, Shipman, Brophy & Bear, 1969) and the degree of fit between authority structures at home and those at school (Epstein, 1983). The relationship between television viewing time and academic performance has been studied extensively. Discrepant findings result in equivocal conclusions (Neuman, 1986; Williams, Haertel, Haertel & Walberg, 1982).

There is considerable empirical evidence to support the idea that the interrelated environments of the family and school have an impact on the development of the child. The importance of the family's influence in academic, behavioral, and emotional problems (Hetherington & Martin, 1979; Kozloff, 1979), the adverse effect of home problems on school learning (Esterson, Feldman, & Krigsman, 1975), and the identification of a school problem as relevant to the home situation and vice versa (Green & Fine, 1980; Smith, 1978; Tucker & Dyson, 1976) have been studied. On the other hand, it has been suggested that school-related crises (e.g., labeling a child as a handicapped learner) may adversely affect the family system (Rist & Harrell, 1982; Seligman, 1979; Turnbull & Turnbull, 1978). Finally, Samuels (1986) has described conditions in a child's learning environment that place the child at risk for academic failure; among these are characteristics of the home environment, such as degree of support for school efforts and the moral standards and values fostered by family members.

There is a growing body of research that examines familial patterns associated with learning and behavioral problems. Much of this work has involved intergroup comparisons between families of educationally handicapped and normal learners and has focused on both structural and psychosocial process variables. For example, the family structural variable of paternal absence is associated with children's learning difficulties (Carlsmith, 1964; Sciara, 1975; Shinn, 1978). Educationally handicapped children have been found to live in less well-organized and less emotionally stable families than academically successful children (Owen, Adams, Forest, Stolz & Fisher, 1971). Ackerman, Elardo and Dykman (1979) found that parents of both learning disabled and hyperactive children expected less achievement from their children than did parents of normal children.

Libitz and Johnson (1975) compared referred and nonreferred children and their families. Based on home observations, they found that referred children showed significantly more deviant behavior and less prosocial behavior than nonreferred children and that their parents emitted more negative and commanding behavior than parents of nonreferred children. Parental attitudes were dramatically different for the two groups, leading the authors to conclude that child behavior is not the only variable in referral and that assessment procedures for child and family are necessary. Patterson (1982) has identified characteristics of family interaction that contribute to the development of aggressiveness in children, and Walker, Reaves, Rhode, and Jenson (1985) argue that parental involvement is essential for preparing emotionally disturbed/behaviorally disordered youth for transition to less restrictive educational programs.

The importance of home/family influence on student achievement and performance in school cannot be underestimated. Individuals have recommended that information about children's home influences and environments be collected during assessment (Anderson, 1983; Ehrlich, 1983; Lombard, 1979), family and school

resources be coordinated to promote student learning (Tucker & Dyson, 1975), and educators working with handicapped children be sensitive to specific issues of family functioning (Turnbull & Turnbull, 1986).

Given that promoting educational competence in students is a home-school venture, that several family variables have been identified as important correlates of academic and behavioral performance, and that little data are available on home influences for students with different handicaps, the purpose of this study was to examine specific, educationally relevant aspects of the home environments of students with mild handicaps, and to determine whether these home environmental influences differ from those of nonhandicapped students. The extent to which these home and family factors differ for different categories of mildly handicapped students was of primary interest. Due to sample characteristics, specifically the number of students classified as emotionally/behaviorally disturbed who were living with single parents, the extent to which home and family factors differed as a function of socioeconomic status (SES) also was examined. Specifically, three questions were addressed:

1. To what extent are there differences in home environments for different categories of mildly handicapped students and nonhandicapped students?
2. To what extent are there differences in home environments of different categories of mildly handicapped students as a function of socioeconomic status?
3. To what extent are there differences in the home environments of nonhandicapped students as a function of socioeconomic status?

Method

Subjects

Subjects were 56 students classified as learning disabled - LD (n = 20), emotionally/behaviorally disturbed - EBD (n = 18), educable mentally retarded - EMR (n = 18) and nonhandicapped - NH (n = 17). The subjects with handicaps were a

subset of 67 students who met criteria for involvement in another study (Ysseldyke, Bakewell, Christenson, Muyskens, Shriner, Cleary, & Weiss, 1988). The subjects without handicaps were a subset of an original sample of 30 students (Ysseldyke, Thurlow, Christenson, & Weiss, 1987). All students were in grades 2-5 from 11 schools in one urban and one suburban school district.

Information about the students is provided in Table 1. Percentages of males and females within student categories were similar except for the EBD group, which had a higher percentage of males. For all groups, more than half of the subjects were nonminority; the nonhandicapped group had the smallest percentage of nonminority students. Minority students were classified as Black, Asian, Native America, or other (i.e., undetermined minority race/ethnicity). The total number of students from grades 3-5 was fairly consistent across categories; the LD and EMR groups each had one student in grade 2. The mean age for all subjects was 119 months; the range was from 98 to 139 months. The EMR students were slightly older than the LD and EBD students.

The four factor index of social status developed by Hollingshead (1975) was used to determine the socioeconomic status of subjects' families. For all groups, the majority were classified as middle or upper class. Each category of handicap was represented within the lower socioeconomic level, with the EMR group having the highest percentage of lower SES families. No nonhandicapped students were in the low SES bracket with this index. The majority of students in the LD group and NH group lived with both parents, whereas most of the students in the EBD group lived in single parent homes. Approximately half of the EMR students lived with both parents and one third were living in single parent homes. Four children lived in a separate residence (e.g., with grandparents). The majority of children in all groups had 1 to 2 siblings. Families of LD children tended to be somewhat larger than families of EBD, EMR, or NH children. Most of the students in all groups had attended

Table 1

Student Demographic Data[a]

	Category							
	LD		EBD		EMR		NH	
Student Characteristics								
Sex								
Male	11	(55.0)	15	(83.3)	8	(44.4)	10	(58.8)
Female	9	(45.0)	3	(16.7)	10	(55.6)	7	(41.2)
Race								
Black	6	(30.0)	4	(22.2)	4	(22.2)	1	(5.9)
White	13	(65.0)	12	(66.7)	13	(72.2)	16	(94.1)
Other	1	(5.0)	2	(11.1)	1	(5.6)	-	-
Grade								
2	1	(5.0)	-	-	1	(5.6)	-	-
3	10	(50.0)	5	(27.8)	6	(33.3)	4	(23.5)
4	2	(10.0)	7	(38.9)	5	(27.8)	5	(29.4)
5	7	(35.0)	6	(33.3)	6	(33.3)	8	(47.1)
Age								
M	117.2		118.8		123.6		115.0	
Range	98-138		103-132		106-139		100-133	
Environmental Characteristics								
SES								
Low	4	(20.0)	3	(16.7)	6	(33.3)	-	-
Mid	9	(45.0)	7	(38.9)	10	(55.6)	6	(35.3)
High	7	(35.0)	7	(38.9)	1	(5.6)	9	(53.0)
Missing	-	-	1	(5.6)	1	(5.6)	2	(11.8)
Child Lives With								
Mother	4	(20.0)	11	(61.1)	6	(33.3)	4	(23.5)
Father	-	-	1	(5.6)	-	-	-	-
Both	16	(80.0)	5	(27.8)	10	(55.6)	12	(70.6)
Separate	-	-	1	(5.6)	2	(11.2)	1	(5.9)
Number of Siblings								
M	2.2		1.0		1.1		1.3	
Range	0-5		0-3		0-4		0-3	
Total Schools								
M	2.6		2.3		3.1		1.7	
Range	1-6		1-5		1-7		1-4	
Schools - last year								
M	1.3		1.4		1.3		1.0	
Range	1-3		1-5		1-3		0-1	
Total Moves								
M	4.3		3.9		3.4		1.5	
Range	0-15		0-17		1-10		0-6	
Moves - last year								
M	.5		.6		.6		.3	
Range	0-4		0-2		0-3		0-1	

[a]Entries are frequencies and percentages for each student category (LD = learning disabled, EBD = emotionally/behaviorally disturbed, EMR = educable mentally retarded, NH = nonhandicapped), with the exception of means and ranges for age, siblings, moves, and school data.

between 2 and 3 different schools, with the EMR students having had the greatest number of school changes. The average number of total moves for all handicap groups was greater than the average for the nonhandicapped group. Overall there were fewer moves for all students the year previous to the home interview.

Measures

A semi-structured home interview, which was a modification of interviews developed by Marjoribanks (1979), Egeland (personal communication, 1985) and Garmezy (personal communication, 1985) was used to obtain information about the child's living situation, weekly routine, use of out of school time, homework practices, the family's attitudes toward the child's education, and the nature and extent of stressful events in the family (see Appendix A).

Ratings were obtained on the extent to which the child's home was characterized by: (a) predictable routine, (b) lack of stress, (c) adequate security, (d) realistic parental expectations, (e) opportunities for the child to develop responsibility, (f) valuing of education by family members, (g) support for completion of academic work, (h) a safe, orderly, physical environment, and (i) support for school policies. Operational definitions and criteria used by interviewers to rate these 9 home factors are provided in Appendix B.

Additional ratings of the child's use of out of school time included the degree to which (a) the parent(s) provided direction for out of school time, (b) the child was involved in productive activities, (c) the child spent time watching television, and (d) the child spent time reading. Operational definitions and criteria used by interviewers to rate the 4 out of school time factors are provided in Appendix C.

Except for two items, the home and out of school time factors were rated on a 4-point Likert-type scale, with "1" indicating "not at all like the child's home environment" and "4" indicating "very much like the child's home environment." The exceptions were the amount of television watching and the amount of reading

done out of school, which were rated in three categories: a lot, moderate, or little. For both of these, ratings were guided by the calculated means and standard deviations for the entire sample (see Appendix C).

Procedures

Subject selection. Subjects with handicaps were a subset of 67 students who were selected for participation in another study (Ysseldyke et al. 1988); selection for that study involved identifying pairs of subjects with similar levels of academic engaged time and different levels of math achievement performance. Twenty parents of nonhandicapped students were randomly selected from an original sample of 30 parents (Ysseldyke et al., 1987). Parental permission for home interviews was obtained from parents of 56 students with handicaps (20 LD, 18 EBD, 18 EMR) and 17 students without handicaps. Seventy-three parents agreed to participate immediately upon request or after one follow-up request. No response was received from 8 parents (3 parents of EBD students and 5 parents of NH students) despite significant follow-up attempts. Eight parents (2 of LD students. 2 of EBD students, 1 of an EMR student, and 3 of NH students) did not want to participate.

Training and data collection procedures. Advanced graduate students conducted the home interviews in the subjects' homes; interviews lasted approximately one hour for all groups (range = 20-105 min). Parents were paid $15 for their participation in the interview. For all groups, the child's mother was interviewed most often; for three children in each group both parents were interviewed. The guardian (i.e., grandmother) of one student in the EMR group was interviewed. The nine home factors were rated immediately after the home interview. The four items about the child's use of out of school time were rated several months later by the home interviewer. Specific criteria for reconstructing the home interview and guidelines for rating the amount of television watching and reading were provided for these post hoc ratings.

Training for the home interviews was done in pairs, beginning with the two individuals who had developed the interview. The trainer conducted the home interview while the trainee observed; following the interview, ratings were completed independently and compared. The trainee conducted a second home interview while the trainer observed, and independent home ratings were completed and compared. Training continued until both members of the pair were confident that the trainee was ready to interview independently and inter-rater agreement met a minimal predetermined standard. Inter-rater agreement was calculated in two ways: grouped and exact. For grouped agreement, ratings of "1" and "2" and ratings of "3" and "4" were combined. The minimal predetermined standard for grouped agreement between the two interviewers was 7 out of 9 items, or 78%. Exact agreement occurred when both interviewers coded the exact same rating on the 4-point scale. The predetermined standard for exact agreement was 6 out of 9 items, or 67%. After trainees' interviewing competence had been established, they trained other interviewers. Inter-rater agreement was assessed 14 times on 7 pairs of interviews. Average inter-rater grouped agreement was 91.3%; average exact agreement was 70.6%.

To determine subjects' socioeconomic status, information from each home interview relative to parental marital status, educational attainment and occupation was entered into Hollingshead's formula for derivation of a total SES score. Subjects were assigned to low, middle, or high SES categories according to their family's obtained score. Inter-rater agreement of 89% was obtained, based on 20% of subjects randomly selected from the total sample.

Data Analysis

Analyses were conducted for 9 home factors and 4 out of school time factors. One-way analyses were run separately for SES and for Category since two-way analyses of variance (SES x Category) were not possible (some cells did not have

subjects - low SES NH; there were low ns in other cells - high SES EMR). For Category analyses, Tukey-HSD procedures were used to examine differences among student groups on those factors found to be significant in the overall ANOVA. For SES, one-way analysis of variance with Tukey-HSD follow-up procedures was used to examine differences in home variables for students with handicaps (LD, EMR, EBD) as a function of SES level. In addition, t tests were conducted to assess the significance of differences between middle and high SES levels for the nonhandicapped students. An alpha level of .05 was adopted for all analyses.

Results

Means and ranges for 9 home and 4 out of school time factors for students with and without handicaps are provided in Table 2. In general, the average ratings of home factors for all groups tend to be at the higher end of the scale; the exception to this pattern is the ratings on the lack of stress factor for handicap groups, especially for students with EBD and EMR handicaps. Generally, the average ratings for factors are higher for NH and LD groups than for EBD and EMR groups. Finally, variability in the ratings for all groups is notable. The range of scores is widest for EBD students, where 1 to 4 ratings are evident on 8 of 9 home factors.

Two out of school time factors, reading and television watching, were rated on a 3-point Likert scale. Nonhandicapped students' average rating on the amount of reading was slightly higher than the ratings for all handicap groups. The average ratings for all groups on television watching were quite similar; all groups watched, on the average, 11 hours of television per week (Range = 0-25 hours).

Means and ranges for students from low, middle, and high SES backgrounds on the 9 home ratings and 4 out of school time ratings are provided in Table 3. Data for separate and combined handicap groups are provided; the number of students in

Table 2

Home Ratings by Category[a]

	Student Category			
	LD (n = 20)	EBD (n = 18)	EMR (n = 18)	NH (n = 17)
Home Factors				
Routine	3.65 (2-4)	3.06 (1-4)	3.33 (2-4)	3.76 (2-4)
Organization	3.80 (2-4)	3.61 (1-4)	3.50 (1-4)	3.71 (2-4)
Lack of Stress	2.70 (1-4)	2.11 (1-3)	2.17 (1-4)	3.35 (2-4)
Security	3.50 (2-4)	2.78 (1-4)	2.94 (1-4)	3.76 (3-4)
Responsibility	3.20 (2-4)	3.00 (1-4)	2.50 (1-4)	3.53 (2-4)
Expectations	3.55 (2-4)	3.17 (1-4)	3.39 (2-4)	3.94 (3-4)
Valuing Education	3.75 (2-4)	3.00 (1-4)	3.06 (1-4)	3.76 (3-4)
Support Academics	3.55 (2-4)	3.00 (1-4)	3.33 (2-4)	3.47 (2-4)
Support School	3.50 (2-4)	2.83 (1-4)	3.56 (2-4)	3.35 (2-4)
Out of School Time				
Structure	3.05 (1-4)	2.78 (1-4)	2.56 (1-4)	3.47 (1-4)
Focused Activities	2.85 (1-4)	3.17 (1-4)	2.17 (1-4)	3.47 (2-4)
Reading	1.60 (1-2)	1.78 (1-3)	1.61 (1-2)	2.24 (1-3)
Television	1.90 (1-3)	1.94 (1-3)	2.39 (1-3)	2.12 (1-3)

[a]Entries are mean ratings for each factor based on a 4-point scale, except for reading and television, where ratings are based on a 3-point scale. Range data are in parentheses.

each breakdown is indicated. Note that no nonhandicapped students were in the low SES bracket and only 1 EMR student was in the high SES bracket. There is a tendency for students with handicaps from low SES families to be rated lower on home and environmental factors.

Home factors

Differences on ratings for the 9 home factors as a function of student category and as a function of SES classification are described. Differences are based on separate analyses.

Routine. A significant difference among the LD, EBD, EMR, and NH groups in the degree of predictability and basic routine to daily and weekly life was found, $F(3, 69) = 3.30$, $p = .025$. Follow-up testing indicated that the homes of nonhandicapped students were rated significantly higher on degree of routine and predictability than were the homes of EBD students. No differences in routine were found for handicapped or nonhandicapped students as a function of SES level.

Organization. No significant differences were found among LD, EBD, EMR, and NH students in the degree to which the home exhibited a degree of order and organization that would be conducive to the development of organizational skills relevant in the school setting. Differences as a function of SES were found only for handicapped students, $F(2, 51) = 6.08$, $p = .004$. The homes of middle and high SES families with children who have handicaps were rated as significantly more orderly and well organized than those of low SES families with children who have handicaps.

Lack of stress. Significant differences were found between groups on the degree of stressful life events experienced by subjects' families, $F(3, 69) = 7.98$, $p = .000$. The homes of EBD and EMR students were rated as significantly more stressful than those of NH students. No differences were found in stress level as a function of SES.

Table 3

Home Ratings for Students by Category in Different SES Levels [a]

	LD			EBD[b]			EMR[b]			TOTAL			NH[b]		
	L N=4	M N=9	H N=7	L N=3	M N=7	H N=7	L N=6	M N=10	H N=1	L N=13	M N=26	H N=15	L N=0	M N=6	H N=9
Home Factors															
Routine															
M	3.25	3.56	4.00	2.67	3.29	3.00	3.00	3.50	4.00	3.00	3.46	3.53	-	3.83	3.67
Range	3-4	2-4	4-4	1-4	2-4	2-4	2-4	2-4	-	1-4	2-4	2-4	-	3-4	2-4
Organization															
M	3.00	4.00	4.00	3.67	3.29	3.86	2.67	3.90	4.00	3.00	3.77	3.9	-	3.67	3.67
Range	2-4	4-4	4-4	3-4	1-4	3-4	1-4	3-4	-	1-4	1-4	3-4	-	2-4	2-4
Lack of Stress															
M	2.50	2.89	2.57	2.33	2.29	1.86	2.33	2.10	2.00	2.38	2.42	2.20	-	3.50	3.11
Range	1-4	1-4	2-4	2-3	1-3	1-3	1-3	1-4	-	1-4	1-4	1-4	-	3-4	3-4
Security															
M	2.50	3.67	3.86	2.33	2.86	2.86	2.33	3.20	4.00	2.38	3.27	3.4	-	3.83	3.67
Range	2-3	2-4	3-4	2-3	1-4	2-4	1-4	2-4	-	1-4	1-4	2-4	-	2-4	3-4
Responsibility															
M	3.00	3.00	3.57	2.33	3.00	3.43	2.00	2.90	2.00	2.38	2.96	3.40	-	3.33	3.67
Range	2-4	2-4	3-4	1-4	2-4	2-4	1-3	2-4	-	1-4	-4	2-4	-	4	3-4
Expectations															
M	3.25	3.56	3.71	3.00	3.14	3.43	3.00	3.80	3.00	3.08	3.54	3.5	-	4.00	3.89
Range	3-4	2-4	3-4	1-4	2-4	2-4	2-4	3-4	-	1-4	2-4	2-4	-	3-4	3-4
Valuing Education															
M	3.75	3.67	3.86	3.00	2.71	3.43	2.33	3.50	4.00	2.92	3.35	3.67	-	3.67	3.78
Range	3-4	2-4	3-4	2-4	1-4	2-4	1-3	2-4	-	1-4	1-4	2-4	-	2-4	3-4
Support Academics															
M	3.25	3.44	3.86	2.33	2.71	3.57	3.00	3.50	4.00	2.92	3.27	3.7	-	3.17	3.67
Range	2-4	2-4	3-4	1-4	1-4	3-4	2-4	2-4	-	1-4	1-4	3-4	-	2-4	3-4
Support School															
M	3.00	3.44	3.86	2.33	2.57	3.14	3.50	3.60	3.00	3.08	3.27	3.4	-	3.50	3.33
Range	-	2-4	3-4	1-4	1-4	2-4	2-4	2-4	-	1-4	1-4	2-4	-	3-4	2-4
Out of School Time															
Structure															
M	2.25	3.22	3.29	1.67	2.57	3.43	2.17	2.80	3.00	2.08	2.88	3.33	-	3.00	3.67
Range	2-3	1-4	2-4	1-2	1-4	3-4	1-4	1-4	-	1-4	1-4	2-4	-	1-4	2-4
Focused Activities															
M	2.50	2.67	3.29	2.67	2.71	3.71	2.17	2.30	2.00	2.38	2.54	3.40	-	3.17	3.67
Range	2-4	1-4	2-4	2-3	1-4	3-4	1-4	1-3	-	1-4	1-4	2-4	-	2-4	2-4
Reading															
M	1.50	1.67	1.57	1.00	1.86	2.14	1.50	1.60	2.00	1.38	1.69	1.87	-	1.83	2.56
Range	1-2	1-2	1-2	-	1-3-	1-3	1-2	1-2	-	1-2	1-3	1-3	-	1-3	1-3
Television															
M	2.00	1.89	1.86	2.33	2.00	1.57	2.33	2.50	2.00	2.23	2.15	1.73	-	2.00	2.44
Range	1-3	1-3	1-3	2-3	1-3	1-3	1-3	2-3	-	1-3	1-3	1-3	-	1-3	2-3

[a] Entries are mean ratings for students from low = L, middle = M, and high = H SES levels within each student category (learning disabled = LD, emotionally/behaviorally disturbed = EBD, educable mentally retarded = EMR, and nonhandicapped = NH). All factors were rated on a 4-point scale with the exception of Reading and Television, which were rated on a 3-point scale.

[b] SES data were missing for 1 EBD, 1 EMR, and 2 NH students. They are not included in this table or statistical comparisons involving SES.

Security. Significant differences were found among groups in the extent to which security characterized the child's home environment, $F(3, 69) = 5.97$, $p = .001$. Homes of NH and LD students were rated as significantly more secure than those of EBD students, and homes of NH students more secure than those of EMR students.

Significant differences in security were found for handicapped students from different SES levels, $F(2, 51) = 5.90$, $p = .005$. Homes of students from middle and upper SES levels were rated as significantly more secure than those of students from low SES level homes. No differences in security ratings were evident for NH students from middle or upper SES level.

Responsibility. Comparison of groups on the extent to which the child was encouraged to develop initiative and responsibility revealed a significant difference between groups, $F(3, 69) = 4.36$, $p = .007$. Nonhandicapped students were rated as having significantly more opportunity within the home to develop responsibility than were EMR students.

SES differences were evident for students with handicaps only, $F(2, 51) = 4.41$, $p = .017$. Handicapped students from high SES home environments had significantly more opportunity to develop responsibility than did handicapped students from low SES home environments.

Expectations. Differences among groups in the extent to which parents conveyed high, but reasonable, expectations for their child's educational and employment outcomes was found, $F(3, 69) = 3.70$, $p = .016$. Parental expectations for NH students were rated significantly higher than those for parents of EBD students. No differences in parent expectations were found for students as a function of SES level.

Valuing education. A significant difference in the degree of emphasis on the value of education emphasized in the home was found for student category, $F(3, 69) = 5.63$, $p = .002$. Parents of NH and LD students were rated as valuing education to a significantly greater extent than were parents of EBD or EMR students. No

differences were found for students with or without handicaps as a function of SES level.

Support academics. There were no significant differences among the groups of students in the degree to which practical support was available from family members for students' academic progress. In addition, no differences were found on this factor for students as a function of SES levels.

Support school. Significant differences were found among groups of students in the extent to which parents were satisfied and supported their child's school, $F(3,69) = 3.26$, $p = .027$. Parents of LD and EMR students were rated as significantly more supportive of their child's school than were parents of EBD students. No significant differences were noted as a function of socioeconomic status for students with or without handicaps.

Out of School Time Factors

Differences in ratings on 4 out of school time factors are described separately as a function of student category and SES level classification.

Structure. Significant differences were found among groups in the amount of direction or structure provided by the parent(s) for the child's use of out of school time, $F(3, 69) = 3.19$, $p = .029$. Parents of NH students were rated as providing significantly more structure than were parents of EMR students. SES differences were found for students who are handicapped, $F(2, 51) = 7.76$, $p = .001$. Homes of students from middle and upper SES groups were rated as significantly more structured than were the homes of students from the low SES group. No differences were found for NH students from middle or high SES levels.

Focused activities. Differences among groups in the extent to which students spent out of school time engaged in focused, productive activities were found, $F(3, 69) = 6.58$, $p = .001$). Nonhandicapped and EBD students were engaged in focused activities to a significantly greater extent than were EMR students. SES differences were found

for handicapped students only, F (2, 51) = 5.46, p = .007. Handicapped students from high SES home environments were involved in focused activities after school to a greater extent than were handicapped students from middle or low SES home environments.

Reading. Significant differences were found among groups in the amount of time students spent reading for pleasure, $F(3, 69) = 3.67$, p = .016. Nonhandicapped students reported spending significantly greater amounts of time in leisure reading than did LD and EMR students. No significant findings were noted in leisure reading for handicapped or nonhandicapped students as a function of SES level.

Television. No significant differences were found among students in the amount of time spent watching television. Nor were there differences for handicapped or nonhandicapped groups of students from different SES levels in the amount of time spent in out of school television viewing.

Summary of Differences in Home Ratings

Differences in the 9 home environment factors and 4 out of school time factors are summarized in Table 4. The differences in home ratings as a function of student category are primarily differences between nonhandicapped students and a handicap group. The only factor for which there was a significant difference among students not involving nonhandicapped students was parental support of school.

In general, home factors for EBD and EMR students were rated lower than for NH students. Differences in ratings of the home environments of NH and LD students were found on only one factor. LD students were rated as reading less outside of school than NH students.

SES differences were found on 3 of 9 home factors and on 2 of 4 out of school time factors, but only for students with handicaps. Consistently, the ratings for home environmental variables were lower for these students from low SES levels.

Table 4

Summary of Differences in Students' Home Environments[a]

Variable	Student Category	SES Level	
		Handicap Group	NH Group
Home Factors			
Routine	NH > EBD	-	-
Organization	-	M, H > L	-
Lack of Stress	NH > EBD, EMR	-	-
Security	NH > EBD, EMR LD > EBD	M, H > L	-
Responsibility	NH > EMR	H > L	-
Expectations	NH > EBD	-	-
Valuing Education	NH, LD > EBD, EMR	-	-
Support Academics	-	-	-
Support School	LD, EMR > EBD	-	-
Out of School Time Factors			
Structure	NH > EMR	M, H > L	-
Focused Activities	NH, EBD > EMR	H > M, L	-
Reading	NH > LD, EMR	-	-
Television	-	-	-

[a]Differences for student category (NH = nonhandicapped, EBD = emotionally/behaviorally disturbed, LD = learning disabled, and EMR = educable mentally retarded) and SES level (L = low, M = middle, H = high) are based on separate one-way ANOVAs.

Discussion

The primary purpose of this study was to describe areas of difference in home environments for three handicap groups of elementary students with handicaps and to compare home environments for handicapped students with those of nonhandicapped elementary students. While the ratings on 9 home factors and 4 out of school time factors were at the higher end of the scales for all students, differences among student groups were found. Differences in home environments emerged most often between nonhandicapped students and one or more of the handicap groups. The home environments of nonhandicapped students were rated significantly higher on 9 of 13 variables (6 of 9 home factors, 3 of 4 out of school time factors). Most often, the differences were significant for nonhandicapped students compared to students in the EBD or EMR groups; home environments of nonhandicapped students were rated higher than those of students labeled LD only on the amount of leisure time reading weekly. Differences among handicapped groups emerged on 4 variables, with LD students' home environments rated higher on three variables.

The home environment of EMR students was rated higher than the home environment of EBD students on the degree to which parental support for school policy and efforts existed. The home environment for EBD students was rated higher than the home environment for EMR students on the degree to which students participated in productive, focused activities after school hours. These differences may reflect the limited opportunities available for EMR students' participation in organized activities.

It was interesting that there were no differences in ratings on Organization, Support for Academics, or Television viewing for the four groups of students. Students' home environments did not differ on the degree to which the students lived in a safe, orderly, physical environment, support was available for completion of

academic work, or the amount of parent reported television viewing. These data may be useful in helping educators examine their beliefs about students, particularly those classified in a handicap group. We recognize that parents may have provided more positive views than typifies normal daily living patterns, and we recognize that there may be differences on these factors for individual students. At the same time, these data call into question some commonly held beliefs, such as the belief that parents of children experiencing learning and behavioral difficulties in school are unwilling to support schoolwork.

There was remarkable variability in ratings on 13 variables for all groups of students. Clearly, average home ratings are deceiving and could result in misinterpretation for specific children. While the average rating for all groups of students was between "3" (somewhat like the student's home environment) and "4" (very much like the student's home environment), the home environment for at least one student in each group was rated as "2" (not like the student's home environment) or "1" (not at all like the student's home environment). In addition, interpreting the data from a quantitative standpoint (e.g., 3.6 on Routine for EBD students) could be very misleading. A qualitative 4-point scale was used in this research and an environment rated as "somewhat like" is qualitatively different than one rated as "very much like." It is critical to examine the home environments for individual students rather than solely making generalizations from groups of students. And, any examination of the home environment should be done for the purpose of designing interventions for parents and children.

The research reported herein was conducted to be exploratory, and consequently, speculation about future research is warranted. The interrelationship of home variables for different groups of students and the possibility that a pattern characterizes students' home environments needs to be examined in future research. For example, there may be a pattern in areas of home environmental difference for

groups of students with handicaps. A pattern of chaos (indicated by low ratings on Routine, Lack of Stress, Security), and/or a pattern of disagreement or conflict with school policy (indicated by low ratings on Expectations, Valuing Education, and Support School) may be occurring for EBD students included in this investigation. Similarly, home environments for EMR students may reflect an overall pattern of low parental expectations for student success, competence or development (indicated by low ratings on Responsibility, Valuing Education, Structure, Focused Activities, Reading). Of course, to describe the home environments for different groups of students requires further study and validation.

The disproportionate number of EBD students living in single parent homes with their mothers led to the examination of differences in home environmental ratings as a function of SES levels. The distribution of the sample across SES levels and student category did not allow two-way analyses of variance to be conducted. Differences in home environmental ratings were examined separately for handicapped (LD, EBD, EMR combined) and nonhandicapped groups. No differences were found for nonhandicapped students, perhaps because no nonhandicapped students in this sample were living in a low SES environment.

Differences in home ratings as a function of SES for handicapped groups emerged on 5 variables (3 home factors, 2 out of school time factors). A consistent pattern emerged; the home environments of students with handicaps from the low SES level were rated significantly lower than the home environments of students with handicaps from high or middle SES levels on Security, Responsibility, Organization, Structure, and Focused Activities. The added strain of poverty in addition to learning problems undoubtedly contributed to these differences. The only difference in home ratings between handicapped students from middle and high SES levels was on the out of school time factor, Focused Activities. Additional

financial resources may be necessary for students to participate in, or at least be transported to, after school organized activities.

Four of the five home ratings (see Table 4) for which significant differences were found as a function of SES levels were also ratings for which differences were found as a function of student category. Organization, or the degree to which the home environment was safe and physically well organized, was a significant variable only as a function of SES. Home environments for students with handicaps from middle and high SES levels were rated as safer and better organized than home environments for students from low SES levels. Poverty clearly could help explain such a difference.

What should differences in home environmental ratings as a function of student category or SES levels say to educators? Should educators be concerned about students' home environments and home influences on students? We believe they must. Adopting a systems perspective in developing student competence means understanding, appreciating, and intervening with home and school influences. Parental involvement is a strong correlate of academic achievement (Henderson, 1988), and many individuals have argued that school psychologists are in an ideal role to work with parents (Anderson, 1983; Conoley, 1987; Graden & Christenson, 1987; Lombard, 1979). How can school psychologists help?

First, school psychologists need to be cautious about interpretations of family assessment data. It would be wrong and unhelpful to label parents as a result of interviewing them about educationally relevant aspects of the students' home environment. School psychologists need to ensure that educators understand the reciprocal influence between home and school environments. It is impossible to tease out whether the lack of security and stress in the home is causing the learning and behavior problems or whether the school learning and behavior problems are causing the lack of security and stress in the home. Searching for causes leads to

pointing the finger of blame and misrepresents the assessment data. In their article, "The Home Environment in the Assessment of Learning Disabilities," Freund, Bradley, and Caldwell (1979) discuss in detail this direction of effect phenomenon. Their conclusion, "To some extent, what we observe in the home environments of learning disabled children is a reaction to, as well as a determinant of, the children's behavior" (p. 48), should be heeded as school psychologists work with the home-school interface. It makes no sense to ignore the additional pressures and demands that a child with poor school performance places upon a family.

Second, school psychologists need to collect family assessment data for the purpose of designing family intervention or support programs. As indicated by the findings from this investigation, there are parents who need information and support in order to maximize their child's progress in school. In fact, without such consultation and supportive facilitation, one could argue that home environments contribute to differentiating students who are less successful from students who are more successful. It was an interesting finding that no differences emerged as a function of student category or SES level on the variable "Support Academics." It appears that parents, regardless of their child's school performance or home living conditions, desire their child to be successful in school. In fact, parents in this sample overwhelmingly indicated they hoped their child would complete more schooling than they really believed the child would complete. Parents in this sample of ten did not know how to assist their child in the learning process. A parent of a third grader who had been retained twice and was classified as EMR asked during the interview: "What is special education? Will my daughter learn to read? How could I help her?" It may be that all parents do not know how to convey a positive attitude in the home for learning or how to assist their child in learning activities. School psychologists need to teach parents about the process of schooling, learning, and

development. School psychologists need to work with parents so they can become partners in the educational process for their children.

Third, school psychologists, by connecting with parents to coordinate efforts for teaching students academic and social skills, can play a major role in preventing blame between home and school. A single-parent mother of a second grader classified as EBD said, "I am always the focus of what is going on at school...if he misbehaves it's because of our home life, if he doesn't make academic progress, it's because of family stress. I am bothered that they are always testing him, giving him books to read he doesn't like, and then they call me too late about his dropping grades." This statement is from a mother whose life is stressed. This mother and her children have experienced many moves, have little money, and a rough schedule. The mother works three jobs, one of which is delivering newspapers. She is determined to provide educational opportunities for her children. In fact, the money earned from the delivery of papers is paying for tutoring for her second grader. Many children live in homes that are dealing with multiple stressors. School psychologists need to support these children and their parents, or the school will only be an added source of stress.

Finally, it is essential that school psychologists recognize the impact of teachers' attitudes, attributions, and expectations for families of students with learning or behavior problems. From an ecological or systems approach to assessment and intervention, the extent and quality of communication and collaboration occurring between a teacher and parent are essential determinants of effective home-school collaboration. Working with individual families around school-related problems of students without involving the child's teacher in a collaborative process is inadequate if the goal is to empower both families and teachers to deal effectively with learning and behavior problems of students. As consultants to parents and teachers, the task for school psychologists is one of

identifying problems occurring at the "interface" between the home and school systems, and of including both parents and teachers as important resources in the resolution of students' academic or social problems at school.

School psychologists may need to provide staff development training for educators on how to form effective parent-professional partnerships. "It takes a skilled, sensitive professional to set the stage, create the rapport, and facilitate the style of interaction that will lead to comfortable parent-professional collaboration and teamwork" (Peterson & Cooper, 1989, p. 227).

We alert the reader to the fact that the data in this report easily could be misinterpreted. We have not said that certain categories of students come from specific kinds of home environments. For example, we have not said that EMR students come from home environments that are highly stressed, lack security, do not value education and learning, and so on. Nor have we said that EBD students come from home environments that are chaotic, dysfunctional, and never support school efforts, We have said that there is a reciprocal influence between home and school environments, parents can be and want to be a source of positive influence toward school learning, and school psychologists need to establish effective home-school partnerships for all students, especially those with handicaps.

Connecting with parents to integrate the goals of home and school is the basis of an ecological approach to service delivery, and has the added benefit of increasing the success of school programming (Peterson & Cooper, 1989). While intervention works best when parents and professionals are collaborating and working together toward common goals for the child, educators need to realize that coordination and collaboration does not occur magically. It is time for school psychologists to teach parents about the process of schooling, to increase parents' knowledge about ways to promote academic and social competence for their child, and to promote a cooperative home-school interface. We offer a choice: Home or School? or Home and School?

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APPENDIX A

HOME INTERVIEW

Home Interview

SID: _____

School Attended: _____

Teacher's Name: _____ (Supplied by _____)

Interviewer: _____

Person(s) Interviewed: _____

Date: _____ Duration of Interview _____

Section A: Living Situation

1. Child usually lives:

   _____with mother
   _____with father
   _____with both parents
   _____at times with mother, at times with father in separate residence

2. Number of people usually living in the home:

   _____adults
   _____brothers or sisters
   _____other children

Section B: Weekly Routine/Out of School Time

3. We want to get an idea of how _____ spends his/her days. Can you describe briefly the routine during the week? During the weekend?

4. How does he/she spend his/her time out of school time?

Activity	Notes	Approx. Number of Hours/Week
1._____		
2._____		

3._____

4._____

5._____

6._____

7._____

8._____

9._____

10._____

Probe for playing, watching television, formal lessons, supervised activities, organized sports, household chores, working outside home, homework, reading for pleasure.

5. At what age did you expect or would expect _____to be doing the following?

(a) Receive an allowance	6 7 8 9 10 11 12 13 14 15 16
(b) Choose what clothes to wear	6 7 8 9 10 11 12 13 14 15 16
(c) Act as a babysitter in someone else's home	6 7 8 9 10 11 12 13 14 15 16
(d) Sleep at a friend's home overnight	6 7 8 9 10 11 12 13 14 15 16
(e) Go on an overnight trip organized by the school or a club	6 7 8 9 10 11 12 13 14 15 16
(f) Be responsible for a regular household chore	6 7 8 9 10 11 12 13 14 15 16
(g) Wash his/her own hair	6 7 8 9 10 11 12 13 14 15 16

6. Does _____ buy books or comics to read, or bring them home, either from the local library, school library, or friend's home? If yes, how many each month?

7. Do you have time to read at home? If yes, about how many hours/week do you generally spend reading?

8. What television shows does your child watch most often? (Probe if unsure if shows are educational in context.)

9. What television shows do you watch most often?

Section C: Homework/Education

We would like to know some of you opinions about _____ 's education.

10. How much education do you want _____ to receive?

	Mother's Opinion	Father's Opinion
Leave school as soon as possible	1	1
Some high school	2	2
Finish high school	3	3
Technical training	4	4
At least some university	5	5
Graduate from university	6	6
More than one university degree	7	7
As much school as possible	8	8

11. How much education do you really expect _____ to receive?

	Mother	Father
Leave school as soon as possible	1	1
Some high school	2	2
Finish high school or, as much school as possible	3	3
High school plus technical training	4	4
At least some university	5	5
Graduate from university	6	6
Postgraduate education	7	7

12. How would you describe your child's overall school performance on the basis of his/her most recent report card?

	Mother	Father
Very good	1	1
Fairly good	2	2
Average	3	3
Fairly poor	4	4
Very poor	5	5

13. How well do you expect your child to do in school this year?

	Mother	Father
Very well	1	1
Fairly well	2	2
Average	3	3
Fairly poor	4	4
Very poor	5	5

14. How satisfied would you say you are with the school that _____ attends?

	Mother	Father
Very satisfied	1	1
Reasonably satisfied	2	2
Not really satisfied	3	3
Very dissatisfied	4	4
Don't know/don't care	5	5
Other (please explain)	6	6

15. How do you react to the following statements about _____'s school: would you strongly agree (1), agree (2), disagree (3), strongly disagree (4)?

In the school that _____ attends:	Strongly Agree	Agree	Disagree	Strongly Disagree
(a) There is enough homework.	1	2	3	4
(b) There is enough discipline.	1	2	3	4
(c) Too much time is spent on subjects such as art, music, drama.	1	2	3	4
(d) Teachers are very friendly.	1	2	3	4
(e) Teachers seem to treat all children fairly.	1	2	3	4
(f) Teachers seem to be very interested in _____ 's education.	1	2	3	4
(g) Too much time is spent on special help for children with problems.	1	2	3	4
(h) Teachers give the impressions that they want to keep parents out of the school.	1	2	3	4
(i) I get enough information from the school about how _____ is doing.	1	2	3	4

Now, how do you react to these general statements:

(j) The school is generally run well.	1	2	3	4
(k) Not enough money is spent on education.	1	2	3	4

16. At _____ 's school, from what you know, how would you rate the teaching of the following subjects :either very good (1), good (2), poor (3), very poor (4)?

	Very Good	Good	Poor	Very Poor
(a) Mathematics	1	2	3	4
(b) Reading	1	2	3	4
(c) Spelling	1	2	3	4
(d) Social Studies (history, geography)	1	2	3	4
(e) Science	1	2	3	4

17. When __ does his/her homework:

Do you sit with _____ while he/she does homework? _____
Do you tell _____ when to start? _____
Does anyone else help _____ with homework besides you? _____
Who? _____
Where is homework usually done? _____
Do you check on the homework? _____
How much time do you spend? _____

18. Do you know what _____ is learning (or has just finished doing) in reading, language, or mathematics?

19. When do you talk with the people at _____'s school?

20. Did you discuss the last report card with _____?

Section D: Life Stressors/Changes

We have some other questions to ask: (If the parent questions "why?," add: We want to know of any changes or difficult events _____ has experienced, since these sometimes affect how a child performs in school.

21. (a) Number of schools attended:_____
(b) Number of schools in since September, 1985:_____
(c) Total number of times _____ has moved:_____
(d) Number of moves since September, 1985:_____

22. Has _____ lived with any family other than yours for more than a month? _____Yes _____No. If yes:

Number of times:_____
Stayed with: Friends_____ Relatives___ Other_____
What age was your child?_____
Length of stay(s):_____
What were the circumstances?

23. Have any of these things happened in your family?

Serious illness or health concern:_____ Who?_____
Deaths:_____ Who?_____
Parental separation/marriage/new family:_____ Who?_____
Other (please explain):_____ Who?_____

24. Number of jobs of main breadwinner(s) held within the last five years?

Person_____ Number_____
Person_____ Number_____
Person_____ Number_____

Section E: Demographic

25. Give the current type of job of each adult living in the home:

Person_____ Job_____
Person_____ Job_____
Person_____ Job_____

26. What level of schooling was obtained by _____'s parents?

	Mother	Father
Less than elementary school	1	1
Finished elementary school	2	2
Some high school	3	3
Finished high school	4	4
Technical training	5	5
Some university	6	6
University degree	7	7
Higher degree	8	8

27. Is there anything else we need to know about _____?

NOTES:

APPENDIX B

RATING CRITERIA FOR HOME FACTORS

Summary Ratings

SID# _____ Date _____ Rater _____

Instructions

Rate the extent to which the following are characteristic of the student's home environment. Select one of 4 ratings: 4 means the statement is very much like the student's home environment; 3 means the statement is somewhat like the student's home environment; 2 means the statement is not much like the student's home environment; and 1 means the statement is not at all like the student's home environment. Circle only one rating.

ROUTINE

1. There is predictability and a basic routine to daily and weekly life.

   A regular schedule of daily activities exists, although this may be variable from day to day; daily life events such as getting up, going to bed, and eating meals occur at predictable times.

   4 3 2 1

ORGANIZATION

2. The physical environment of the home exhibits some order and organization conducive to the development of organizational skills relevant in the school environment.

   Materials are kept in specific locations and are grouped according to some logical system; materials can be located with reasonable ease; a schedule or pattern of maintaining a degree of neatness and order exists; materials that are out in rooms are in current use for family activities; the home is kept in reasonable repair; no health hazards are evident.

   4 3 2 1

LACK OF STRESS

3. The child's life is/has not been a stressful one.

   The child has not experienced a severe or chronic illness, deaths, a great number of moves, divorce, or significant separations from primary caregivers, or other personally stressful events.

   4 3 2 1

SECURITY

4. The family provides a secure environment for the child.

The child remains with a primary caretaker or has a very predictable and established arrangement for movement between caretakers. The caretakers are in good health and are present during much of the child's time within the home. The family is not unusually stressed by illness, sibling behavior problems, or housing, employment, or financial difficulties. The child has not moved a great deal.

4 3 2 1

RESPONSIBILITY

5. The child is encouraged to develop initiative and take responsibility for specific tasks.

The child is responsible for some household chore(s) and is expected/allowed to function independently on appropriate personal tasks; the child attends regular lessons or participates in activities that require that a specific standard of performance be attained; the child participates in an activity that requires additional task completion outside of the actual activity session.

4 3 2 1

EXPECTATIONS

6. Parents hold high, but reasonable expectations for their child's educational and employment possibilities.

The child is expected to complete the highest level of schooling that he/she is capable of and obtain employment that reflects that level of schooling.

4 3 2 1

VALUING EDUCATION

7. There is an emphasis on the value of education within the home.

The parent's are involved in the child's educational/learning activities; reading is encouraged through the parent's example and through encouragement of the child; the child's school work is displayed in the home; discussions are held with the child regarding the importance of education.

4 3 2 1

SUPPORT ACADEMICS

8. There is practical support available for academic progress.

The parent communicates regularly with the school, the parent provides assistance with homework, the child is structured to read or do academic work at home, reasonable bedtimes are enforced, parents are knowledgeable about their child's current school tasks.

4 3 2 1

SUPPORT SCHOOL

9. The parents are supportive of the child's school.

Parents express overall satisfaction with the school administration, although they may disagree with specific policies; parents communicate with the school.

4 3 2 1

APPENDIX C

RATING CRITERIA FOR OUT OF SCHOOL TIME FACTORS

Out of School Time Factors

Structure

Direction or structure is provided by the parent for out-of-school time.

The parent is knowledgeable about how the child spends his/her time. The child's time is spent in a broader variety of activities than simply play or T.V. watching. The parent provides guidance or structure for how the child's time is spend to ensure a variety of experiences. This may be reflected in participation in organized activities, but not necessarily.

4 3 2 1

Focused Activities

The child is involved in productive, focused activities.

The child's out of school time is spent in activities that are productive or focused. Productive or focused activities will have some elements of: learning, task completion, practicing, performing, competing, achievement of skills, have a clear focus or result in products. Such activities may be adult-run or initiated by the student, a group or other individual.

4 3 2 1

Reading

The amount of reading will be reflected in the number of hours a week reported for pleasure reading, the number of books brought home, and comments about books read that are owned by the family.

Consider comments and your impressions as to whether the child actually reads the books.

As a guide, a sample of the responses found the average number of books brought home to be 6 (range of 0-20), with 4-6 most commonly reported. The number of hours "reading for pleasure" was reported to range from 0-9, with an average of 3 hours.

3	2	1
a lot	moderate	little

Television

The amount of time will be reflected in the number of hours/week reported. As the time estimates cannot be relied upon completely, consider also comments under "routine" for the number of hours/week the child spends watching T.V. To help guide you on a sample of the responses, the range of hours was from 0-25 and the average number of hours was 11 hours per week.

3	2	1
a lot	moderate	little

IAP PUBLICATIONS

Instructional Alternatives Project
350 Elliott Hall
University of Minnesota
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Minneapolis, MN 55455

Research Reports

No. 1 Time allocated to instruction of mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students by J. E. Ysseldyke, M. L. Thurlow, S. L. Christenson, & J. Weiss (March, 1987).

No. 2 Instructional tasks used by mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students by J. E. Ysseldyke, S. L. Christenson, M. L. Thurlow, & D. Bakewell (June, 1987).

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No 8 Regular education teachers' perceptions of instructional arrangements for students with mild handicaps by J. E. Ysseldyke, M. L. Thurlow, J. W. Wotruba, & P. A. Nania (January, 1988).

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No. 13 Teacher stress and student achievement for mildly handicapped students by D. Bakewell, S. R. McConnell, J. E. Ysseldyke, & S. L. Christenson (August, 1988).

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No. 14 A case study analysis of factors related to effective student-teacher ratios by J. E. Ysseldyke, M. L. Thurlow, J. G. Shriner, & C. S. Propsom (August, 1988).

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