

DOCUMENT RESUME

ED 269 955

EC 182 741

AUTHOR Ysseldyke, James E.; And Others
TITLE An Ecological Study of School Districts with High and Low Preschool Screening Referral Rates. Early Childhood Assessment Project Research Report #6.
INSTITUTION Minnesota Univ., Minneapolis.
SPONS AGENCY Special Education Programs (ED/OSERS), Washington, DC.
PUB DATE Oct 85
GRANT G008400652
NOTE 30p.; For other reports in this series, see EC 182 736-740.
PUB TYPE Reports - Research/Technical (143)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Disabilities; *Early Childhood Education; *Referral; *Socioeconomic Influences

ABSTRACT

An ecological study was conducted to investigate social, economic, and political factors that influence referral rates following early childhood screening. Telephone interviews were conducted with school personnel from 17 school districts directly involved in the screening and referral process. Subjects (6 early childhood teachers, 3 preschool coordinators, 3 school nurses, 2 directors of special education, 1 superintendent, and 2 other persons fulfilling various dual roles) were asked to describe the variables in their particular community that either contributed to or impinged upon the referral rate. Results suggested that there are no obvious factors clearly associated with referral rate. Preschool coordinators generally cited similar factors regardless of their system's referral rate. Alternative hypotheses are generated to explain these findings. (Author/CL)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED269955

 **University of Minnesota**

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
 Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

RESEARCH REPORT #6

**AN ECOLOGICAL STUDY OF SCHOOL DISTRICTS WITH
HIGH AND LOW PRESCHOOL SCREENING
REFERRAL RATES**

James E. Ysseldyke, Martha L. Thurlow, Jill A. Weiss
Camilla A. Lehr, and Robert A. Bursaw

EARLY CHILDHOOD ASSESSMENT PROJECT

October, 1985

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

J. Ysseldyke

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

EC182741

Abstract

An ecological study was conducted to investigate social, economic, and political factors that influence referral rates following early childhood screening. Telephone interviews were conducted with school personnel directly involved in the screening and referral process. Subjects were asked to describe the variables in their particular community that either contributed to or impinged upon the referral rate. Results suggested that there are no obvious factors clearly associated with referral rate. Preschool coordinators generally cited similar factors regardless of their system's referral rate. Alternative hypotheses are generated to explain these findings.

The development of this report was supported by Grant No. G008400652 from Special Education Programs, U.S. Department of Education. Points of view or opinions stated in this report do not necessarily represent official position of Special Education Programs.

An Ecological Study of School Districts with High and Low Preschool Screening Referral Rates

James E. Ysseldyke, Martha L. Thurlow, Jill A. Weiss,
Camilla A. Lehr, and Robert A. Bursaw

The implementation of the Education for All Handicapped Children Act (P.L. 94-142) has been an impetus behind the emergence of widespread screening programs to identify handicapped or at-risk school children. The state of Minnesota has been a pioneer in this effort. It has offered a comprehensive screening program to all children younger than kindergarten age since 1977 (Lombard, 1980). However, despite legal and financial support, school systems have faced the challenge of trying to develop effective screening practices in the absence of specific state guidelines recommending the assessment tools, procedures, and personnel to be utilized. The Preschool Screening Law (MS 123.701) sets up the general framework mandating the inclusion of the following screening components: vision, hearing, developmental, height/weight, and summary interview with parent. But it is up to the discretion of individual school districts to determine the actual testing instruments and assessment procedures to be employed. The result within Minnesota has been somewhat heavy reliance on a limited number of screening instruments in some areas, and yet substantial diversity in how children are diagnosed as handicapped (see Ysseldyke, Thurlow, O'Sullivan, & Bursaw, 1985).

In a previous study of most of Minnesota's screening and assessment programs for identifying students with exceptional needs (Thurlow, Ysseldyke, & O'Sullivan, 1985), a principal finding was that

wide variation exists in the percentage of children referred for further diagnostic evaluation following a district-wide screening process. Analysis of the data from state screening forms indicated that the referral rate in 1982-83 ranged from a low of 0% to a high of 85.7%, with an average referral rate of 24.4% (SD = 16.1). Referral rates at the elementary school level appear to be much lower. For example, Algozzine, Ysseldyke, and Christenson (1983) found that in 1979-80, the average rate nationwide was 4.5% of the school-age population. Analyses of constraints and pressures on the referral process in elementary schools (Christenson, Ysseldyke, & Algozzine, 1982) indicated that organizational factors, such as the perceived competence of referral recipients, and availability of services were common limiting factors on referrals while outside agency influences, federal or state requirements, and concerns of parents often worked as pressure factors encouraging referrals. The extent to which similar or other factors might influence preschool referrals has not been examined.

Considering that over 45,000 preschoolers were screened in 1982-83, the variables related to exceptionally high or low referral rates may have critical impact on the educational experiences of thousands of children. The extent to which various components of the screening process, as well as social, economic, and political issues, influence the rate of referral must be examined. An initial factor analysis of state demographic data and examination of the relationships among these factors and referral rates (see Ysseldyke &

O'Sullivan, 1985) indicated that broad social, economic, and educational factors accounted for only 3% of the variance in referral rates. It is clear that more in-depth investigation is needed on variables that might be related to referral rates. Further, it is important to study preschool coordinators' perceptions of the referral rates of their own screening programs. To explore these issues, interviews of coordinators of preschool screening programs were conducted.

The present interview study was designed to examine both (a) the extent to which different variables seem to be related to high and low referral rates in school districts, and (b) preschool coordinators' perceptions of the referral patterns in their districts, and possible reasons for them. An ecological perspective was reflected in the specific areas of discussion during the interviews: (a) procedures for informing the public, (b) professional background of decision makers, (c) characteristics of "front-line" personnel, (d) screening instruments, (e) diagnostic process, (f) differences in procedures for mildly and severely handicapped children, (g) availability of programs, and (h) factors believed to influence referral rates. The possible variables were studied in detail among a few high referral and low referral programs, in order to help us understand the wide differences in screening outcomes that exist statewide.

Method

Subjects

An initial step in this investigation was the analysis of 1982-83 referral data from 402 school districts. The referral rates of these

districts were rank ordered (range = 0 - 85.7%); districts that might have spuriously high or low referral rates (i.e., districts screening fewer than 25 children and districts with 0% referral rates that screened less than 100 children) were eliminated. From the remaining districts (n = 305), the 25 with the highest referral rates and the 25 with the lowest referral rates were identified.

From among these districts, an attempt was made to select pairs of high and low districts within the same geographic areas. In addition, an attempt was made to include both districts with high overall referral rates and districts with high developmental referral rates (the two were not always the same). Similarly, because several of the low referral rate districts had 0.0% referral rates, an attempt was made to include both districts with 0.0% referral rates and districts with referral rates greater than 0.0%, but still low.

Twenty-two school districts were contacted. Agreement to participate was obtained from 17 school personnel who were involved with the early childhood special education screening and referral process in their districts. Initially, attempts were made to contact preschool coordinators in charge of organizing their districts' screening and early childhood special education programs. However, in most cases, a person solely designated as "preschool coordinator" was not found. Instead, the role was assumed by school personnel with other duties. In the present study, the subjects included six early childhood teachers, three preschool coordinators, three school nurses, two directors of special education, and one superintendent. The other

two respondents fulfilled dual roles, such as acting as preschool teachers and coordinators.

Of the 17 school districts included in the final sample, eight were considered to be high referral districts and the other nine were low referral districts. The average referral rate overall for the high referral districts was 54.1% and for the low referral districts was 2.2%. When only developmental referral rates were considered (i.e., height, weight, physical, vision, and hearing were excluded), the average rate for high referral districts was 29.1% and for low referral districts was 0.7%. A summary of the characteristics of the final sample of school districts is included in Table 1.

Materials

An interview format was developed to obtain information about school district screening and referral processes and to identify variables that might be related to high and low referral rates. Questions dealt with: (a) steps from screening to referral, (b) descriptions of special education early childhood programs and populations served, and (c) factors that might contribute to high and low referral rates. An outline of the interview format is provided in the Appendix.

Procedure

Subjects were contacted by telephone and asked to participate in a tape-recorded telephone interview. A copy of the interview questions was sent to participants to aid in preparation prior to the

Table 1
 Characteristics of High and Low Referral Districts

District	Region	N	Overall Referral %	Developmental Referral %
High Referral				
A	SW	26	61.5	50.0
B	SE	51	56.9	37.3
C	SW	32	62.5	34.1
D	M	225	47.6	33.8
E	NW	220	61.8	33.2
F	S	26	46.2	15.4
G	C	150	46.0	14.7
H	M	220	50.0	14.5
Low Referral				
I	SW	109	0.0	0.0
J	C	192	0.0	0.0
K	M	427	0.0	0.0
L	M	268	0.4	0.0
M	S	29	3.4	0.0
N	M	169	5.3	0.0
O	SE	48	2.1	0.0
P	C	186	3.8	0.5
Q	S	42	2.4	2.4

interview. The duration of the interview varied from 20 to 45 minutes. Interview data were transcribed and qualitatively analyzed by question. Descriptive comparisons were made between school districts with high and low referral rates.

Results

Informing the Public

The responses of the 17 school districts suggest that an impressive amount of effort is put into the process of notifying the community of upcoming screening dates. The most popular method is to send letters to parents of preschoolers, inviting them to bring their child in for testing on a specific date. The majority of school districts use census data to identify families with preschool children. Other widely used techniques include advertising in local papers, distributing flyers in stores and churches, and buying radio spots.

The specific notification procedures chosen by a given district had little bearing on the percentage of children later referred for additional testing. One might surmise that districts that refer a greater percentage of children are somewhat more persistent in their efforts to encourage participation of all eligible families, thereby increasing the numbers of low income and socially disadvantaged children tested. This is true in some cases, but not in others.

One high referral rate district routinely screens children between the ages of three and four. But letters also are sent to parents of 4½-5 year old youngsters who have not yet been brought in

for screening. Thus, all children are given at least two chances to be assessed prior to kindergarten.

In contrast, another high referral rate district sends letters out to parents once, but does not make any systematic efforts to follow up nonresponses. The rationale is that participation in preschool screening is voluntary, so a high-pressure campaign is not necessary. However, the preschool coordinator of this district also reported that mobile families living in nearby trailer parks often are not on current census data lists, so may not receive official screening information. Thus, even districts with high referral rates are not necessarily reaching all high risk children.

Overall, low referral rate districts appeared to do as effective a job as most high referral districts in the area of community awareness. In fact, most of the low referral districts use a combination of approaches such as radio spots, posters, and church brochures to inform as many families as possible of the available screening services. On the average, districts referring relatively few children following screening have a community participation rate that is as high as that of districts referring a high percentage of preschoolers who are screened. In fact, state summary results of the 1982-83 screening process indicate that more than 80% of eligible preschool children in both high and low referral rate school districts participated in the screening process (Minnesota Department of Education, 1984).

Professional Background of Decision Makers

One hypothesis that was considered in trying to understand possible reasons for large differences in referral rates was that the area of expertise of the professional in charge of the screening process is related to the referral rate. Although working in the role of "preschool coordinator," most respondents were not actually trained as preschool coordinators. The majority were practicing speech clinicians, resource teachers, psychologists, and other non-administrative professionals fulfilling dual roles. In a few cases, the individual contacted was acting basically as a spokesperson for a team of individuals responsible for placement and referral decisions.

Although our sample size was small, it provided moderate evidence for the contention that the professional background of the preschool coordinator is related to the number of children referred. Higher referral rate districts vested more decision-making power in the hands of teachers and speech clinicians. Those districts referring a lower percentage of children relied more heavily on the judgment of the school nurse or the consensus of a team of professionals.

"Front-Line" Personnel

When discussing the relationship between professionals with administrative responsibilities and referral rates, it is critical also to investigate the influence of front-line personnel (i.e., the individuals directly involved in the testing of children during screening). According to the Minnesota Department of Education (1984), volunteers were utilized in 90% of the 1982-83 screening

programs. Our sampling of 17 districts during 1984-85 suggested more variance in the types of personnel involved in screening children. Although volunteers frequently were used, several districts reported using only special service professionals (i.e., teachers, speech clinicians, psychologists) to carry out all aspects of preschool assessment. In one case, a school nurse was responsible for completing all evaluation on the preschoolers in her district. Some high referral districts depended heavily on the use of volunteers, others did not. The same observation held true for low referral rate districts.

When asked how critical the training of those involved in direct testing was, respondents gave what seemed to be paradoxical interpretations. Several coordinators in low referral rate districts acknowledged that volunteers often fail to identify children with developmental problems. On the other hand, another coordinator surmised that the special education professionals who administered the screening tools in her district were more apt not to refer children than were the volunteers. Her rationale was that professionals know how to "encourage" best responses from young children who otherwise would fail test items.

Screening Instruments

It is reasonable to surmise that the type of screening instrument used in a given district might influence the number of problems initially identified. Screening tools may cover a spectrum from a gross assessment of a child's developmental level to a more in-depth

analysis of a youngster's specific strengths and deficits. It is possible that high referral districts employ screening instruments that are more sensitive to subtle developmental problems.

A survey of the instruments most frequently used by the 17 districts suggested that this is not the case. The participating programs used primarily one of three measures: DIAL (Developmental Indicators for the Assessment of Learning), CIP (Comprehensive Identification Process), or the DDST (Denver Developmental Screening Test). The DIAL was the screening tool used most often. There is little difference in the scope and sensitivity of these three tests. All three provide rather gross estimates of a child's functioning across several developmental domains.

Diagnostic Process

Children who are referred for further assessment following screening typically undergo a more in-depth diagnostic evaluation to identify their specific strengths and weaknesses. However, there is much diversity in the implementation of this diagnostic phase. Referred youngsters in some screening programs are readministered the same test used in the screening stage. Children in other systems are placed in a diagnostic preschool classroom for 30 days of observation and additional testing. Most districts implement diagnostic policies falling along a continuum somewhere between these extremes. Obviously, the time and financial commitment varies tremendously depending upon the practices of the district.

A reasonable question to investigate is whether districts with more expensive and time-consuming diagnostic procedures are less

likely to refer children for further evaluation. Perusal of the data suggests that no such pattern exists. There are both high and low referral districts committed to supporting the in-depth 30-day diagnostic policy. Similarly, one-day diagnostic evaluations can be found in districts that referred a high percentage of children and in those referring a low percentage. It appears that the time needed and expense of carrying out thorough evaluations does not influence the percentage of children referred following screening.

Severe vs Mildly Handicapped Children

One question that may be raised is whether high referral rate districts screen greater numbers of more severely handicapped children than low referral rate districts. If this were the case, then chances are greater that more children will be referred for additional testing and possible placement. However, of all the factors investigated, screening policies for severely vs. mildly handicapped youngsters showed the least variance across districts. In fact, according to the majority of coordinators interviewed, the severe population is identified at an earlier age by physicians, nurses, Developmental Achievement Centers, and other community resources. Those children are usually in county or district programs before the age of three, so they do not participate in the screening process. Therefore, with only a few exceptions, the referral rate statistics reflect the percentage of mildly handicapped children referred for further assessment.

Available Programs

Another possible factor related to the extreme differences in referral rates is the types of early childhood special education programs that are available. Within district programs constitute one variable to consider. Most of the high and low referral rate districts had some kind of special education preschool for their relatively mildly handicapped children. Most districts also reported contracting out for at least a portion of their children, and those children tended to have relatively more severe handicaps. Some of the various programs mentioned included school-based, half day programs, a family oriented preschool involving parents, and nursery schools. The various types of programs were scattered throughout both high and low districts. Therefore, the extent to which programs are available and the kinds of programs available in the districts does not appear to account for the differences in referral rates.

Another variable to consider is the extent to which students are served by non-school district agencies, or the extent to which districts contract for services for their handicapped children. The only apparent difference between high and low referral districts, although slight, was that high referral districts seemed to provide more services for the more severely handicapped children, while the low districts tended to contract for services to those children. Perhaps the high districts tend to refer more children in order to keep these programs full. However, it may also be that the high referral districts simply have a higher demand for programs for more

severely handicapped children. Therefore, they provide more services to those children to satisfy the demand.

The availability of services, or more specifically, the room available to serve more students has been hypothesized as a potential variable that might affect referral rates. In our sample of school districts, nearly all said that they would accept and provide services for any eligible child in their district. Several respondents, both high and low, noted that they would just have to add staff, change rooms, or otherwise expand their programs to meet the increased demand. There were only four respondents, two high and two low, who reported being at capacity or overloaded. The respondents indicating a number of openings also were evenly split between high and low districts. Therefore, the extent to which programs have the ability to serve more students does not seem to differentiate between high and low referral rate districts.

Related to the ability to accept more students is the extent to which the programs have expanded in response to increasing demands. This was determined in our interview by asking how many early childhood teachers had been hired in the past five years. In our sample, the responses were virtually half and half for hiring new teachers and not hiring new teachers in the past five years. This was consistent for both high and low referral rate districts. Apparently this factor does not discriminate between these districts either.

Commonly Cited Factors Affecting Referral Rates

In any given school district, it seems that social and political factors contribute to the subsequent rate of children referred. Both high and low referral districts cited the following factors as contributing to an increase in the rate of referral: (a) widespread parental, physician, and community awareness of the screening program, (b) use of a competent screening staff with professional expertise, (c) interagency cooperation, and (d) an increase in the number of children requiring services.

By increasing community awareness of screening programs through extensive telephone calling networks, newsletters, census mailings, etc., most districts believed that the families with children that required services were being notified and screened. This ultimately raised the number of children identified for services. Also, several districts with high referral rates cited physicians as contributing to an increase in the number of children referred for special services by having a better awareness of mild handicaps and an awareness of available public school programming.

It was reported that a competent professional staff contributed to increasing referral rates because professionals were able to use their expertise and identify children with special needs who might be overlooked by volunteers or paraprofessionals. In one case a district explained that a sensitive speech clinician who conducted the screening accounted for a rather high number of developmental referrals. In addition, cooperation between agencies was reported to

facilitate the identification of children for special services by bringing them to the attention of the screening program. Last, it was felt that more children are exhibiting problems and being referred due to an increase in single parent families, transient families, and less stable family environments. For instance, one district accounted for a high referral rate by explaining that the population served was largely composed of Indian families from a nearby reservation who were low income and at high risk.

When asked about factors that might restrict the number of children referred for early childhood special education services, the responses were similar, regardless of the district's referral rate. Both high and low referral districts cited the following factors as limiting the referral rate: (a) stricter state criteria, (b) limited staff, (c) use of a screening staff composed of volunteers and nonprofessionals, (d) lack of awareness of the screening program, (e) good quality daycare and headstart programs, and (f) lack of parental cooperation. Many of the district representatives noted that stricter state guidelines, which do not include criteria for fine or gross motor delays, reduce the number of children who can qualify for special education placement, thus reducing the number of children referred. For example, one district with a low referral rate stated that their program strictly adheres to program entrance criteria, which were reported to allow only children with scores falling below the 10th percentile on standardized tests. The use of volunteers or people lacking expertise was reported to contribute to a decrease in

the referral rate largely because those individuals are not sensitive to detecting mild handicaps. In addition, lack of awareness of the screening program, especially by transient or rural families who may have children that require services, contributes to a lower rate of referral. The existence of quality daycare and the fact that many children are in educational programs that develop readiness skills and provide environmental stimulation to children before they are screened was commonly listed as a factor contributing to a decrease in the number of referrals. Districts also noted that often parents do not want their child identified as requiring special education and consequently hold their children back a year, rather than having their child screened and referred.

Several factors described by district personnel were highly indigenous. One high referral district claimed a high number of uncooperative and bashful children failed to complete the screening and were consequently counted as referrals. Two districts explained high referrals in vision and hearing as being due to a high number of children with colds and allergies. These factors are all district specific and form no clear pattern of predictable referral rates, although they undoubtedly have an impact on the numbers of children referred. However, in general, regardless of a district's referral rate, factors viewed as contributing to an increase or decrease in the rate of children referred were similar for both high and low referral districts.

Perceived Accuracy of State Statistics on District Referral Rates

At the end of the interview, district representatives were asked whether they perceived the referral rate data taken from state screening forms as being accurate or inaccurate. Two of the eight districts identified as having high referral rates agreed that the data were accurate. One district representative said that their high referral rate was due to the fact that they serve all the children that need to be served. The other district reported that the high referral rate was due to the fact that they screen a low income, rural, environmentally deprived population. In addition, they noted poor vision screening methods, which increased vision referrals, and a high number of children with allergies and asthma, which resulted in a high number of hearing referrals.

The six high referral districts that did not agree with the state's data accounted for the discrepancy by saying that (a) the information was inaccurate (e.g., typing errors, bookkeeping errors), (b) definitions of rescreening and referral were confused, (c) children were counted as referrals multiple times if they were referred in more than one area (e.g., developmental, hearing, and vision), (d) referrals were counted from other districts who received service in their particular program, or (e) characteristics of those conducting the screening resulted in a high referral rate (e.g., sensitive nurse or speech clinician with a tendency to make frequent referrals).

Only one of the nine districts identified as having low referral rates agreed that the state's data were accurate. The district in

agreement attributed its low referral rate to the fact that many of the children were already receiving special services. Therefore, they were not rescreened or referred for service.

The seven districts that did not agree accounted for the discrepancy by saying the information was plainly incorrect (e.g., bookkeeping error), or was due to confusion on the part of the person providing the information. Most could not explain the discrepancy between their data and the state data.

Thus, the majority of the districts did not perceive the state data as being accurate. This was true whether districts had high referral rates or low referral rates. Similarly, explanations varied, but in many cases, a given reason was used both as an explanation for a high referral rate, and as an explanation for a low referral rate.

Discussion

The results of the research suggest that there are few clear-cut variables related to the variance in early childhood referral rates among Minnesota school districts. Although some districts refer as many as 85% of screened preschoolers and others refer few or no children for additional testing, the task of predicting referral rates is more complex than originally believed. An in-depth investigation of the screening processes of 17 school districts revealed few practices that distinguish high versus low referral rate districts. In fact, with the exception of a positive relationship between referral rate and the professional background of the screening coordinators (speech pathologists and teachers refer more children),

no specific screening policies could be isolated as directly and consistently influencing referral rates.

The finding that teachers and clinicians head programs that refer more often than do those headed by nurses and teams makes intuitive sense when one evaluates the types of children most often placed in early childhood handicapped programs. Based on descriptions from preschool coordinators, those are youngsters with mild language, cognitive, and developmental delays. It may be that preschool teachers and clinicians are better trained to recognize these subtle developmental lags than are medical personnel. Perhaps, when speech therapists and teachers are members of a team approach, their professional opinions do not have the influence they do in a more autonomous setting. These speculations, of course, suggest the need for additional research, with a much larger sample, to investigate the relationship between program personnel and referral rate.

An "armchair" hypothesis about the impact of "tester competence" on referral rates might be that districts that depend on volunteers to carry out the initial screening assessments will have a lower rate of referral since those individuals lack the formal training to identify subtle problems. Analysis of the interview data did not support this hypothesis. It is certainly not feasible to predict referral rates on the basis of formal training of the "front-line" personnel.

It was surprising to us that no specific variables appeared to differentiate between high and low referral rate districts. It certainly seemed plausible that social, economic, and political

variables would have significant impact on the variance in referral rates between districts (see Ysseldyke & O'Sullivan, 1985). There are several hypotheses that may explain the unexpected results. The first, and perhaps most obvious, is that bookkeeping errors have been made. This occurrence has been suggested by more than one coordinator. As one screening administrator explained, for some multiply handicapped students, each of their problem areas was treated as cause for a separate referral, contributing to an inaccurate count. In other cases, children were referred but inadvertently excluded from state forms.

Another possibility is that social, economic, and political factors are operating on referral rates, but in a more subtle fashion than expected. For instance, several districts mentioned that parents' receptiveness to early childhood programs could either decrease or increase the number of referrals. A community's perceptions of educational programs might certainly be influenced by the media, philosophies of school board members, and other community characteristics not readily apparent to those enmeshed in the system. This would represent somewhat of an inability "to see the forest for the trees."

A related explanation is that the social, economic, and political factors are not only subtle, but idiosyncratic to a given school district. This proposition has the most merit, based on the information gathered from the telephone interviews. For instance, one preschool coordinator attributed a high referral rate to the great

number of needy Indian children in the area. Another administrator cited the high transient population as impinging upon the referral rate, since many families not on census data cannot be contacted. These certainly reflect social issues, although the issues are not identical for all systems.

It appears that the search for significant and relevant factors directly affecting referral rates of preschool children for further assessment is more complex than previously assumed. No simplistic correlation appears to exist between referral rates and social, economic, and political influences. As noted previously, screening referral rates among Minnesota school districts were not found to be related to broad demographic factors in any obvious way (Ysseldyke & O'Sullivan, 1985). In fact, as reported previously, only about 3% of the variance in referral rates was accounted for when social, economic, and educational characteristics of school districts (e.g., district size, SES, school expenditures) were used to predict the referral rates of Minnesota screening programs. These results do not mean that all social, economic, and political variables are unrelated to screening outcomes. No doubt the relationship exists, but inaccurate recordkeeping and subtle indigenous community characteristics confound the relationship.

References

- Algozzine, B., Ysseldyke, J., & Christenson, S. (1983). An analysis of the incidence of special class placement. The masses are burgeoning. The Journal of Special Education, 17(2), 141-147.
- Christenson, S., Ysseldyke, J. E., & Algozzine, B. (1982). Institutional constraints and external pressures influencing referral decisions. Psychology in the Schools, 19, 341-345.
- Lombard, T. J. (1980). A lesson for every state from Minnesota's preschool screening program. The Journal of School Health, 50, 459-462.
- Minnesota Department of Education. (February, 1984). The fifth report for the Minnesota Legislature on the Preschool Screening Program. St. Paul, MN: Minnesota Department of Education, Pupl Personnel Services Section.
- Thurlow, M. L., Ysseldyke, J. E., & O'Sullivan, P. (1985). Preschool screening in Minnesota: 1982-83 (Research Report No. 1). Minneapolis: University of Minnesota, Early Childhood Assessment Project.
- Ysseldyke, J. E., & O'Sullivan, P. (1985). Predicting outcomes in a statewide preschool screening program using demographic factors (Research Report No. 5). Minneapolis: University of Minnesota, Early Childhood Assessment Project.
- Ysseldyke, J. E., Thurlow, M. L., O'Sullivan, P., & Bursaw, R. A. (1985). Current screening and diagnostic practices for identifying young handicapped children (Research Report No. 2). Minneapolis: University of Minnesota, Early Childhood Assessment Project.

Appendix
Outline of Interview Format

Date _____ Interviewer _____
District _____ Interviewee _____

Interview Questions

1. In your district, what are the steps from initial screening to referral?
 - 1a. What is meant by screening/assessment/referral?
 - 1b. Is there a second screening process for students not meeting criteria during initial screening?
 - 1c. Who has primary responsibility for determining if a child has passed the screening process?
 - 1d. How do you inform the public about your screening program? Do you think you are missing a specific subgroup of children?
 - 1e. What criteria are used at each step of the process to determine whether further assessment/referral is needed?
 - 1f. Do you keep records regarding how many and which children are referred for further evaluation? What kind? Would you be willing to share your data with us?
2. How does the screening process differ for the mildly and severely handicapped student in your district?
 - 2a. Are severely handicapped children identified at an earlier age than mildly handicapped children?
 - 2b. Who first identifies severely/mildly handicapped students?
3. What early childhood programs are available in your district?
4. Describe the typical student in each of these programs.
5. Approximately how many more students could be served presently in these programs?
6. How many new early childhood teachers have been hired in the past five years?

7. In any given school district, there are factors that contribute to raising the rate of referral and factors that limit the rate of referral to early childhood special education programs.

7a. Please identify and rate the importance of three factors in your district that contribute to or increase the rate of referral?

1. (most imp.) _____

2. _____

3. _____

7b. Please identify three factors that restrict the number of children being referred for early childhood special education placement in your district and rate their importance.

1. (most imp.) _____

2. _____

3. _____

8. Are there any children in your district who are not referred to early childhood special education programs after being identified in screening because they are being served by other community agencies?

8a. Are there children receiving speech/language services, OT, PT, or other services through such agencies as Easter Seal.

8b. Are children receiving these services through outside agencies because of parent preference, unavailability of appropriate programs in the school, or other reasons?

8c. Approximately how many or what percentage of children does this affect?

9. Our data show that your district is relatively high (low) in the percentage of children referred during screening.

9a. Does this seem accurate to you?

9b. What reasons do you think might account for this finding?

ECAP PUBLICATIONS

Early Childhood Assessment Project
University of Minnesota

- No. 1 Preschool screening in Minnesota: 1982-83 by M. L. Thurlow, J. E. Ysseldyke, & P. O'Sullivan (August, 1985).
- No. 2 Current screening and diagnostic practices for identifying young handicapped children by J. E. Ysseldyke, M. L. Thurlow, P. O'Sullivan, & R. A. Bursaw (September, 1985).
- No. 3 Instructional decision-making practices of teachers of preschool handicapped children by J. E. Ysseldyke, P. A. Nania, & M. L. Thurlow (September, 1985).
- No. 4 Exit criteria in early childhood programs for handicapped children by M. L. Thurlow, C. A. Lehr, & J. E. Ysseldyke (September, 1985).
- No. 5 Predicting outcomes in a statewide preschool screening program using demographic factors by J. E. Ysseldyke & P. O'Sullivan (October, 1985).
- No. 6 An ecological study of school districts with high and low preschool screening referral rates by J. E. Ysseldyke, M. L. Thurlow, J. A. Weiss, C. A. Lehr, & R. A. Bursaw (October, 1985).