Rural Special Education Placements: 
Stability and Change

Douglas W. Halgren\(^1\)
Harvey F. Clarizio\(^2\)

Michigan State University

ABSTRACT

A three year catch-up prospective study of 654 rural special education (SE) students was conducted to determine what proportion had a change in classification and/or programming and what factors were associated with change. The study, which represents the first major effort to address the issue of stability and change among special education students in rural areas, included all handicapped students from preschool through secondary school. Information was gathered through a record review and parent survey.

Change was found to be more common than is generally perceived, as 38.2% of the students had a classification change (21.9% by termination and 16.3% by reclassification). Changes in the type of program occurred for 32.8% and time in special education occurred for 71.2% of the students in classroom programs. Rates of changes varied significantly between classifications. Bivariate analysis revealed that initial grade level and comorbidity were significantly related to classification and programming changes. In addition, student IQ, gender and multidisciplinary (MDT) member consistency were significantly related to programming changes. The student’s initial classification was significantly predictive of change in classification and programming while IQ and MDT special education teacher membership consistency were significant predictors of change in programming.

INTRODUCTION

Use of yearly cross-sectional estimates as provided in the Annual Reports to the Congress (e.g., U.S. Department of Education, 1989) impedes our knowing whether an increase in the special education (SE) population arises from more children being identified or fewer terminated. Relatedly, an increase in one disability (e.g., learning disability) might stem from the identification of new pupils or from reclassification of youngsters from other disability categories (e.g., emotionally disturbed). This gap in the data makes it very difficult to assess the nature of change with the SE population. Knowing that the number of children in special education has increased does not inform us whether fewer students have been terminated or more have been identified and placed.

To date, only two major studies have addressed the issue of what proportion of school age students remain in SE. Walker, Singer, Palfrey, Orza, Wenger, and Butler (1988) studied 1829 SE students in elementary school in three urban district during a two-year period. Investigating both mildly and severely handicapped students, they found that changes in classification (either termination or reclassification) were highly related to the initial primary handicapping condition. Children who were speech and language impaired (SLI) showed the greatest amount of change (54%). Other categories showing considerable change included the learning disabled (LD) (21.5%), the emotionally impaired (EI) (23.2%), and the physically/multiply handicapped (25.2%). Wolman, Thurlow, and Bruininks (1989) investigated the rate of classification change with mildly impaired tenth, eleventh, and twelfth grade suburban students who had received at least two years of SE services. Consistent with the findings of Walker et. al. (1988), these researchers found that being initially classified as speech and language impaired was closely associated with classification change (66%). Other classifications showed considerably less change: LD 18%, educable mentally impaired (EMI) 14%, and EI 4%. The present study extends the works of Walker and Wolman (1988) by (a) investigating rural SE students,

\(^1\)Douglas W. Halgren is a psychologist in the Cheboygan-Otsego-Presque Isle Intermediate School District, Gaylor, MI 49735.

\(^2\)Harvey F. Clarizio is a Professor in the Department of Counseling, Educational Psychology and Special Education, Michigan State University, East Lansing, MI 48824.
(b) extending the grade levels examined from preschool through secondary school, (c) studying the amount or frequency of service, (d) determining the relationship between changes in the MDT staff and eligibility/programming, and (e) using individually administered measures of intelligence and achievement rather than group measures.

**METHOD**

**Subjects**

Six hundred fifty-four students from 10 rural school districts comprising a tri-county or intermediate school district (ISO) in a Great Lakes state were identified as handicapped by state guidelines which are modeled closely after the federal guidelines. These 10 districts ranged in student population from 200 to 2775 students with a median of 699 students. Following the lead of Hughes and Clark (1981), a rural school district is defined as one with less than 3000 students. Rank ordering the 574 districts in the state from richest (#1) to poorest (#574), the median ranking for the 10 districts in this study was 489, with a range from 377 to 569. The average federal adjusted gross income for the state was $20,452 in 1984. The median adjusted gross income for the 10 districts was $15,745 with a range from $12,257 to $18,530. The median number of students per square mile was 3.5. Table 1 indicates the primary classification of students who were receiving special education services during the 1984-85 school year and were followed through the 1987-88 school year. The SLI group included children with articulation, voice, and/or fluency impairments which interfere with effective communication. Test results on not less than two standardized tests or subtests were used to determine the appropriateness of language functioning. The LD category includes those with a disorder in one or more of the basic psychological processes (e.g., memory, attention) involved in understanding or using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or to do mathematical calculations. A severe discrepancy between ability and achievement must be manifested (e.g., a 15 point disparity between an IQ score and an achievement score in basic reading skill). The EI classification refers to the manifestation of behavioral problems primarily in the affective domain, over an extended period of time, which adversely affect the student's education. Typical characteristics include unsatisfactory interpersonal problems, a general pervasive mood of unhappiness or depression, physical symptoms or fears, or inappropriate behavior or feelings under normal circumstances. The EMI include those whose mental development is approximately two to three standard deviations below the mean (typically IQ between 50 and 70), achievement in reading and arithmetic which falls within the lowest six percentiles on a standardized test, and impairment in adaptive functioning. The SMI category includes students whose mental development is at least three standard deviations below the mean on an individually administered IQ test and impairment in adaptive behavior. The sensory motor (SM) classification was a compilation of visually impaired, hearing impaired, and physically and otherwise health impaired students.

The sample consisted of the identified and placed special education students who had not graduated from school prior to the end of the 1987-1988 school year. Identified students who transferred into the rural ISO were included when there was pertinent data on file for the time period of the study. The subjects were white (N=639) except for 2.3% (N=15) who were American Indian. No other racial groups were represented. Of the 654 handicapped students, 90 (13.8%) were at the preschool level, 435 (66.5%) at the elementary school level, and 129 (19.7%) at the secondary school level at the time of initial placement. Two-thirds of the subjects were males and one-third females. Thirty-six percent of the subjects were poor enough to qualify for a free lunch or a reduced-price lunch, in accordance with federal income guidelines.

**Procedures**

A catch-up prospective design which combines elements of the follow-up and retrospective designs was used. Like the follow-up study, the sample is identified at time 1, but differs in that the data have already been collected and reside in existing records. It also has the obvious advantage of the retrospective study, namely, elimination of the waiting period between times 1 and 2. The main potential disadvantage has to do with the quality and extensiveness of the existing records. Bolstered by State Department of Education monitoring, the federal requirements that (a) tests be valid for the purpose in which they are used, and (b) all handicapped students be re-evaluated at least once every three years enhance assurances that the files are not only current but represent the most accurate set of data available for each student.

The school records were reviewed with particular attention given to the Individual Education Plan (IEP)
and the Multidisciplinary Educational Team (MET) reports. These records included both individual student files and records which had been stored on microfiche. Twenty-five records were selected randomly for re-examination. This reliability procedure found no discrepancies in the investigators' recording of the original data.

Specific information was gathered with regard to classification (diagnosis), type of service, and frequency of service during the 1984-1985 school year. Specifically, the data gathered from the files included: gender, initial grade level, local school district, initial primary handicapping classification, number of concurrent classifications, whether therapy was received and the type of therapy, whether consultative or classroom services were received and the type of service received, and the total number of minutes in therapy and classroom services each week. Both initial IEPs (1984-85) and subsequent IEPs through June, 1988, were reviewed with the same information gathered. Comparisons of the data were made to determine any changes that had occurred in the classification (terminated, reclassified, same) or programming (frequency and type) areas since the time of the 1984-1985 school year. Other information collected from the files included the results of IQ (initial and follow-up results) and achievement tests (follow-up results) which had been individually administered.

The present study addressed two general questions:

Question I: What proportion of rural SE students have a classification (diagnosis) and/or program (type and frequency of service) change after a minimal interval of three years in special education?

Question II: What factors (school, family and child) are related to changes in classification and programming for rural special education students?

**Statistical Analyses**

To synthesize and summarize the information for the students reviewed, two approaches were employed, descriptive and inferential statistics. Descriptive statistics (means, frequencies, and cross tabulations) were used to aggregate the information across cases and to present the percentages of children who experienced different outcomes according to their family, school and student characteristics. The Chi Square test statistic was used to examine whether the obtained proportions of change differed significantly between groups. In addition, an analysis of variance (ANOVA) was used to investigate whether there were significant differences among the means of several independent factors.

**RESULTS AND DISCUSSION**

**Students leaving the district**

First, 6.4% of the handicapped students moved out of the ISD area. Although the rates of moving out of the district varied between initial classifications, the percentage did not differ significantly ($t = 7.98; p=.158$). The two most mobile diagnostic classifications were the SLI (9.5%) and the EMI (9.7%) students. Within the moderately mobile range were LD (5.7%), EI (4.8%) and SM (5.1%) students. The least likely to leave the ISO was the SMI (1.3%) student. An additional 2.6% dropped out of school or died during the interval. The overall percentage of SE students leaving this rural ISD (9%) is consistent with the overall percentage of 7% reported by Walker et. al. (1988).

**Students Terminated From Special Education**

As seen in Table 1, the overall percentage of change by termination across all classifications was 21.9%. The decision to terminate was made by the individualized educational planning committee following a comprehensive evaluation conducted by the MDT. Unlike leaving the school system, termination from special education services was strongly correlated with the child's initial classification. The most frequently terminated were the SLI (55%), followed by SM (11%), LD (10%), and EI (5%). None of the EMI or SMI students were terminated during the study. The above amount of change was similar to Walker et. al. (1988) who found a 17.2% termination rate over a two-year period and that of Raber and Frechtling (1985) who found a 13% termination rate for preschoolers over a three to nine year period. Although the termination rates within the SLI groups varied between this study
Table 1
Special Education Status in Spring 1988 by Initial Handicap

<table>
<thead>
<tr>
<th>Initial Handicap</th>
<th>Terminated (%)</th>
<th>Reclassified (%)</th>
<th>No Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLI 1984-85</td>
<td>54.7</td>
<td>22.9</td>
<td>21.9</td>
</tr>
<tr>
<td>LD 1984-85</td>
<td>10.0</td>
<td>11.4</td>
<td>74.6</td>
</tr>
<tr>
<td>EI 1984-85</td>
<td>5.0</td>
<td>16.7</td>
<td>66.7</td>
</tr>
<tr>
<td>EMI 1984-85</td>
<td>0.0</td>
<td>39.3</td>
<td>60.7</td>
</tr>
<tr>
<td>SMI 1984-85</td>
<td>0.0</td>
<td>5.1</td>
<td>94.9</td>
</tr>
<tr>
<td>S/M 1984-85</td>
<td>10.7</td>
<td>14.3</td>
<td>73.2</td>
</tr>
<tr>
<td>ALL</td>
<td>21.9</td>
<td>16.3</td>
<td>59.1</td>
</tr>
</tbody>
</table>

x² (5df) = 181.09
P≤ .0001

NOTE: Some percentages do not equal 100 due to rounding.

SLI = Speech and language impaired
LD = Learning disabled
EI = Emotionally impaired
EMI = Educable mentally impaired
SMI = Severely mentally impaired
S/M = Sensory motor impaired

(55%) and the Harvard study (33.1%) (Walker et. al., 1988), the two studies both found SLI to be the most fluid special education category across rural and urban settings. SLI is a relatively innocuous label that is less stigmatizing than other labels (e.g., EI). Future research which addresses type of SLI problems, severity, comorbidity, and motivations for using this label should provide greater insights into the reasons for the high termination rates found for this SE category. The LD and EI students in this study were somewhat less likely to be terminated (10% and 5%, respectively) as was true in the Harvard study (14.9% and 9.1%, respectively). Fassbender's study (1986) of 122 EI students found a 10% termination rate over a ten year period. Wolman et. al. (1989) and colleagues did not address classification changes by termination.

Students Reclassified in Special Education

Students were less frequently reclassified (16.3%) than terminated (21.9%). The only category for which termination rates exceeded reclassification rate was SLI. The most frequently reclassified SE students were EMI students (39%) and SLI students (23%). Moderate rates of reclassification were noted for EI students (16.7%), SM (14.3%) and LD (11.4%). Few SMI students were reclassified (5.1%). Differences in rate of reclassification are strongly related to initial classification (x² = 27.56; p ≤ .0001).

The overall reclassification rate (16.3%) in this rural ISD was slightly higher than those found by the Harvard group (12.3%) in urban areas but lower than those reported by Wolman et. al. (1989) (24%) in suburban areas. Classification rates for specific disabilities range widely across studies (Fassbender, 1988; Raber & Frechtling, 1985; Walker et. al., 1988; Wolman et.al., 1989). For SLI students, the rates ranged from 20% to 66%, for LD students from 6.6% to 18%, for EMI students from 7.7% to 39.3% and for EI students from 4% to 38.8%. The only conclusion permitted is that there appears to be great variability in reclassification rates for specific disabilities across studies.

Two areas merit further analyses and comment. Despite the fact that only 31 of the 654 students in this study were initially classified as EMI (less than 5%), these students experienced the highest rate of change,
with 24.1% being reclassified as SMI, 10.3% as LD and 3.4% as EI. Given the high percentage of EMI children being reclassified as SMI, it appears that MDT might be inclined to place the less stigmatizing label of EMI on young children who are borderline between EMI and SMI. As abstract language and conceptual knowledge become more of a focus of evaluation, the severe nature of their mental handicap might well become more apparent. Whatever the explanation, finding the highest rate of reclassification among the lowest prevalence category in this study is indeed intriguing. While approximately two of five EMI students are reclassified over a three year period, only 5% of SMI students experience reclassification over a similar time frame, rendering them the least fluid special education category (χ² = 19.79; p ≤ .0001).

The SLI students were reclassified as follows: 14.1% to LD; 5.7% to EI; and 2.6% to EMI. When reclassified, these students tend to require more intense services than students who were not originally SLI. This finding suggests that it would be wise for MDT members to be more aware of the need for possible early and intensive intervention. It seems the majority of SLI can be sorted into two groups which differ in severity. By far the larger of the two groups consists of students with mild SLI problems who are terminated (55%) within a three year period. There is also another group with severe SLI problems and/or other handicap who are eventually reclassified (23%) and receive more intensive programming. The present study does not tell us whether we can reliably differentiate between these two groups. In any event, only 21.9% of SLI students experience no change in their handicapped status over a three-year-period. The next most fluid special education consists of EMI pupils, 60.7% of whom experience no change in their handicapped status over a comparable time period.

In sum, one finding about classification changes (both termination and reclassification) is clear. A considerable amount of change occurs with special education over time in rural settings. These changes are most pronounced among SLI students occurring in almost four out of five so identified. These changes also happen with regularity in other mildly handicapping conditions. Almost two out of five EMI students undergo reclassification within a three-year period. Generally speaking, more than one out of five LD and EI experience a change in classification. Even change within what is considered the more severe, low incidence SM handicaps is not uncommon, affecting one of every four students. Classification change is, however, very infrequent among SMI students, affecting only one in twenty students so afflicted. All in all, change in the classification of SE students appears to be far greater than what many special educators and school psychologists perceive. This finding holds true across urban, suburban and rural communities.

### Programming Changes

There was significantly more change in the type of programming as compared to classification (χ² = 58.64; p ≤ .0001). The type of service (consultant, resource room, categorical room placements) changed for 32.8% of the students and frequency of service changes occurred for 71.2% of the students after an interval of three years in special education. The degree of restrictiveness of program remained the same for two-thirds of the students. Of these, the SMI students showed no change as they were consistently found in full-time categorical programs. Of the approximately one-third who experienced a change in the type of program, there was a greater percentage moving into a more restrictive program (19.2%) than moving into a less restrictive program (13.9%). When there was a change in type of program, the EMI, SLI, and SM students received more restrictive programming, while LD and EI students received less restrictive programming over time. There were significant differences between initial classifications in the percentage of students whose program restrictiveness remained the same (χ² = 52.87; p ≤ .0001) or increased (χ² = 48.84; p ≤ .0001). One of the other studies (Edgar, Heggelund & Fischer, 1988) to address the issue of restrictiveness confirmed the present study's finding that SLI and EMI students moved to more restrictive programs but did not confirm the present findings regarding type of change experienced by LD, EI, SMI, and SM students. The disagreements between the two studies are difficult to interpret because the students in the Edgar et.al. (1988) study began in regular education placements, while the restrictiveness of placements varied for students in the present study.

There were also significant differences in the amount of time spent in SE service related to the initial classification of students (χ² = 207.26; p ≤ .0001). Of the SE students who were not terminated, only 28.8% received the same amount of service over time. Those with changes were fairly evenly divided between those receiving more (39%) and less (32.2%). For the EI and LD groups, nearly as many received less service as received more service over time. On the other hand, EMI, SLI and SM received more time in SE programs...
Table 2
Special Education Programming In Spring of 1988 by Initial Handicap

<table>
<thead>
<tr>
<th>Initial Handicap</th>
<th>Type Frequency</th>
<th>Spring 1988 Programming for Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>less %</td>
<td>same %</td>
</tr>
<tr>
<td>1984-85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLI</td>
<td>3.4</td>
<td>49.4</td>
</tr>
<tr>
<td>LD</td>
<td>25.1</td>
<td>64.0</td>
</tr>
<tr>
<td>EI</td>
<td>26.0</td>
<td>62.0</td>
</tr>
<tr>
<td>EMI</td>
<td>7.1</td>
<td>67.9</td>
</tr>
<tr>
<td>SMI</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>S/M</td>
<td>6.0</td>
<td>60.0</td>
</tr>
<tr>
<td>ALL</td>
<td>13.9</td>
<td>66.9</td>
</tr>
<tr>
<td>( \chi^2 ) (5df)</td>
<td>48.84</td>
<td>52.87</td>
</tr>
<tr>
<td>( P )</td>
<td>.0001</td>
<td>.0001</td>
</tr>
</tbody>
</table>

NOTE: Some percentages do not equal 100 due to rounding.

SLI = Speech and language impaired
LD = Learning disabled
EI = Emotionally impaired
EMI = Educable mentally impaired
SMI = Severely mentally impaired
S/M = Sensory motor impaired

over time than less. Raber and Frechtling (1985), who followed kindergarten identified students for three to four years, found similar overall rates of change with respect to restrictiveness. Other studies do not consistently confirm the present findings regarding changes in restrictiveness vis-a-vis specific SE categories (Raber & Frechtling, 1985; Travis, Thomas & Fuller, 1985).

Question II: What factors are related to changes in classification and programming for rural special education students?

Factors Related to Change in Classification or Programming

School Factors. Initial grade level was a significant factor related to changes in classification (\( \chi^2 = 21.14; p \leq .0003 \)), type of service (\( \chi^2 = 32.63; p \leq .0001 \)), and frequency of service (\( \chi^2 = 48; p \leq .0001 \)). Reclassification occurred at the lowest rate at the secondary level (22%) and at higher comparable rates at the elementary and preschool levels (43%). That is, classification changes occur twice as often at the preschool and elementary school level compared to the high school level.

Programming, both type and frequency, also becomes more stable with increasing grade level (\( \chi^2 = 7.2; p \leq .027 \)). Of those changing, preschoolers more often moved to more restrictive programs (89%) and more time in SE. Secondary students more often move to less restrictive programs (79%) (\( \chi^2 = 22.5; p \leq .001 \)) and less time in SE (\( \chi^2 = 19.0; p \leq .001 \)).

Personnel changes in the makeup of the MDT between three year re-evaluations were associated with changes in programming with respect to type of service (\( \chi^2 = 15.62; p \leq .001 \)) and frequency of service (\( \chi^2 = 8.14; p \leq .004 \)) but not associated with rates of change in classification (\( \chi^2 = 2.76; p \leq .097 \)).
Child Factors. The number of concurrent classifications was found to be significantly related to change in classification ($x^2 = 23.25; p \leq .001$), type of program ($x^2 = 21.41; p \leq .001$) and frequency of service ($x^2 = 43.66; p = .001$). The rate of classification decreased from 44.3% for students with a single classification to 21.8% for students with two or more classifications.

The nature of change (reclassification or termination) was also significantly ($x^2 = 34.317; p \leq .001$) related to number of concurrent classifications. Students with a single classification were more likely to be terminated (64.4%) than reclassified (35.6%). Students with two or more classifications, on the other hand, were much more likely to be reclassified (93.1%) than terminated (6.9%). With respect to type of program change, students with a single classification changed more often than students with two more classifications (39% versus 17.6%). For the amount of service, the mean number of minutes of services at the time of follow-up was 677, 1032, and 1541 for students with one, two and three or more classifications, respectively ($F = 32.7; p \leq .001$). The increased frequency of time in SE for students with more than one classification is consistent with the view that comorbidity is an indicator of severity (Clarizio, 1990).

Among the other child factors (gender, IQ, current achievement in reading, written language and mathematics), the student’s IQ was significantly related to changes in classification ($F = 8.25; p \leq .001$) and type of service ($x^2 = 28.9; p \leq .001$). Lower IQ’s were related to receiving more restrictive programming and more time in special education, while higher IQ’s were related to receiving less restrictive programming and less time in special education. IQ’s below 80 or above 90 appear to be signals that changes in classification and type of service are likely in the SE child’s future. Reclassification occurs more frequently among those with IQ’s below 90 and termination is associated with higher IQ.

Gender was also related to programming changes ($x^2 = 5.22; p \leq .02$) in that males were more likely to move toward less restrictive settings and reduced time in special education. Although more males were placed in SE, it may be that the females placed are more severe, and thereby given more time in SE.

School achievement, when analyzed continuously, showed significant relationships between student classification changes and reading ($F = 5.52; p = .005$), mathematics ($F = 14.55; p \leq .001$) and written language ($F = 5.76; p = .004$). This latter finding is consistent with the Wolman et. al. (1988) study which found reading achievement predictive of categorical change by reclassification in suburban areas.

Factors Unrelated to Change in Classification and Programming

Family Factors

Socioeconomic status, as measured by family income, was not significantly related to changes in classification ($x^2 = .22; p = .64$) or programming type ($x^2 = .68; p \leq .41$). It is reassuring to note the absence of a socioeconomic bias with respect to classification and programming changes.

Parental satisfaction, as measured on a global basis, was the second family variable found to be unrelated to change in either classification ($x^2 = .69; p = .41$), programming type of service ($x^2 = .01; p = .91$) or frequency of service ($x^2 = 1.52; p = .22$). Of the students experiencing a change in programming, parental satisfaction was not related to restrictiveness of the setting ($x^2 = 1.94; p = .50$). The Harvard study, in contrast to this study, found satisfaction to be a significant factor related to classification (Walker, et.al., 1988). It is possible that focus on global change rather than specific assessment of changes in classification and programming obscured relationships between parental satisfaction and SE services. Also, finding a relationship between parental satisfaction and educational programming in urban areas may be enhanced by the availability of more educational options than typically exist in rural areas.

School size, classified as large, medium and small in accordance with the state High School Athletic Association criteria, was found to be unrelated to classification changes ($x^2 = 1.02; p = .60$) or type of service changes ($x^2 = .02; p = .89$).

SUMMARY AND CONCLUSIONS

To address the general question of the stability of SE services in rural areas, 654 SE students from 10 school districts were followed over a three year period. More than one of five SE students were terminated and about one in six were reclassified within a three year period yielding a total rate change of 38.2% with regard to classification changes. Highly significant classification differences were found in the rate of change. Consistent with previous studies conducted in nonrural settings, SLI students were most likely to change while SMI students were least likely to change. Of particular interest was that more than one in five of the mildly impaired (EI, EMI, LD) and the S/M students had a change in classification. Changes in programming
were more frequent, as 32.8% of the students had a change in type of program and 71.2% had a change in the amount of time in special education. The rate of change again significantly varied between classifications.

Initial grade level and comorbidity were significantly related to classification and programming changes. In addition, student IQ, gender, and MDT consistency were significantly related to programming changes. The students' initial classification was significantly predictive of change in classification and programming while IQ and MDT special education teacher consistency membership were significant predictors of change in programming.

Various limitations of the present study should be noted. A major limitation has to do with the unreliability of the special education criteria in determining handicapping classifications. As would be expected, there is debate about reliability of the classifications at the individual, school district, state, and national levels. This unreliability would limit the degree to which the results would generalize to other districts. Despite their unreliable nature (Singer, Palfrey, Butler & Walker, 1989), MDT decisions constitute, nonetheless, a defensible and reasonable criterion because eligibility and placement decisions are based on them as required by PL 94-142.

Second, certain of the measures may not be refined enough to capture the full essence of the construct being assessed. For instance, socioeconomic status was operationally defined by whether the child received a free lunch or lunch at a reduced price. Parental educational measures were not readily available and attempts to secure this information were too labor intensive to make this feasible.

Finally, although all available cases within the tri-county ISD area were analyzed, this study was limited to a rural white area of a midwestern state. The generalizability to urban, suburban and multiracial areas is questionable.

REFERENCES


