

School Mobility and Students with Emotional Disturbance

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We examined the school mobility of a cross-sectional sample of 70 secondary-age youth with emotional disturbance (ED). Data were collected through an archival review of school records. Students' school mobility histories were examined in terms of the overall number of schools attended in the elementary school years, as well as the timing of the moves that were made. Findings indicate that sample students experienced high rates of school mobility with 66% having changed schools at least once by the end of 2nd grade and 89% having changed schools at least once by the end of 5th grade. Strategies for minimizing school mobility and the impact of high rates of school mobility are reviewed.

KEY WORDS: mobility; school mobility; emotional disturbance.

Students who receive special education services for emotional disturbance (ED) commonly experience negative long-term outcomes. For example, these students exit school without earning a diploma at higher rates than any disability category (i.e., 50.6%, U.S. Department of Education, 2001). These individuals are also disproportionately represented in the juvenile justice system (Greenbaum et al., 1996) and, at least for those who have dropped out of school, highly likely to be arrested or incarcerated as young adults (Wagner, 1995). Even for students with ED who have successfully navigated completion of high school, research has documented low rates of post-secondary school attendance (Malmgren, Edgar, & Neel, 1998) and frequent job changes (Hagner, Cheney, & Malloy, 1999).

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While the existence of these negative outcomes is well documented, the amount of attention paid to the path toward these outcomes has been less consistent, with researchers in a variety of fields exploring different conceptualizations and constructs. In the field of developmental psychology, for example, risk and protective factors mediating the path between childhood behavior problems and later negative outcomes is a primary interest (e.g., Buchanan, Flouri, & Brinke, 2002; Ladd & Burgess, 2001; White, Bates, & Buyske, 2001). Research aimed at better understanding causal pathways to childhood behavior problems and extending from childhood behavior problems to subsequent negative outcomes has investigated factors including child maltreatment, parental attachment, and school engagement. Drawing on the work of researchers from a wide range of disciplines, it can be concluded that the negative outcomes experienced by youth with ED are attributable to a complex web of causal and mediating factors. One notable factor that has not garnered much attention in education circles is the level of school mobility experienced by students with ED.

For youth in general, high rates of school mobility are linked to disengagement from school and, overall, to poor outcomes (Temple & Reynolds, 2000). However, school mobility alone may not lead directly to poor outcomes. In some cases, school mobility has even been linked to positive outcomes. For example, a study of school mobility in Baltimore found that middle-class Caucasian students who moved out of the city school system experienced more positive educational outcomes than similar students who were not mobile (Alexander, Entwisle, & Dauber, 1996). Similarly, in the case of military families, mobility is not correlated with negative outcomes (Marchant & Medway, 1987). In general, however, frequent school moves in the elementary years are associated with a host of negative outcomes such as poor school achievement (Audette, Algozzine, & Warden, 1993; Kerbow, 1996; Wood, Halfon, Scarlata, Newacheck, & Nessim, 1993) and grade retention (U.S. General Accounting Office [GAO], 1994; Wood et al.). Frequent moves in elementary school have also been associated with the occurrence of multiple behavioral problems (Wood et al.) and increased levels of violent behavior displayed in high school (Ellickson & McGuigan, 2000).

More specifically, Dauber, Alexander and Entwisle (1993) reported poorer outcomes for students who switched schools early in the primary years compared to students who switched schools later. Also emphasizing the particular importance of early childhood mobility, Haveman, Wolfe, and Spaulding (1991) reported that mobility experienced between the ages 4–7 years had a more negative impact on high school graduation status than mobility experienced in later elementary grades.

The fact that school mobility has been associated with varying outcomes makes it clear that school mobility affects students differentially. Indeed, researchers have identified factors that appear to mitigate the effects of school mobility. For example, one national study of school and residential mobility found that even one residential move had a negative effect on both academic and behavioral

measures of school success only for children who did not live with both biological parents (Tucker, Marx, & Long, 1998). Mobility is also thought to have a more negative effect on children living in poverty than on their more affluent peers (Eckenrode, Rowe, Laird, & Brathwaite, 1995).

Another factor to consider in any study of school mobility is the fact that all children are not equally likely to experience high rates of mobility. Children who are Limited English Proficient (LEP), maltreated, from families considered low-income and children who attend schools characterized as "inner-city" are more likely to experience high rates of school mobility (Eckenrode et al., 1995; U.S. GAO, 1994). Additionally, low school performance (as measured by grade point average), behavior problems, high rates of absenteeism, and low education expectations all predict high rates of school mobility when family structure and family income level are controlled (Lee & Burkam, 1992; Rumberger & Larsen, 1998).

Students with ED are disproportionately likely to exhibit many of these same traits that have been linked to high rates of school mobility. For example, Mattison, Spitznagel, and Felix (1998) reported that over half of students with ED in their study had experienced abuse. Findings from a national survey of teachers indicated that 38% of students labeled ED were estimated to have been physically or sexually abused and 41% neglected (Oseroff, Oseroff, Westling, & Gessner, 1999). Students with ED are also more likely to live in poverty than students in the general population (Wagner, 1995). Taken together, this research suggests that many of the traits and characteristics associated with students with ED (e.g., living in poverty, experiencing maltreatment, demonstrating early academic and behavior problems), are the very traits associated with high rates of school mobility. Furthermore, those same traits frequently exhibited by students with ED may exacerbate the negative effects of school mobility when elevated rates of mobility do occur. For these reasons, an empirical investigation was undertaken of the school mobility rates experienced by a purposive sample of youth with ED.

We addressed three issues in this study: (a) number of school moves; (b) timing of school moves; and (c) comparison of school mobility across youth characteristics. In addition, in-depth histories are provided for three students in the sample with high rates of mobility. These summaries illustrate the complex situations and factors related to school mobility.

METHOD

Sample

Archival record reviews were conducted at the participating school district's administrative offices. Case files were provided to the researchers by school district

personnel and assigned project ID numbers to maintain confidentiality during data collection. Data for this study were collected as part of a larger investigation of interagency collaboration (see Malmgren & Meisel, 2002).

The sample was selected from a pool of all secondary students (i.e., students enrolled in grades 9–12) currently receiving special education services for ED who were also known to the district's child welfare and juvenile justice agencies. Students in the sample had: (a) experienced abuse or neglect, or had been placed out-of-home by the state sometime prior to the time of data collection; and (b) had been arrested, detained, or committed to a juvenile justice facility at least once prior to data collection. Furthermore, in order to be included in the sample, the students were required to have complete school attendance records from the beginning of Kindergarten through the end of second grade. These restrictions led to a final selected sample of 70 students.

The sample was comprised of 37% ($n = 26$) African American, 51% ($n = 36$) Caucasian, and 11% ($n = 8$) Hispanic youth. The proportions of Caucasian and Hispanic youth in the sample were not significantly different from their proportions in the county's school enrollment population. However, African American youth were significantly overrepresented in comparison to their representation in the county's school-age population ($z = 4.91$, $p < .001$). This finding is consistent with the overrepresentation of African American youth in the population of students with ED nationally (U.S. Department of Education, 2002). With regard to gender, the sample was made up of 81% male participants ($n = 57$). While female students were clearly underrepresented, the gender proportion of the sample was consistent with the national population of students receiving services for ED (U.S. Department of Education). The mean age of the youth in the sample was 16.5 years.

Approximately one-third of the sample (i.e., 35%, $n = 24$) had been retained in grade at least once during their academic careers, with 16% of the sample ($n = 10$) having been retained some time during elementary school (i.e., kindergarten through 5th grade). The average age at which students in the sample were first classified as having a disability was 9.4 years or approximately 4th grade. Half of the sample ($n = 35$) had been placed in a residential treatment facility at least once prior to the time of data collection. Additionally, just under half of the sample (45%, $n = 30$), had been placed in foster care at least once prior to data collection.

Measures

The primary variable of interest in this study was school mobility. In order to best compare findings to those of other researchers, several measures of school mobility were used. Heinlein and Shinn (2000) reported a link between high mobility in the early school years (i.e., two or more moves prior to 3rd grade),

and low reading and math achievement at 6th grade. Thus, in the current study a mobility index score was created that reflected the number of schools attended from the beginning of Kindergarten through the end of 2nd grade. In order to make comparisons with studies of mobility that focused on number of school moves prior to 6th grade (see Alexander et al., 1996; Benson, Haycraft, Steyaert, & Weigel, 1979; Heinlinn & Shinn, 2000), a second mobility index was created to reflect the number of schools attended from the beginning of Kindergarten through the end of 5th grade.

In addition to calculating total number of schools attended, the timing of school moves was also of interest. Mid-years moves are likely to be more disruptive to a child's educational experience than school moves occurring over the summer, the latter of which coincides with planned breaks in the curriculum. For this reason, mid-year vs. summer session changes of school placement were also noted.

Attendance at a summer school program was not coded as a school move. Therefore, if a student enrolled in a residential or day treatment program over the summer but returned to his or her previous school for the following academic year, no school move was coded. However, instances in which a student was moved temporarily during the academic year, (e.g., to a day treatment facility or hospital program), were coded as school moves if it was determined that the student attended school at the temporary setting.

Grade level designations used in the coding of data reflect years in school rather than actual grade designations in those cases where a student was retained in grade. For example, if a student was retained in the 1st grade, any moves that the student experienced in his or her 2nd year of 1st grade would be coded as "moves during 2nd grade" for the purposes of data collection. This approach provided an accurate measure of mobility for students' first six years of contact with public elementary schools.

Analysis

Descriptive statistics were generated for demographic characteristics and mobility. Univariate ANOVAs with Bonferroni corrections for repeated measures were conducted to determine whether youth differed significantly on measures of school mobility by ethnicity. Independent sample *t*-tests were conducted to determine whether youth differed significantly on measures of school mobility by gender and by retention status. Bivariate correlations were run for continuous variables of interest (e.g., mobility indices, age at time of study).

In order to assess the reliability of data collection, 10% of the case records were randomly selected for reliability checks. For those selected case records, a second reviewer independently examined the records. Reliability in data collection and coding was calculated by dividing the number of agreements by the number of disagreements plus agreements and multiplying by 100. Reliability was 89% for variables reported and analyzed in this study.

RESULTS

One-way ANOVAs indicated that there were no significant differences between the African American, Caucasian, and Hispanic participants with regard to rates of mobility. Independent sample *t*-tests confirmed that male students were not significantly more likely to experience high rates of school mobility than females. Additionally, *t*-tests confirmed that students who were retained in grade at least once were no more likely than those who were not retained to experience high rates of mobility. Participants' age at the time of data collection was not significantly correlated with any of the school mobility outcome measures.

Mobility in the Elementary School Years

The average number of schools attended by students in the sample in grades K-2 was 2.06 ($SD = .99$). By the end of 2nd grade, 66% ($n = 46$) of the students had changed schools at least once. Additionally, the average number of schools attended by students in the sample at the end of 5th grade was 3.70 ($SD = 1.84$). By the end of grade 5, only 11% of the sample had remained at one school for their entire academic career up to that point (see Table I). The average number of moves made by students in the sample during their Kindergarten through 5th grade years was 2.69 ($SD = 1.84$). Mobility as measured by the K-5 Mobility Index was significantly correlated with mobility scores on the K-2 Mobility Index ($.71, p = .00$). The age at which participants were first identified for special education services was negatively correlated with the total number of schools attended by the end of 5th grade ($r(62) = .25, p = .05$).

Timing of School Moves

With regard to the timing of the school moves experienced by students in this study, 24% ($n = 16$) had changed schools during the middle of an academic year at least once by the end of 2nd grade. By the end of 5th grade, 39%

Table I. Total Number of School Moves from Kindergarten Through Grade 5

Number of school moves	Number of students	Percentage of sample
0	7	11
1	13	20
2	11	17
3	16	24
4	9	14
5	5	8
6	1	2
7	4	6

Table II. Timing of School Moves

Number of school moves	Number of students	Percentage of sample
Changed schools during Kindergarten	9	13
Changed schools between K and 1st grade	22	31
Changed schools during 1st grade	4	6
Changed schools between 1st and 2nd grades	29	41
Changed schools during 2nd grade	7	10
Changed schools between 2nd and 3rd grades	29	42
Changed schools during 3rd grade	10	15
Changed schools between 3rd and 4th grades	31	45
Changed schools during 4th grade	9	13
Changed schools between 4th and 5th grades	23	34
Changed schools during 5th grade	8	11

Note. K = Kindergarten.

($n = 26$) had experienced at least one mid-year school change and 27% ($n = 18$) had experienced two or more separate mid-year school changes. Notably, one student had made three mid-year school changes, four students had made four such changes, and one student had experienced a total of six mid-year changes in school placement by the end of 5th grade. The average number of mid-year moves experienced by students in the sample for the period spanning grades K-5 was .80 ($SD = 1.23$).

Changes in school placement that were coordinated with changes in school year were more common, with 31% of the sample experiencing a change of school placement over the summer between Kindergarten and 1st grade and 41% experiencing a change of school placement between 1st and 2nd grades (see Table II). In considering school adjustment for mobile students, the timing of moves in the child's academic career, as well as the timing of moves with respect to other moves is an important factor. In the sample, one student who changed schools during the middle of Kindergarten also changed schools again over the summer between Kindergarten and 1st grade. Three other students followed this same pattern during and after 1st grade, with another three making similar moves during and after 2nd grade. Also, six students in the sample made unscheduled school moves over the summer between 3rd and 4th grade after having changed schools during the middle of the 3rd grade school year (with one of those students having changed school twice during 3rd grade). Finally, five other students changed schools between their 4th and 5th grade years after having also changed schools during the 4th grade (with one of those students having changed schools twice during the 4th grade school year).

Mobility Histories of Individual Students

Because average number of moves per school year can hide the magnitude of individual students' chaotic school attendance histories, the mobility histories

of selected individual students are shared. Four individual students (i.e., 6% of the sample) had experienced 8 school moves by the end of 5th grade. All four of these most mobile students were Caucasian males. A detailed description of three of their school attendance histories for the first six years of elementary school follows.

Student One

This student began Kindergarten at one elementary school then changed schools during January of that school year. He remained at that school for the remainder of his Kindergarten year and the beginning of 1st grade, but then switched back to his original school during the middle of his first grade year. He then moved out of state over the summer between 1st and 2nd grades and attended a school in the new state for all of 2nd grade. Remaining at that same school, he was retained in grade for 2nd grade. In December of that year, he moved back to the study district and completed his second year of 2nd grade. He changed schools that summer, and again during November of the following school year, when he was in 3rd grade. He changed schools again over the summer between 3rd and 4th grade, but stayed in place his entire 4th grade year. It was during that year of 4th grade that this student was referred for and began receiving special education services. By this time, he was demonstrating problems in reading and in math and was exhibiting behavior problems in school. He had attended eight different schools by the time he was finally identified as in need of special education services.

Student Two

The second student started Kindergarten at age 5 and attended that same elementary school for all of Kindergarten. Teachers noted early in Kindergarten that he had poor peer relations. He changed schools over the summer and attended a second school for all of 1st grade. He changed schools in January of his 2nd grade year and remained at that school through the beginning of 3rd grade. He again changed schools one month into 3rd grade, switching back to the school he had attended for the beginning of 2nd grade. Student #2 then changed school programs over the summer and began 4th grade in a new school. He experienced two school moves during 4th grade, one in December and one in January. This meant that he attended three different school programs during 4th grade, all three in different local education agencies (LEAs). He switched schools once again over the summer following 4th grade, so that he began the 5th grade at yet another new school back in his LEA of origin. After just one month, he moved to another school, where he remained for the remainder of that academic year. Toward the end of that 5th grade year, Student #2 was suspended for 5 days for bringing a knife to school. By the time Student #2 was identified for special education services

in middle school, he had attended 15 different schools and been suspended from school on four different occasions for a total of 21 days.

Student Three

After attending one year of Head Start, this student started Kindergarten. He remained at the same school for his entire Kindergarten year. However, he was switched from a half-day morning class to a half-day afternoon class in the fall due to behavioral concerns. During that Kindergarten year, Student #3 was referred for special education services. He began receiving special education services for ED in February of his Kindergarten year. He was placed in a self-contained school for students with ED for 1st grade. He attended that school for all of 1st grade and began his 2nd grade year at that same school. After 2nd grade began, this student became highly mobile, making three changes of school placement before the end of 2nd grade. Specifically, he made his first school change of that year in October. He attended the new school (School A) for one month before moving to a private parochial school (School B). He then experienced a complete lapse of schooling before returning to School A. After only one month, he again withdrew from school. When he returned to school near the end of the 2nd grade school year, he was placed in a day treatment program (School C). He remained at School C for the beginning of 3rd grade. However, he changed school settings two more times during 3rd grade, including 2 months of school district-provided home instruction. He began his 4th grade year at his last school of attendance from the 3rd grade, and continued to be educated in that same private school for all of 4th and most of 5th grade. The last month of his 5th grade year he was placed in a residential program. During these years, Student #4 was also undergoing other disruptions in his life. While the exact date was not clear in his cumulative file, it was noted that some time during his 3rd or 4th grade year, Student #3's father was shot and killed by police.

DISCUSSION

There are two primary limitations of our study. While comparison of the findings to previous research on school mobility indicates that students in the sample experienced notably high rates of school mobility, the lack of a comparison group from the same school district is a limitation. The school district from which the sample was drawn reports school-level student mobility rates that are relatively low. However, without a comparison group of students without ED, involvement in child welfare, and/or involvement with juvenile justice from the same district, it is not possible to rule out that other students in this jurisdiction also experience high rates of mobility. Additional research with comparison groups could validate the higher than expected rates of school mobility noted for students with ED in this research.

Another limitation to this study is a lack of information regarding the cause of student mobility. It can be presumed that many changes in schools were necessitated by parallel changes in residence and even family structure. However, this research could not confirm which school changes were dictated by other life changes. High rates of residential mobility and frequent changes in family structure during the early school years have been linked repeatedly to negative academic and behavioral outcomes (e.g., Ackerman, Kogos, Youngstrom, Schoff, & Izard, 1999; Ellickson, & McGuigan, 2000; Haveman et al., 1991). Having access to this additional information would provide documentation of additional stressors experienced by these students.

Results of this study suggest that students with ED who are also in contact with child welfare and juvenile corrections experience extremely high rates of school mobility in their elementary school years. Students in the sample made almost three school moves on average during their K-5 school years. For the specific three students discussed, each had changed schools at least seven times by 5th grade. Additionally, at the end of 5th grade, only 11% of the total sample had attended one school for their entire academic career. As a point of comparison, research conducted in Chicago Public Schools, a school district with high rates of student mobility, resulted in findings that an average of 38% of students did not change schools at all between Kindergarten and 6th grade (Kerbow, 1996). In another comparative example, Wood et al. (1993) reported that 25% of all students from a nationally representative sample remained at the same school through age 17.

The relatively high number of school moves for this group of students is particularly troublesome given current research on student mobility. Eckenrode et al. (1995) reported that maltreated youth have greater academic difficulties in part because of their high levels of school transfers. As noted, findings from other studies that indicate high numbers of school moves in the earliest years of school are disproportionately associated with negative academic outcomes (Dauber, Alexander, & Entwisle, 1993). Further, in the current study many students (31%) also changed schools between Kindergarten and 1st grade. School mobility in the formative school years, specifically between Kindergarten and 1st grade can have an adverse affect on student outcomes (Alexander et al., 1996; Dauber et al., 1993; Kellam, Branch, Agrawal, & Ensinger, 1975; Reynolds, 1989). The negative association between student mobility and school outcomes, combined with the fact that students with ED *by definition* have both social and academic difficulty in school, makes this lack of early school stability particularly alarming.

To address the issue of high student mobility broadly, Rumberger (2003) suggested improving the overall quality of schools and focusing on fostering student and family attachment to local schools. Feeling attached to one's school is related to academic achievement (Johnson, Crosnoe, & Elder, 2001). By fostering this attachment, families may be more likely to prioritize keeping their child at

a given school. This point was emphasized by Kerbow (1996) who noted that the key to reducing school mobility is to strengthen the ties that families have with local schools, thereby encouraging families to want to keep their children enrolled. It is difficult to imagine that students who change schools more than once a year on average could feel strong levels of attachment to any school. For students with ED, who frequently have problems making and keeping friends and difficult relationships with teachers and other authority figures, these transitions likely prove even more challenging.

Evidence from the review of school records reported here suggested that many of the school changes experienced by youth in the sample were dictated either by the schools themselves—as they attempted to provide different or more restrictive educational placements to these students as their learning and behavioral disabilities became identified—or by other agencies (e.g., child welfare). In these cases, multi-pronged solutions need to be employed. At the school level, Eckenrode et al. (1995) suggested that administrators adopt policies that encourage schools to reduce the absolute number of school transfers that occur within LEAs. School policies such as open enrollment allow students to maintain attendance in a single school despite changes in local residence. Also, it may behoove LEAs to consider a child's school mobility history when planning pre-referral interventions and when making decisions about special education placement or service delivery. If high rates of school mobility are viewed as a risk factor for later poor outcomes, schools must consider a stable learning environment to be a desirable element of a child's programming.

A multi-system approach also includes collaboration and communication between child-serving agencies. Caseworkers, judges, caregivers, and other concerned adults should be aware of the effect their decisions have on several domains of a child's life. While disruption may not be completely avoidable, decisions can be carried out in ways that minimize the impact of that disruption. For example, if a child must be placed temporarily in foster care, child welfare and school personnel could collaborate to ensure that the child remains in the same school even as the home placement changes. While there are certainly challenges, high rates of mobility experienced by these already disadvantaged youth could be reduced if that reduction is made a priority.

In addition to this high number of moves experienced by the sample overall, another alarming finding was the high number of mid-year moves experienced by students. By the end of 2nd grade, 23.9% of the sample had made at least one mid-year move, and by the end of 5th grade, 39.4% of the students had done so. By the end of 5th grade, the three students highlighted had made a combined 16 mid-years moves, with one student making seven mid-year school changes and another five.

For students who are already showing signs of struggling academically due to an ED, a mid-year move could result in a disjointed academic experience and

several related problems. For example, variations in the order that curriculum is covered in different schools can lead to gaps in student learning. Mid-year student movement may make it less likely those youth will have the information necessary to perform proficiently on mandated statewide assessments. In addition, changes in routines due to a mid-year move can result in difficulties with student behavior. For students with ED, changes in routines can have an even greater impact. For example, behavioral complications resulting from mid-year moves include changes in support structures and peer groups (Eckenrode et al., 1995). Breaking up peer groups increases student adjustment problems (Alexander et al., 1996) which is compounded by difficulties with peers that are common for children with ED.

Reducing the negative impact of mid-year moves on academic success and behavior requires two components. First, the receiving school should provide support to students who make mid-year moves. Audette et al. (1993) recommended providing orientation programs, a buddy system, and peer tutoring to students upon their arrival. Such links give students knowledge of support personnel and lay the groundwork for positive peer relationships to develop. Communication across schools is also important to assure that students do not miss content critical to academic success. This exchange requires a focus on specific curriculum covered at the sending school. Specific procedures for communication must be identified at the state level to assure consistency across LEAs.

Situations that are considered rare in other studies of school mobility (e.g., changing schools mid-year, following a summer change; Alexander et al., 1996) were relatively common occurrences for the students in the current sample. Specifically, 18 students in the sample (26%) experienced unscheduled summer changes in schools after having just adjusted to a new school (or multiple new schools) during the previous academic year. Interestingly, for the three students described in detail, two each had two occurrences of combined mid-year school changes followed by another move at the beginning of the next year. These kinds of multiple disruptions can be chaotic for any child as they are forced to adjust to new and different teaching methodologies, expectations, textbooks, and physical environments (Benson et al., 1979). High levels of school mobility are likely even more difficult for students with ED because of within-child traits associated with ED.

Strategies to minimize the negative impact of student moves are needed. Several researchers have proposed solutions ranging from administrative to ecological. Wood and colleagues (1993) proposed that school systems be encouraged to develop more school-based family resource centers to help schools meet the needs of highly mobile students and their families. Specifically, these resource centers could provide health, mental health, and social service support to families. Demie (2002) reported that a majority of schools that had demonstrated some success in developing strategies to combat high rates of school mobility in England provided language support to mobile LEP students. Another solution offered by Demie, as

well as the U.S. GAO (1994), was the suggestion that LEAs adopt better record keeping systems. The U.S. GAO proposed record keeping systems be adopted that prioritize comparability across LEA and state boundaries and streamline access to information that could be used by schools to provide better services to mobile students.

Additional information about the school experiences of students with ED is greatly needed. Also, school, LEA, and state policies must be evaluated to identify the extent to which students with high mobility are supported by formalized policies and procedures that address the need to reduce the number of student moves, as well as the impact of these moves. Despite a general understanding that frequent school changes have a negative impact, many schools do not have a systematic program to assist students with these transitions (Nelson, Simoni, & Adelman, 1996). For these students to be appropriately served, supports are necessary at the school, LEA, and state levels.

REFERENCES

- Ackerman, B. P., Kogos, J., Youngstrom, E., Schoff, K., & Izard, C. (1999). Family instability and the problem behaviors of children from economically disadvantaged families. *Developmental Psychology, 35*, 258–268.
- Alexander, K. L., Entwisle, D. R., & Dauber, S. L. (1996). Children in motion: School transfers and elementary school performance. *The Journal of Educational Research, 90*, 3–12.
- Audette, R., Algozzine, R., & Warden, M. (1993). Mobility and school achievement. *Psychological Reports, 72*, 701–702.
- Benson, G. P., Haycraft, J. L., Steyaert, J. P., & Weigel, D. J. (1979). Mobility in sixth graders as related to achievement, adjustment, and socioeconomic status. *Psychology in the Schools, 16*, 444–447.
- Buchanan, A., Flouri, E., & Brinke, J. T. (2002). Emotional and behavioral problems in childhood and distress in adult life: Risk and protective factors. *Australian and New Zealand Journal of Psychiatry, 36*, 521–527.
- Dauber, S., Alexander, K., & Entwisle, D. (1993). Characteristics of retainees and early precursors of retention in grade: Who is held back? *Merrill-Palmer Quarterly, 39*, 326–343.
- Demie, F. (2002). Pupil mobility and educational achievement in schools: An empirical analysis. *Educational Research, 44*, 197–215.
- Eckenrode, J., Rowe, E., Laird, M., & Brathwaite, J. (1995). Mobility as a mediator of the effect of child maltreatment on academic performance. *Child Development, 66*, 1130–1142.
- Ellickson, P. L., & McGuigan, K. A. (2000). Early predictors of adolescent violence. *American Journal of Public Health, 90*, 566–572.
- Greenbaum, P. E., Dedrick, R. F., Friedman, R. M., Kutash, K., Brown, E. C., Lardieri, S. P., & Pugh, A. M. (1996). National adolescent and child treatment study (NACTS): Outcomes for children with serious emotional and behavioral disturbance. *Journal of Emotional and Behavioral Disorders, 4*, 130–146.
- Hagner, D., Cheney, D., & Malloy, J. (1999). Career-related outcomes of a model transition demonstration for young adults with emotional disturbance. *Rehabilitation Counseling Bulletin, 42*, 331–344.
- Haveman, R., Wolfe, B., & Spaulding, J. (1991). Childhood events and circumstances influencing high school completion. *Demography, 28*, 131–157.
- Heinlein, L. M., & Shinn, M. (2000). School mobility and student achievement in an urban setting. *Psychology in the Schools, 37*, 349–357.

- Johnson, M. K., Crosnoe, R., & Elder, G. H. (2001). Students' attachment and academic engagement: The role of race and ethnicity. *Sociology of Education*, 74, 318-340.
- Kerbow, D. (1996). Patterns of urban student mobility and local school reform. *Journal of Education for Students Placed at Risk*, 1, 147-169.
- Kellam, S., Branch, J., Agrawal, K., & Ensinger, M. (1975). *Mental health and going to school: The Woodlawn program of assessment, early intervention and evaluation*. Chicago: University of Chicago Press.
- Ladd, G. W., & Burgess, K. B. (2001). Do relationship risks and protective factors moderate the linkages between childhood aggression and early psychological and school adjustment? *Child Development*, 72, 1579-1601.
- Lee, V. E., & Burkam, D. T. (1992). Transferring high schools: An alternative to dropping out? *American Journal of Education*, 100, 420-453.
- Lash, A., & Kirkpatrick, S. (1990). A classroom perspective on student mobility. *Elementary School Journal*, 91, 171-191.
- Malmgren, K., Edgar, E., & Neel, R. S. (1998). Postschool status of youths with behavioral disorders. *Behavioral Disorders*, 23, 257-263.
- Malmgren, K. W., & Meisel, S. M. (2002). Characteristics and service trajectories of youth with serious emotional disturbance in multiple service systems. *Journal of Child and Family Studies*, 11, 217-229.
- Mattison, R. E., Spitznagel, E. L., & Felix, B. C. (1998). Enrollment predictors of the special education outcome for students with SED. *Behavioral Disorders*, 23, 243-256.
- Nelson, P. S., Simoni, J. M., & Adelman, H. S. (1996). Mobility and school functioning in the early grades. *The Journal of Educational Research*, 89, 365-369.
- Oseroff, A., Oseroff, C. E., Westling, D., & Gessner, L. J. (1999). Teachers' beliefs about maltreatment of students with emotional/behavioral disorders. *Behavioral Disorders*, 24, 197-209.
- Reynolds, A. (1989). A structural model of first-grade outcomes for all urban, low socioeconomic status, minority population. *Journal of Educational Psychology*, 81, 594-603.
- Rumberger, R. W. (2003). The causes and consequences of student mobility. *The Journal of Negro Education*, 72, 6-21.
- Rumberger, R. W., & Larson, K. A. (1998). Student mobility and the increased risk of high school drop out. *American Journal of Education*, 107, 1-35.
- Temple, J. A., & Reynolds, A. J. (2000). School mobility and achievement: Longitudinal findings from an urban cohort. *Journal of School Psychology*, 37, 355-377.
- Tucker, C. J., Marx, J., & Long, L. (1998). Moving on: Residential mobility and children's school lives. *Sociology of Education*, 71, 111-129.
- U.S. Department of Education. (2001). *Twenty-third annual report to congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: Author.
- U.S. Department of Education. (2002). *Twenty-fourth annual report to congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: Author.
- U.S. General Accounting Office. (1994). *Elementary school children: Many change schools frequently, harming their education*. Washington, DC: Author.
- Wagner, M. M. (1995). Outcomes for youths with serious emotional disturbance in secondary school and early adulthood. *The Future of Children*, 5, 90-112.
- White, H. R., Bates, M. E., & Buyske, S. (2001). Adolescence-limited versus persistent delinquency: Extending Moffitt's hypothesis into adulthood. *Journal of Abnormal Psychology*, 110, 600-609.
- Wood, D., Halfon, N., Scarlata, D., Newacheck, P., & Nessim, S. (1993). Impact of family relocation on children's growth development, school function, and behavior. *Journal of the American Medical Association*, 270, 1334-1338.