Children who experience multiple stressors (e.g., limited language skill, low motivation, cultural value differences, low parental involvement in school, etc.) should be identified at the outset of kindergarten so that they and their parents can be supported more directly and better communication encouraged. This study explores the questions that will help to identify the need for special services. Research questions covered such issues as: (1) behaviors, language problems, or family variables contributing to underachievement of Navajo students; and (2) the impact of a culturally sensitive intervention program on reading achievement? High-risk Navajo children were identified and an intervention program provided at one school while another served as the control. Data are presented describing the sample and on language proficiency and school performance. Results suggest that counseling intervention with the parents positively affects reading achievement. Differences between parental and teacher perceptions of language proficiency are clear as well as differences due to the intervention. Involving parents with the school and creating a more culturally relevant school program emerge as themes. Parents are significant partners in the education of their children. (EMK)
Early Identification And Intervention of Navajo Students At Risk for Underachievement

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Abstract

The purpose of this study is to identify high-risk Navajo children and provide an intensive intervention program for both children and their parents. This is a joint project between Gallup McKinley County School District (GMCS) and Western New Mexico University Gallup Graduate Studies Center (WNMU, GGSC), both contributing funds for this research project. The research procedures includes: (a) preparation of Navajo Family Interview Instrument, (b) development of counseling intervention materials; (c) training of counselors for both parents and children in the study, (d) intervention sessions, and (e) the gathering of test scores for children throughout their early education (K - 3rd grade). Results suggest that counseling intervention with the parents positively affects reading achievement. Further, results suggest that parents are significant partners in the education of their children.
Early Identification And Intervention
of Navajo Students At Risk for Underachievement

Currently, academic underachievement is a topic receiving wide attention from educators, politicians, and the media. The Carnegie Foundation (1995) states that “only twenty-eight percent of all eighth graders scored at or above the proficiency level, and only two percent read at or above advanced level” (p. 25). In addition, there are significant disparities continue between diverse racial and ethnic groups and rural and urban populations on all academic measures. Lack of achievement, particularly in reading comprehension, is a major concern. The work place demands workers who are literate, who can think and problem solve (Carnegie, 1995). Future educational and employment success is threatened when students are struggling with basic reading requirements. Of special interest to the current research, Deyhle’s study (1992), concluded that an average American Indian high school graduate is reading at the 7th grade level. Most of the American Indian students who drop out of school are at least six grade levels behind the national average in reading (Brandt, 1992).

Gallup McKinley County Schools (GMCS) geographically encompasses 5,000 square miles, serving a 73% student population that is Navajo students. A longitudinal study was completed in 1980 to identify contributors to Navajo student underachievement (Tempest, 1987). The results of the study suggested that 39% of the fifth-grade students in the county schools were underachievers. There were multicausal factors that helped to explain Navajo underachievement, including child-rearing practices and attitudes about school, as well as medical and environmental needs. Often, Navajo children must learn a second language and/or are between two languages, often being neither fluent in Navajo or English (Tempest, 1987). Language stimulation, especially in the developing child, is essential in aiding the child in storing, integrating, and retrieving information. Acquiring a second language, a high prevalence of chronic otitis media, and significant cultural differences often contribute to lower scores on verbal measures (McShane & Plas, 1984; Tempest & Skipper, 1988; Gilliland, 1995). The Navajo world at home is more visual than verbal, while the Navajo world at school is more verbal than visual.

Parish (1989) defines an underachiever as a child whose observed school performance is below his or her potential regardless of the absolute level of the performance. Interestingly,
studies have shown that academic achievement is not necessarily a Navajo value (Tempest et al., 1988). Neither is regular attendance in school always considered essential to learning.

Two apparently opposing concepts function within Navajo culture. The autonomy of the individual regarding possessions and actions is strongly maintained while at the same time, the consensus and cooperation of the group is desired (Lamphere, 1977; Kluckhohn & Leighton, 1946). Lamphere describes this conflict with the often used Navajo phrase, "t'aabeebo'holni’ih --- it's up to him or her to decide." (i.e., if he wants to attend school or not). Many Navajo parents believe that their children have the right to make decisions about education, including attending school. It is important to point out that students who have poor attendance and limited English proficiency are at risk for lower standardized test scores and lower academic achievement.

The recent literature suggests the importance of a link between parental involvement in the school and improved student achievement (Garcia & Donato, 1991; Comer & Haynes, 1991; Meade, 1992; Gilliland, 1995). This has been researched and documented for all levels of education including high school. Parental involvement is often discussed by counselors, teachers, and administrators as critical to successfully dealing with problems of discipline, intrinsic motivation, and improving overall school success. Garcia and Donato (1991) suggest that when parents are directly involved with their child’s educational process, the outcome is higher academic achievement.

When language minority parents increase their interactions with the school, their children seem to improve academically (Garcia et al., 1991; Dwyer, 1992). Dwyer (1992) suggests that the form of involvement a parent takes is not that important as long as the involvement is organized, well planned, and long lasting. Often, language-minority parents feel isolated and disengaged from their child’s school. School involvement among language minority parents largely depends on their access to political and cultural power (Garcia et al., 1991). According to French, Jordan, & Tempest (1994), many Navajo families believe they are left out of important decisions made at their child’s school. They experience miscommunication and conflict between their traditional beliefs and values and school expectations. Parent involvement begins with good school-parent communication (Dwyer et al., 1992). Open communication increases the likelihood that parents and teachers are actually talking to each other. Thus, it becomes very important to improve
parental communication as a direct link to improving parental involvement. In addition, parents (and students) must feel that they belong to the world of school.

Esters and Levant (1983), compared the effects of two parent counseling programs on the achievement of low-achieving, rural children. Children whose parents received counseling scored significantly better on achievement at the end of the year than did a group of control subjects whose parents did not receive special training on how to work with their children. The investigators of the current study believe that children who experience multiple stressors at home should be identified at the outset of kindergarten so that they and their parents can be supported more directly and better communication encouraged.

The current study was also conducted to determine what questions must be answered by the child’s parents upon registration for kindergarten that identify the need for special services. The research questions were based on studies that determined high-risk children, and parent-involvement models:

Questions that the study focused upon were the following:

- What behaviors, language problems or family variables contribute to underachievement of Navajo students?
- What would be the impact of a culturally-sensitive intervention program on reading achievement?

Method

The original samples consisted of 50 Navajo kindergarten students from two similar county schools. An experimental group of 25 high-risk students were selected from one school and 25 high-risk students as a control group from the other school. High-risk students using Early Prevention of School Failure (preschool language test) and other variables were identified by using the Navajo Family Interview. The two county schools have predominately Navajo populations. These two groups were selected from the total kindergarten population of 83 students in both schools. In both schools, the kindergarten students were rated by their teachers to determine language preference, specific family information and behavioral indicators. Simultaneously, Navajo interviewers visited the parents of each child asking the parents the same questions about
their child’s language preference, family environment, and behavior indicators.

The two schools involved in the project were chosen because they were the most economically similar. The control group had 93.5 percent of community income in the low group while the experimental group had 87.6 percent of the community income in the low group (based on State of New Mexico Chapter 1 criteria). The two schools were in communities where the income level was below the poverty level. Of the control group, 35% were underachievers because they achieved below the fifth percentile in reading. In the experimental group, 24 percent were rated as underachievers, according to the same criteria.

Initially, 25 students (13 male, 12 female) were in the experimental group. Their receptive language-age score measured by the Peabody Picture Vocabulary Test (PPVT) upon entrance into kindergarten was 3.6. At the end of kindergarten, their PPVT age score was 4.4. It is clear that exposure to the kindergarten curriculum resulted in improved receptive language for these 25 students. In addition, the students visual motor ability was measured by the Visual Motor Integration (VMI) test. Their prekindergarten VMI age score was 5.0. Their post-kindergarten VMI age score was 5.8.

We designed our study of increased parental involvement and early identification of underachievers to include hiring and training four Navajo parent counselors and two school counselors. Counselors who worked with the parents encountered: (a) problems with inclement weather causing poor road conditions; (b) isolation of many homes; (c) families and counselors moving away; (d) cultural conflicts causing miscommunication, and (e) parent misperceptions about the study.

Ten families in the original experimental group were visited in their homes on an average of three times in the school year (1993-1994) for a minimum of two hours and a maximum of six hours. Each family member was counseled individually with an intervention program developed by the research team. During the spring of the same year when they were third graders, a small group of six children from these families also were counseled in a group at school with a similar intervention program. At the end of the group sessions, the researchers visited the children at an exit interview. The children were very positive about the group experience in which they shared and participated. Early Prevention of School Failure (EPSF), Iowa Test of Basic (ITBS) and
California Test of Basic Skills (CTBS) scores were collected for the experimental and control groups in kindergarten, first and third grade. Finally, similar counseling intervention materials were developed to support both the high-risk children and their parents. The intervention materials were developed in collaboration with Navajo professionals, counselors, and educators in an effort to create materials that would provide improved communications, encouragement and opportunity for other adjunct community services.

Results

The pre-intervention data from the initial interview found that at the experimental school, the boys mean age was 5.4 and girls was 5.6. At the control school, the boys mean age was 5.6 and girls was 5.6. Both vision and hearing acuity were tested for all the children in the study. Hearing acuity was normal for all the children. Five students had visual acuity problems (20/50 or greater).

It is also important to add that in another research study of Navajo students, comparing randomly selected sample populations of first to fifth graders from both the control and experimental schools on the WISC-III during the 1994 school year, little difference was found between the two groups in intellect, with a WISC-III overall Verbal score of 75 versus Verbal score of 79. There was a significant difference between the two groups in the Performance score of 94 versus Performance score of 103 at the <.05 level. The difference was found specifically in perceptual organization. This can, in part, be explained because of the sample size. However, clearly the difference in intellectual capability between the two groups should be further studied as a contributing factor to the striking difference in reading scores.

The initial interview findings of the present investigator's intervention study found that there are a substantial number of Navajo families living without basic utilities such as telephone and running water. Many of the families live off the main highway on dirt roads that are inaccessible in the winter. Many children speak English as a second language or are speak a mix of both languages to peers and family members. (See Table 1)
<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>13 (52%)</td>
<td>13 (52%)</td>
</tr>
<tr>
<td>Female</td>
<td>12 (48%)</td>
<td>12 (48%)</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Teacher Evaluation of Child's English</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navajo Dominant</td>
<td>7 (28%)</td>
<td>1 ( 4%)</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>13 (52%)</td>
<td>17 (74%)</td>
</tr>
<tr>
<td>English Fluency</td>
<td>5 (20%)</td>
<td>5 (22%)</td>
</tr>
<tr>
<td>Parent Evaluation of Child's English</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navajo Dominant</td>
<td>0 ( 0%)</td>
<td>2 ( 8%)</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>18 (72%)</td>
<td>16 (64%)</td>
</tr>
<tr>
<td>English Fluency</td>
<td>7 (28%)</td>
<td>7 (28%)</td>
</tr>
<tr>
<td>Parents Tell Traditional Stories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many Times</td>
<td>1 ( 4%)</td>
<td>5 (20%)</td>
</tr>
<tr>
<td>Some Times</td>
<td>12 (48%)</td>
<td>14 (56%)</td>
</tr>
<tr>
<td>Never</td>
<td>12 (48%)</td>
<td>6 (24%)</td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>17 (71%)</td>
<td>17 (68%)</td>
</tr>
<tr>
<td>No</td>
<td>7 (29%)</td>
<td>8 (32%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 2
Comparing Differences Between Experimental And Control Groups ITBS Reading Scores - 3/94

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>6</td>
<td>34.667(24%)</td>
<td>14.32</td>
<td></td>
</tr>
<tr>
<td>3rd Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITBS Reading (NCE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Control</td>
<td>19</td>
<td>24.632(12%)</td>
<td>13.57</td>
<td>3.21**</td>
</tr>
</tbody>
</table>

*The original group of children identified, no parent or child counseling

**Significant at the .01 level

One of the parents of the experimental group became involved in working with the other families in the intervention program. His involvement with the other parents seemed to be a factor in his daughter’s significant increase in overall achievement and grade-point-average. Overall, results suggest that the family intervention positively affected reading scores of the experimental group. Experimental group parents involvement seemed to motivate children to work harder on their reading assignments. Especially significant was the fact that both groups began first grade with many of the same difficulties and similar high-risk profiles at the end of third grade, the group of children who received both parent and group counseling, were significantly higher in their reading achievement than the control group that did not.

Discussion

Despite the apparent successes, there were some significant limitations of this project. In 1990, 25 students were in the experimental group. By the time these students completed 2nd grade, 12 of the original 25 students remained. In the Spring of 1994, 6 students felt to be high-risk students became part of the counseling project. Navajo workers had difficulty teaching all the
parents of the identified children because of isolation, weather, road conditions, and some parents were not at home, even though a home visit was scheduled. Future research needs to differentially assess the various components, processes, and interactions of Navajo parental involvement on student achievement.

According to Yates (1987), American Indians are the most severely economically disadvantaged of any population within the United States. School achievement is severely compromised and many youths drop out before completing high school. Yates suggests that the American Indian child understands the environment through intuitive, visual, and pictorial means, but success in most American schools is largely dependent on auditory processing, abstract conceptualization, and language skills. The fact that students in our study were at age 3.1 in receptive language and at age 5.7 in visual-motor integration upon entering elementary school suggests that many Navajo children are processing information through their visual channel of learning. In addition, when a teacher asks a student to move into an arena of the unknown; the Navajo student often does not know the rules of the school. They may not have the needed receptive language in English to make sense of what is being taught and to master the basic concepts. Often, they move from school-to-school, creating little opportunity to become a part of the school community. Each school has their own reading program and this program may be very different than that which with the child started.

Often, the Navajo child has conflict between school and home because the expectations for school are confusing and unfamiliar. Parents can provide a vital link to understanding the Navajo world and the classroom teacher's expectation. At home, many children receive important instruction such as "caring for livestock, attending siblings, assisting with family chores, helping clan relations, and participating in important ceremonies" (Deyhle, 1991). Without an important bridge between the cultures, often the child does not perform as his/her peers from the dominant culture. Eventually, the Navajo child may feel overwhelmed, depressed and lacking in self-confidence and there is little trust and relationship building between peers and teacher. When the child and parent believe they do not belong in the school, there is little investment in the learning process (this includes teaching style, cultural values, and discipline).
Bonnie Benard, (1991) in her extensive research on *Turning the Corner to Greater Resiliency*, recommends that we celebrate the multicultural "salad" by creating a culturally transformed community of parents actively involved with:

- overall school community, including teachers and administrators;
- school policy;
- redistribution of power and authority within the schools and classrooms;
- expectations by teachers; and,
- curriculum issues of infusion, language study, individual learning style. (p. 5)

It is critical that classrooms and school environments be more similar to what the child is accustomed to at home. Quality input from parents can provide recommendations to adapt existing classrooms and other facilities to incorporate Navajo cultural experiences. The improved communication and collaborative decision making between parents and school can facilitate a more appropriate investment in the learning process both at school and within the family. Finally, although there are many more questions that need to be asked such as the quantity and quality of parental involvement, this study supports other research findings that parental involvement improves academic achievement (Estes et al., 1983; Garcia et al., 1991; Dwyer et al., 1992; Gilliland, 1995). Certainly, the high dropout rates of Navajo students suggests that it is worth the effort to further investigate this important area of concern.
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