Exploring the Impact and Implications of Residential Mobility: From the Neighborhood to the School

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Abstract: *This cross-sectional study examines residential relocation among a cohort of 495 fifth graders in one urban community in the Southeastern U.S. The impact of residential mobility is discussed in relation to student/family outcomes as well as the stressors placed upon schools. Results support previous findings which suggest residential relocation is correlated with academic problems. In addition, highly mobile students are twice as likely to be referred by teachers for disciplinary intervention and families are five times more likely than their residentially stable counterparts to be involved with child protective services. Implications from this study address the need for school systems, including school social workers, to look beyond the classroom to understand and respond to the needs of highly mobile families.*

Keywords: *Residential mobility, children and families, education*

INTRODUCTION

We are a mobile nation. Data from the U.S. Census Bureau shows that 17% of families with children both pre-school and school-aged experience at least one residential move each year (U.S. Census Bureau, 2007). Among these movers, 68% relocate within the same county. This relatively high percentage of families with children that relocate annually raises many concerns for researchers and practitioners alike (Dong et al., 2005). Previous research has been conducted on both the reasons for and implications of residential mobility, yet recent findings are contradictory (Currie & Yelowitz, 2000; Duncan, Clark-Kauffman & Schnell, 2004; Hango, 2003) and research on school-aged children is limited. For school-aged children, a residential move is often coupled with a change in schools—which implies a change in routine, a need to make new friends/assimilate into new social groups, and a disruption in a child's education.

Although not all moves result in a need to transfer to a new school, a residential change can still create stress for children who face adjusting to new living space and integrating into a new neighborhood. This is especially relevant for highly mobile families who may have relatively few resources to support the many transitions required by a move. These families may not have an abundance of social capital upon which they can rely for support during such transitions (Coleman, 1988; 1990; Tucker, Marx & Long, 1998).

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The purpose of this study is to understand the effect that frequent residential moves can have on educational and social outcomes of elementary school age children. Are children who experience more frequent residential moves more likely to have lower educational attainment than their less mobile peers? Are these same children at risk for behavior problems and/or involved in more disciplinary action within the classroom than their less mobile peers? And, finally, are these children more likely to be involved in the child welfare system than their less mobile peers? If residential mobility is related to these factors, then intervention strategies that extend beyond the school's walls must be created and implemented, increasing opportunities for vulnerable children to achieve their full potential.

LITERATURE REVIEW

Schafft (2005) suggests that for economically vulnerable families moving is generally not associated with "moving up;" rather moves are often "unplanned and unpredictable" and can create "broken social ties and interrupted academic experiences" (p. 1). These lateral moves within limited geographical areas are more typical among lower-income families (Fitchen, 1994; Gramlich, Laren & Sealand, 1992; Long, 1992; Kerbow, 1996; Tucker, et al., 1998; Schafft, 2005; Wood, Halfon, Scarlata, Newacheck & Nessim, 1993).

It is often assumed that a move to a "better" neighborhood or community may benefit school-aged children; however, research findings in this area remain contradictory. Regardless of where and why, a move is often viewed as a "stressful life event" (Henderschott, 1989) and can be a disruptive process for school-aged children. Hango's (2003) research suggests that the effects of residential mobility can vary depending upon the nature of the move. Using the National Longitudinal Study of Youth, she examines the relationship between neighborhood and negative behaviors among children. In this study, negative behaviors were defined using mother's report of negative behaviors, as scored using the Behavior Problem Index (p. 53). Moves from "poor" to "non-poor" neighborhoods were correlated with decreased negative behaviors (though this impact was found to decrease over time) and lateral moves within poor neighborhoods were related to an increase in negative behaviors (though these behaviors also manifested over the course of several years). Duncan, Clark-Kauffman and Snell (2004) further highlight the complexity of residential mobility among children. Findings from their study of the Moving to Opportunity (MTO) program indicate that for boys, moves may be associated with negative behaviors, even when the moves were to more affluent areas. However, Currie and Yelowitz (2000) report that residential stability has been linked to positive outcomes for children. Thus, these contradictory findings suggest that the impact and implications of residential mobility are complex and in need of further study.

There is a substantial body of evidence that links residential mobility to negative outcomes. The adjustment to new schools, peers, and teachers can be stressful for students (Tucker et al., 1998). Additionally, children who are frequent movers may also have to adjust to family crises and uncertainty that create a cycle of perpetual mobility (Wood et al., 1993).

Residential mobility has been shown to have a direct negative effect upon the well-being of children including decreases in self-concept and locus of control and increases in the likelihood of depression (Hendershott, 1989), emotional-behavioral problems (Simpson & Fowler, 1994), and engaging in acts of violence (Haynie, 2005). Many researchers have suggested that residential mobility is a "proxy" for an underlying construct of personal instability that is believed to be at the root of family and residential instability (Astone & McLanahan, 1994; Long, 1992; Speare & Goldshneider, 1987).

Additional research has revealed that residential mobility is associated with an array of negative outcomes in children including increased psychiatric admissions, multiple hospitalizations, impaired impulse control, antisocial behavior, and caregiver abuse and neglect (Eckenrode, Rowe, Laird & Brathwaite, 1995; Mundy, Robertson, Greenblatt & Robertson, 1989). In their retrospective cohort study of over 8000 adults, Dong et al. (2005) examined the relationships between residential mobility and adverse childhood experiences using respondents' self-report of childhood sexual abuse/neglect. Their findings show that the odds of having endured emotional, physical and sexual abuse increased with the number of residential moves experienced during childhood (p. 1107).

The relationship between residential mobility and academic performance is also complicated. Coleman (1988) uses the construct of social capital to explain how residential mobility negatively affects school performance through the loss of social capital. When families move, they may lose social capital as established supportive relationships in the family, neighborhood and community are severed (Coleman, 1988, 1990; Hagen, MacMillan & Wheaton, 1996; Tucker, et al., 1998). Residential mobility is associated with lower school attainment including an increased probability of dropping out (Astone & McLanahan, 1994; Coleman, 1988), lower graduation rates (Haveman, Wolfe & Spaulding, 1991), lower school achievement that is often operationalized as a greater likelihood of repeating a grade (Eckenrode et al., 1995; Wood et al., 1993), lower math and reading test scores (Schuler, 1990; Warren-Sohlberg & Jason, 1992), and more academic problems (Tucker et al., 1998). Additionally, the effects of mobility are not cross sectional; rather students feel those effects over time. Dunn, Kadane and Garrow (2003) found that one move (to a new school) was as detrimental to a student as 32 absences in the year following the move – and as 14 absences in the third year. The effects of mobility are both immediate and long-term.

Similarly, students who are highly mobile are more likely to experience more behavioral problems in school (Tucker et al., 1998; Wood et al., 1998). Given the association between academic performance and behavior problems, this is not surprising. Maladjustments to a new school can result in social isolation, disruptive or antisocial behavior, and detachment from the educational process (Astone & McLanahan, 1994; McLanahan & Sandefur, 1994). Hango's (2003) work suggests that the extent and duration of different negative behaviors is mediated by the type or types of moves experienced by the child (e.g. poor to non-poor, poor to poor, poor to poorer). Taken together, these findings all suggest that further research needs to examine how academic performance and behavior problems can be related to—or perhaps understood by—residential mobility.

Residential mobility also has a role in mediating the relationship between child maltreatment and lower academic outcomes. Maltreating families are more unstable and isolated with fewer social supports and ties to neighborhoods (social capital). This increases the likelihood of residential mobility as well as subsequent academic failure (Eckenrode et al., 1995). A study by Ziesemer, Marcoux and Marwell (1994) demonstrated the extent to which highly mobile children are an at-risk population by comparing their school achievement and behavioral performance with a population of homeless children. They found that there were no differences between the groups; both exhibited low levels of school achievement and higher levels of behavioral problems.

Highly mobile families may continually uproot themselves from neighborhoods and communities, therefore limiting the development of social capital. Several studies have identified social capital as being related to educational attainment (Coleman, 1988; Israel, Beaulieu & Hartless, 2001; McNeal, 1999; Parcel & Dufur, 2001; Sandefur, Meier & Hernandez, 1999) as well as to school behaviors (Parcel & Dufur 2001). Additional research supports the idea that mobility erodes social capital, which helps to explain negative child outcomes (Astone & McLanahan, 1994; Coleman, 1988; Furstenberg & Hughes, 1995; Hagan et al., 1996; Pribesh & Downey, 1999). In considering how mobility impacts students in terms of academic behavior, behavioral problems and involvement with child protective services, recognition of social capital—or a lack thereof—is potentially helpful in thinking about how to positively impact the lives of highly mobile children.

In spite of this body of research, there is still a need for current research to further explore the relationships between child well-being and residential mobility. Thus, this research addresses a gap in the literature and focuses on the effect of residential moves on educational attainment, and social and behavioral outcomes, including family involvement with child protective services due to allegations of abuse and neglect. We hypothesize that elementary school-aged children experiencing higher rates of residential instability are more likely to perform academically below their less mobile peers and that children in highly mobile households face an increased risk for social and behavioral problems both within and outside of the classroom. Specifically, we posit a direct relationship between residential mobility and the likelihood of family involvement with the child welfare system.

METHODS

Sample

The sample consisted of 495 fifth grade students attending public elementary schools in one urban school district in a mid-south city with a population of 250,000. Since students enrolled in this public school system transfer to middle school beginning in sixth grade, it was necessary to pull our sample from the population of fifth graders to maintain a focus on the residential mobility experiences of elementary school children. Stratified random sampling was used to ensure inclusion of schools with concentrations of both poor and more affluent student populations. The purpose was to obtain a representative

sample of students from varying neighborhoods and school types. Thirty-five elementary schools located within the district were divided into three strata using the combined percentage of free and reduced lunch as a proxy for school socioeconomic status (SES). The population of elementary schools fell into three strata that corresponded to low SES (63.6%-94.6% combined free and reduced lunch rate), moderate SES (36.6%-53.2% combined free and reduced lunch rate), and high SES (5.8%-26% combined free and reduced lunch rate). The low SES group contained thirteen schools while the moderate and high SES groups each contained eleven schools.

A total of 11 elementary schools were randomly selected from among the three strata of schools to generate an optimal sampling frame of 5th grade students. A random sample of the fifth grade student population was then selected in equal proportions from each of the three school tiers representing 22% of the total fifth grade population in the school district. After accounting for student records that were unavailable, the final sample for the study (N = 495) was reached.

Data Collection

Data for this secondary analysis were compiled from three sources: cumulative student records, a district-wide data base, and a state-level family and child welfare agency. The IRB approved protocol for this study involved the use of school social workers employed by the district to collect data from student records of enrolled fifth graders. All data were extracted from school files and/or a central student database maintained by the district, and stripped of any personally identifying information (e.g. names, identification numbers). In order to standardize the process, an instrument was created to ensure that data were appropriately gathered on each subject. Each of the data sources is discussed below:

Cumulative student records. School social workers were trained to use the data collection instrument, ensuring that there was consistency in the information extracted from the student records. The cumulative student record provided historical and background information on the individual child and his/her and family, including residential moves. Academic information included standardized reading and math scores, attendance, grade retention, and teacher referrals for behavioral concerns. The research team collected retrospective data on each child from first through fifth grade. Given the nature of the data, some student files were incomplete meaning not all of the requested information was available.

District Wide Data Base. Data collected from the central office data base included system wide information for each school such as rates of free and reduced lunches, the ethnic and racial composition of the student body, and each school's standardized achievement test scores.

State office on family and child welfare. This agency is responsible for addressing issues that impact the well-being of children and families throughout the state, including the protection of children suspected of having been maltreated. This agency confirmed, while maintaining confidentiality, whether a child in the sample had been referred for suspected abuse or neglect during their fifth-grade year. No information related to past

involvement with the agency was reported, nor did the agency indicate the outcome from any referral.

Variables

Residential mobility is used as a predictor variable in the study. Residential mobility is operationalized as a change of address recorded in the student's cumulative file. Each change of address denotes a single move. The variable was coded categorically with zero moves representing "stable households," one or two moves representing "low mobility" households and three or more moves representing "high mobility" households. Coding mobility categorically is consistent with other recent research on mobility (for example, in her 2003 work, Hango creates a dichotomous mobility variable).

Several student educational outcomes are used as criterion variables in the study. Standardized math and reading scores are taken from results of standardized tests administered to 5th graders throughout the State. School attendance is a count of the number of days each student was marked present during the 5th grade school year. Grade retention was operationalized as a categorical variable (1 = retained; 0 = not retained). Teacher referrals for behavior or disciplinary concerns during the 5th grade school year were operationalized by the use of the district's Suspension and Failure Elimination Program (SAFE). SAFE is an in-school intervention tool that assists students in adjusting to the classroom environment. Referrals to SAFE may include disruptive outbursts by the student, use of inappropriate or profane language, and inability to cooperate with classmates. This variable was also coded categorically (1 = referred to SAFE; 0 = no referrals to SAFE). Given that not all disciplinary referrals are equal, it was deemed appropriate for the purpose of this study to create a dichotomously coded proxy variable to capture whether or not the student has had a disciplinary referral, not how many referrals have been made.

Involvement with the child protection system (CPS) is also operationalized as a categorical variable wherein 1 indicates an open case during 2001 and 0 represents the absence of an open case in 2001 (the child's fifth grade year).

Data Analysis

Three analytic strategies were used in examining the data. First, frequency distributions were computed for each of the sociodemographic variables and a chi-squared test was performed to examine relationships across levels of residential mobility. Second, linear regression models were used to evaluate the effect of residential mobility on the continuous education variables (e.g. reading and math scores, attendance) controlling for sociodemographic factors. A hierarchical regression was conducted entering covariates initially, controlling for each, and then entering the predictor variable for mobility. Finally, residential mobility was used as a predictor in logistic regression models to examine the effect on dichotomously coded criterion variables including disciplinary referrals (i.e. SAFE), grade retention, and CPS involvement. Only variables with significant bivariate relationships to the dependent variables were included in the multivariate analyses.

RESULTS

Descriptive Statistics

Over half the students in the sample were male (52%). More than two-thirds of the sample (69%) were non-Hispanic White and a quarter (26%) were African American. Children living in two-parent households comprised slightly more than half the sample (51%) compared to 32 percent who resided in households headed by a single parent. In cases where information on housing status was available in student records, slightly more than one-quarter of the sample (27%) were identified as renters compared to 36 percent who owned their homes. Thirty-six percent of the sample had no information on file.

Residential moves ranged from zero to 16 (m = 1.4 moves, SD = 1.8). Nearly two-thirds of students sampled had experienced at least one episode of residential mobility between first and fifth grade. Thirty-seven percent of the students were considered "stable" with no moves; 46 percent were considered "low mobility" with one or two moves; and 17% were found to be "highly mobile" with three or more moves between the first and fifth grade.

Descriptive data for the dependent variables show a mean standardized reading test score of 832.9 (SD = 240.8, range = 151-1500); and an average standardized math test score of 6.23 (SD = 2.1, range = 2.0-12.9). The mean attendance rate was 95.6 days (SD = 5.6, range = 6.8-100). Nearly one-fifth of the sample (19.4%) had received a disciplinary referral (SAFE), and 18.2% had been referred to Child Protective Services (CPS).

Table 1 displays additional descriptive characteristics for students in the sample according to their level of residential mobility. Chi-square tests indicate that students changing residences three or more times between 1st and 5th grades were more likely to be African American, (χ^2 = 46.0, df = 4, $\rho \leq .001$), and live in single parent families (χ^2 = 101.6, df = 6, $\rho \leq .001$).

Table 1: Descriptive Statistics for Students across Residential Mobility Groups (N = 495)

Variable	Stable (0 moves) n = 181	Low (1-2 moves) n = 228	High (3 > moves) n = 86
Gender[a], %			
Male	51.4	53.5	52.9
Female	48.6	46.5	47.1
Race/Ethnicity, %***			
African American	12.7	28.5	46.5
White (non-Hispanic)	85.1	63.6	48.8
Other[b]	2.2	7.9	4.7
Family composition, %***			
Single parent	16.0	35.1	55.8
Two parent	76.2	43.9	17.4
Step parent	6.1	14.9	10.5
Other[c]	1.7	6.1	16.3

Note. [a] N = 490.
[b] Other category for race includes Asian, Hispanic, and other race/ethnicity.
[c] Other category for family composition includes foster parent, grandparent, and other family composition.
$p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Multivariate Analysis

Educational outcomes. Residential mobility was entered into a linear regression model to predict three educational outcomes: achievement on standardized reading and math test scores, and daily school attendance. With regard to reading scores, after controlling for the sociodemographic factors (i.e. gender, race, and family composition), having a high level of residential mobility was significant in the regression equation (see Table 2). Thus, students who have moved 3 or more times between 1st and 5th grades scored on average 97 points lower on state-wide reading tests compared to their stable counterparts who had never encountered a residential move ($\beta = -.153$, $\rho \leq .01$). No statistically significant effect was found for students with low mobility (i.e. 1 or 2 moves). Other factors in the regression model that significantly predicted reading scores included race ("being African American", $\beta = -.266$, $\rho \leq .001$), and family composition ("residing with a step parent", $\beta = -.104$, $\rho \leq .05$). It should be noted that although

mobility was found to significantly affect reading scores, the added explanatory power of this predictor is small (.011). Residential mobility was not found to be significant in predicting achievement on standardized 5th grade math tests. Table 3, however, does show the variable school attendance to be statistically significant with highly mobile students (β = -.201, $\rho \leq .001$). Thus, students who relocate frequently have a greater number of recorded school absences compared to their residentially stable peers. Although the overall explained variance on attendance is rather low (R-square = .072), the predictor of residential mobility in this model adds greater explanatory power than found with standardized reading scores (see Table 2).

Table 2: Regression of 5th Grade Reading Scores[a] (N = 428)

	Step 1		Step 2	
Variable	**β**	**t**	**β**	**t**
Gender				
Male (coded = 1)	-.063	-1.384	-.067	-1.486
Race				
African American	-.281	-5.774***	-.266	-5.462***
Other[b]	-.034	- .738	-.024	- .523
Family composition				
Single parent	-.148	-2.906**	-.092	-1.684
Step parent	-.129	-2.726**	-.104	-2.148*
Other[c]	-.098	-2.071*	-.061	-1.250
Residential Mobility				
Low (1-2 moves)			-.069	-1.311
High (3 > moves)			-.153	-2.717**
R^2	.156		.167	

Note. [a] January 2001 standardized 5th grade reading scores.
[b] Other category for race includes Asian, Hispanic, and other race/ethnicity.
[c] Other category for family composition includes foster parent, grandparent, and other family composition.
* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Table 3: Regression of 5th Grade School Attendance[a] (N = 459)

	Step 1		Step 2	
Variable	**β**	**t**	**β**	**t**
Gender				
Male (coded = 1)	.050	1.066	.048	1.058
Race				
African American	.059	1.188	.074	-1.496
Other[b]	-.013	- .270	-.010	- .218
Family composition				
Single parent	-.168	-3.233**	-.110	-1.995*
Step parent	.002	.031	.018	.375
Other[c]	-.018	- .373	.031	.630
Residential Mobility				
Low (1-2 moves)			.044	.830
High (3 > moves)			-.201	-3.536***
R^2	.028		.072	

Note. [a] Reported for the 2000-2001 school year.
[b] Other category for race includes Asian, Hispanic, and other race/ethnicity.
[c] Other category for family composition includes foster parent, grandparent, and other family composition.
* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Social-behavioral outcomes. We used logistic regression analysis to determine whether residential mobility was a statistically significant predictor of three dichotomous dependent variables: student disciplinary referrals (SAFE), grade retention, and involvement with child protection services (CPS). Results from this type of analysis are most often reported in terms of the odds ratio for a unit change in a given independent variable. In other words, the odds to which an event will occur. When the variables for gender, race, and family composition were held constant in the model, being highly mobile increased the likelihood of receiving a teacher referral to the SAFE program for behavioral or disciplinary reasons by 2 times ($\beta = .725$, $\rho \leq .05$) compared to residentially stable households (see Table 4). In other words, children who experienced three or more residential moves through 5th grade increased the odds of receiving a disciplinary referral by a factor of two (*OR* = 2.064) when compared to classmates living in non-mobile households. Similarly, when we examined CPS involvement (see Table 5), highly mobile students were 5.5 times at greater risk for having an open case with child protective

services ($\beta = 1.709$, $\rho \leq .001$) compared to students experiencing no residential moves. Residential mobility was not found to be a significant predictor of grade retention.

Table 4: Logistic Regression of Referrals to SAFE Program[a] (N = 490)

Variable	β	SE	Odds Ratio
Gender			
Male (coded = 1)	.570	.254	1.767*
Race			
African American	.643	.271	1.903*
Other[b]	.726	.540	2.067
Family composition			
Single parent	1.127	.315	3.085***
Step parent	1.302	.390	3.675***
Other[c]	2.060	.467	7.844***
Residential Mobility			
Low (1-2 moves)	.299	.304	1.349
High (3 > moves)	.725	.368	2.064*
Constant	-3.082		
Model χ^2	65.7***		
df	8		

Note. [a] Suspension and failure eliminated program.
[b] Other category for race includes Asian, Hispanic, and other race/ethnicity.
[c] Other category for family composition includes foster parent, grandparent, and other family composition.
$p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Table 5: Logistic Regression of Involvement with Child Protective Services (CPS) (N = 490)

Variable	β	SE	Odds Ratio
Gender			
Male (coded = 1)	.340	.258	1.405
Race			
African American	.078	.284	1.081
Other[a]	-.463	.691	.630
Family composition			
Single parent	.910	.320	2.483**
Step parent	1.356	.386	3.881***
Other[b]	1.685	.481	5.394***
Residential Mobility			
Low (1-2 moves)	.619	.330	1.858
High (3 > moves)	1.709	.381	5.522***
Constant	-3.052		
Model χ^2	65.4***		
df	8		

Note. [a] Other category for race includes Asian, Hispanic, and other race/ethnicity.
[b] Other category for family composition includes foster parent, grandparent, and other family composition.
* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

DISCUSSION

The findings from this study suggest those elementary school students living in families that make frequent residential moves are an at-risk population who are likely to have academic and behavioral problems in school. These children are more likely to be African American, living in single parent impoverished families and to have involvement with child protective services.

More specifically, the findings indicate that high residential mobility is related to academic and behavioral problems in elementary school children. High mobility students had significantly lower reading scores (97 points) than stable students. They were also more likely to be referred for behavioral problems. The poorer school performance of mobile students may be related to a number of problems that emanate from both the

immediate adjustments that children have to make when changing residences and schools, and the disruptive impact that mobility has on instruction and learning. These findings are consistent with previous findings on child mobility (Hango, 2003; Schuler, 1990; Tucker et al., 1998; Warren-Sohlberg & Jason, 1992). Changing residences can be viewed as a major stressor for children that probably presents more challenges and needed adjustments for them than it does for adults, not only because children may have fewer coping abilities, but also because they must also adapt to a new school and neighborhood environments.

Most of the time school changes accompany residential moves. When children change schools, it requires an immediate adjustment to a new school setting, new teachers and students, possibly a different academic focus and curriculum, and perhaps a more accelerated pace of curriculum coverage. Additionally, student mobility occurring during the school year disrupts the continuity of instruction and can create many challenges for teachers and administrators related to enrollment and attrition (Schaff, 2005).

As we found in the study, low-income families headed by a single parent are likely to change residences more often than other types of family configurations and income levels. It is common for these residential changes to be short lateral moves from one low-income neighborhood to another (Schaff, 2005). There are many income-related reasons for frequent family moves. The lack of affordable housing is a major problem for most low-income families. The growth of single parent families over the past thirty years, many of whom are poor, have greatly increased the demand for more affordable housing. An increase in demand along with a lack of available affordable housing, especially inexpensive rental units, has disproportionately raised the cost of renting compared to the cost of owning. Most of the highly mobile families in this study were renters. They, like other low-income families, have taken the brunt of the "shelter-poverty" crisis in America that has been created by a serious decline in available low-income housing (Mulroy, 2002; Mulroy & Lane, 1992). Many of the families in our study lived in several predominately African American neighborhoods where it is difficult to find sufficient affordable housing. Perhaps many families are forced to accept housing that they cannot afford.

One of the strongest findings of the study indicated that CPS involvement was 5.5 times more likely to occur in families with high residential mobility. The referrals involved CPS investigations into allegations of abuse and neglect of children and for reported incidents of domestic violence and unfortunately did not reflect rates of substantiation. There is very little in the research literature on the rates of residential mobility for maltreating families. The work of Eckenrode and associates (1995) stands out as the first empirical verification of this relationship demonstrating that maltreating families had high rates of residential mobility. The study found that the relationship of child maltreatment to poor school performance was mediated by high rates of residential mobility. Maltreating families move for some of the same income-related reasons as other low-income families such as the problems associated with the lack of affordable housing. They also move for reasons connected to the unstable relationships and poor family functioning that characterize these families. Families may be constituted and

reconstituted as members come and go and as they move from one residence to another. Maltreatment incidents themselves create mobility when child victims are placed with foster care families. Maltreating families may move more often because they are more socially isolated with fewer ties to parents, extended family members, neighbors and teachers, greatly diminishing their connections to given residences and neighborhoods. They have few supports and low social capital.

The way in which maltreatment incidents are related to residential mobility is not entirely clear. In the study conducted by Eckenrode et al. (1995) based on a small sample, they reported that maltreatment incidents preceded mobility events. However, without time-sequenced data to match incidents to moves, they could only speculate that the stress from residential moves would be a likely contributor to the possibility of subsequent maltreatment. Astone and McLanahan (1994) suggest that an underlying factor of personal instability in these families contributes to both unstable family relationships and residential mobility. Research into the temporal sequencing of residential moves and school transfers with maltreatment incidents would help to clarify the nature of this relationship.

Among highly mobile children, school records were often incomplete or spotty. Thus, this study was limited by the data that was available. We frequently encountered missing or incomplete data and data entered over time by multiple people in multiple locations. Though not uncommon within social science research that relies on extant data, this did limit the depth of our analysis and bears mentioning within this discussion. As discussed above, the initial sample included 22% of fifth grade students from the school district. Students with very limited records (e.g. missing most data) were excluded from the sample. While we cannot be certain of the reason for their spotty records, we can likely infer that among those excluded may have been highly mobile students or students with very limited attachment to the school.

Implications for Social Work

Children from families with high residential mobility constitute an at-risk population who are likely to suffer from poor school performance. These children are embedded in family and neighborhood environments that present a broad array of risk factors including impoverished single parent families, changing family composition, frequent residential and school moves, and a substantial likelihood of maltreatment or domestic violence. Taken together these factors can place children at significant risk for many negative outcomes in addition to school failure. These risks could include delinquency, substance abuse, mental health problems, teen pregnancy and running away. This is an at-risk population with whom social workers have great familiarity, yet rarely is residential mobility alone viewed as a risk factor leading to negative outcomes. Although social workers are likely to encounter these children in school settings, workers must possess skills that go beyond school walls to be effective with these children. Social workers must engage with students, their families, and their communities to help create opportunities and to decrease negative outcomes.

Interventions targeted to address the problem of residential mobility among families with school-age children require a range of social work skills including those at the mezzo and macro levels of practice. We suggest that an important priority of this work focus on promoting family stability and the building of social capital. At the mezzo-level, school-based interventions such as orientation programs, tutoring, and counseling can be useful tools to help a family forge a stronger connection with the educational system. School social workers can be instrumental in strengthening ties between the home and the classroom through an open line of communication between parents and teachers. Direct school services should be augmented with school-based family and community services that provide economic, psychosocial, educational, and social networking assistance. Such resources offer support to those families who must cope with the stressors of a new environment.

An important priority at the macro level involves the need for social workers to advocate for policy change in an effort to support the provision of special services to mobile children and their families. Social workers should be willing to address client housing problems including intervening in disputes with landlords, advocating for rent supports, affecting government policies and practices concerning low income housing and mobilizing community support. Furthermore, child welfare advocates should urge child protection systems to consider residential mobility to be a significant risk factor negatively impacting the well-being of children in their care. They should be encouraged to develop policies that support the prevention of residential mobility with the goal of keeping families stable and children healthier and safer.

Future research on residential mobility and student outcomes should examine evidence-based strategies within school and community settings to promote more stable behavioral and academic outcomes for school-aged youth. An examination of the impact of state and federal legislation on the ability of school systems and community institutions to address student mobility is warranted.

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