Title
Against All Odds: Examining How Parents and Teachers Help Homeless Students Stay on Track Academically

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Against All Odds:
Examining How Parents and Teachers Help Homeless Students
Stay on Track Academically

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Education

by

Kirby Ann Chow

2014
This mixed-methods dissertation examined how a child’s experiences within their primary developmental contexts—family, school, and peers—serve as pathways through which homelessness influences children’s academic and socioemotional adjustment. This study focused on a developmental period (i.e., middle childhood – ages 5-12) and context (i.e., schools) that have received little attention in recent literature on family homelessness. Study 1 focused on a broad investigation of whether child behavioral processes and the quality of children’s experiences with their family (i.e., parental involvement at school, warmth, and control), at school (i.e., perceptions of school belonging, school engagement), and with peers (i.e., victimization, loneliness) mediate the relation between residential mobility and children’s academic outcomes. Participants were 78 children and their primary caregivers (n = 54) living at
two family homeless shelters in Southern California. Results of a series of SEM path analyses showed that residential mobility negatively impacted parents’ involvement at their child’s school, which in turn, predicted lower academic achievement test scores. Children whose families had moved more often also reported lower levels of school belonging and, in turn, lower levels of school engagement. Study 2 provided an in-depth examination of teachers’ perspectives working with homeless students. Semi-structured interviews were conducted with 28 teachers who worked at the designated public schools for the family homeless shelters from which participants in Study 1 were recruited. A prominent theme from teachers’ accounts was that homelessness is linked to more than just loss of housing and residential mobility, but also breaks in relationships with family and friends. These various forms of instability appeared to influence students’ socioemotional adjustment in the classroom including difficulties developing relationships with classmates. Findings also demonstrated how frequent student mobility presented challenges for teachers, and how teachers’ own social and emotional competencies (e.g., perspective taking) shaped how they responded to homeless students’ needs. Overall, results suggested that schools should prioritize fostering supportive relationships with homeless children and their parents as a means to promote students’ educational success. In order to protect the development of homeless children, policy and practice efforts must be aimed at strengthening the stability of homeless families.
The dissertation of Kirby Ann Chow is approved.

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2014
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CONTRIBUTION OF AUTHORS

The manuscript for Study 2 (Homelessness in the Elementary School Classroom: Social and Emotional Consequences) was invited for submission to the “Homeless Youth and Educational Institutions” Special Issue in the International Journal of Qualitative Studies in Education, for the July 2015 issue. It has been reviewed by the special issue guest editors (Ronald Hallett, Peter Miller, and Linda Skrla), and is currently under external review. This manuscript is co-authored by myself, Dr. Rashmita S. Mistry, and my undergraduate research assistant Vanessa Melchor. As the lead author for this manuscript, I took the lead role in planning and implementing the study at participating schools, supervised undergraduate research assistants who transcribed the interviews, analyzed the data with instrumental support from Vanessa Melchor and advisement from Dr. Mistry, and prepared initial drafts of the manuscript. Dr. Mistry provided considerable input and guidance with respect to the development of the semi-structured interview protocol, framing and organization of the paper, analysis and interpretation, and made extensive editorial comments on earlier drafts of the manuscript.
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GENERAL INTRODUCTION

In the wake of the recent housing crisis and the Great Recession, with national estimates suggesting that over a million students were homeless during the 2011-12 school year (National Center for Homeless Education - NCHE, 2014), it is critically important that scholars remain focused on the well-being of homeless children, arguably one of the most vulnerable segments of the child population. While there is robust evidence that homelessness places children at significant risk for negative educational and social outcomes (Haber & Toro, 2004; Miller, 2011), not all children experiencing homelessness fare poorly. Recent studies highlight that some homeless and highly mobile (H/HM) children are able to attain a high level of academic competence (e.g., Cutuli et al., 2013; Obradović et al., 2009) and demonstrate high levels of functioning across multiple domains (e.g., academic and behavioral functioning; Huntington, Buckner, & Bassuk, 2008) despite facing significant adversity. Less well investigated are the factors and processes that account for the variability among homeless children’s educational outcomes.

Thus, my dissertation sought to address this gap in the literature by examining the ways in which a child’s experiences within their primary developmental contexts—family, school, and peers—serve as pathways through which homelessness and residential mobility influence children’s academic and socioemotional adjustment. I did so with attention to a developmental period (i.e., middle childhood) and context (i.e., schools) that have received little attention in recent literature on family homelessness.

First, I provide a general orientation to the topic of family and child homelessness by addressing prevalence rates, instability issues H/HM students face, and the variability among H/HM children’s outcomes. I then turn to a discussion about the importance of examining
developmental contexts during middle childhood in order to account for the heterogeneity among H/HM children. Lastly, I summarize the main objectives of Study 1 and Study 2.

**Prevalence of Family and Student Homelessness Signifies a Pressing Social Issue**

Homeless families and children are often a “hidden” population that much of the public is not even aware exists. However, based on the U.S. Department of Housing and Urban Development’s (HUD) 2013 point-in-time estimates of sheltered and unsheltered individuals, homeless families make up over a third of the total homeless population. That is, on a single night in January 2013, 222,197 (or 36%) of all homeless people counted were persons in families (HUD, 2013). Moreover, 58% of all homeless people in families were children (HUD, 2013). As depicted in Figure 0.1, the most recent available data on the age distribution of homeless children indicate that children ages 6-12 comprise 34% (110,976) of the sheltered homeless child population (HUD, 2009).

![Figure 0.1](image)

The U.S. Department of Education (DoE) also requires that public schools report on the number of children who meet the DoE definition of homelessness—*individuals who lack a fixed, regular, and adequate nighttime residence*. This includes conditions such as living in shelters,
transitional housing, motels, cars, parks, public spaces, abandoned buildings, and substandard housing. Additionally, children who are “doubled up” (i.e., sharing housing with others due to loss of housing, economic hardship, or a similar reason), children who are awaiting foster care placement, and certain cases of migratory children also fall under this definition (NAEYC, NCHE, NCH, NLCHO, & NN4Y, 2002). DoE data indicated that during the 2011-12 school year (SY), there were approximately **1,168,354** identified homeless students nationwide (NCHE, 2014). Children living “doubled up” accounted for the largest percentage of homeless students, followed by those living in shelters, hotels/motels, and being unsheltered (i.e., living on the streets or in cars; see Figure 0.2). The current study focused on children living in **family shelters** in Southern California.

For the past three academic years, of all the states, California has had the largest percentage of the total national enrollment of homeless students. During the 2011-12 SY, California accounted for 21.3% (248,904) of all identified U.S. homeless students, far exceeding the next three states with the highest-ranking percentages of student homelessness (see Figure 0.3).
More specifically, data for the current study were collected in the Greater Los Angeles Area, a region that serves a large number of homeless families (HUD, 2013). The Los Angeles Unified School District (LAUSD), the second largest school district in the nation, identified over 15,000 homeless students during the 2010-11 school year (LAUSD Homeless Education Program, 2012). As shown in Figure 0.4, in 2009, approximately 57% of homeless students in LAUSD were in kindergarten through sixth grade, which aligns with the developmental period of focus for the current study.
Homeless and Highly Mobile Students Face Significant Instability

As I interviewed parents for the current study, I heard numerous accounts that poignantly illustrated the instability homeless families endure. No one story was exactly alike, yet most shared a common thread of frequent mobility and strained relationships.

Sierra\textsuperscript{1} described how she, her partner, and their two young daughters were living doubled-up with a friend. However, things went downhill when their friend received an eviction notice, didn’t tell them, and disappeared with their rent money. In an attempt to acquire money for a place to stay, Sierra’s partner tried to rob a store but was caught on camera, and consequently was in prison at the time of the interview. I often observed the girls drawing pictures to send to their dad and heard them talk about how they missed him. Sierra and her 2 young daughters lived in various motels/hotels, a rescue shelter for 7 weeks, a transitional housing facility for 1 month, a rescue mission for 2 weeks—all before arriving at the transitional family shelter where they resided at the time of the interview.

Another mother, Teresa, recounted how she and her family used to live in their own 2-bedroom house when her partner worked as a security guard for a school district. However, when Teresa’s partner got laid off, they could no longer pay for rent, and moved in with his parents. She, her partner, and their young son later moved into a back house (like a garage), which they rented from a woman who owned the house. However, when the city came to investigate, they claimed that it was illegal for the woman to rent out the back house, and ordered that Teresa and her family move out or else they would be fined. They then lived with various family members for roughly 3 months, mainly staying with her partner’s parents. Unfortunately, there was

\textsuperscript{1} All parent, teacher, and school names are pseudonyms used to protect the identity of participants
substantial conflict stemming from differing cultural beliefs about the role of women. Teresa described how her partner’s parents felt that women should let their husbands do whatever they want and not say anything, and this clearly clashed with her personal beliefs. Due to these conflicting views, they left, and through the family preservation agency they were able to move into the family emergency shelter where they were living at the time of the interview.

In another case, Raven described how she, her partner, and their two boys lived with friends and family for about 4 years, which involved moving around to more than 5 different places. She explained how they eventually went to the Union Rescue Mission on Skid Row but only stayed there for 1 week because the organization tried to separate her from her partner. They then resided in a hotel for 2 weeks, then at an emergency shelter for 2 months, before coming to the transitional shelter where they were staying at the time of the interview.

During another interview, Carla recalled that she and her 2 young boys were homeless in California for one month, then had an apartment for 6-8 months, but eventually had to move out because she couldn’t pay the rent. Subsequently, they were homeless for a few weeks, and then lived in a transitional housing facility for 3 months. Carla explained how they then went to Texas for 1 year to live with her husband who was in the military, but due to domestic violence, one day she took whatever she could in her car and left. She said that they were living in their car for a while, and that she would drive around until the kids fell asleep at night. When they woke up, she would explain to them that she was too tired, so they all just slept in the car. Carla expressed that this routine helped to protect her kids from knowing what was really happening. For awhile, all of the shelter programs she had applied to were full, but eventually she got a call from the shelter director at the transitional family shelter informing her there was an opening and that they could move in. This is where I met Carla.
As a final example, Edwina described how their house in Nevada foreclosed in 2010. After losing their house, she and her daughter stayed in a motel in Las Vegas, and eventually made their way to Santa Barbara to stay with a friend. They then stayed in a shelter on Skid Row, left when there was an opening at another shelter, and lived in a motel before arriving at the transitional shelter in 2011 where they participated in the study.

As vividly demonstrated above, episodes of family homelessness are characteristically part of a long period of residential instability, in which families bounce around various living situations including stays in their own housing, doubling up with friends and relatives, living in motels or hotels, and/or staying in shelters. Moving residences is a fairly typical experience for U.S. children (Murphey, Bandy, & Moore, 2012). Data collected from the Current Population Survey (CPS) indicated that in 2011, over nine million children ages 1-17 (approximately 30%) changed residence. However, children from lower socioeconomic families are more likely to experience residential mobility in comparison to their more advantaged counterparts (Jellyman & Spencer, 2008; Murphey et al., 2012; U.S. Census Bureau, 2012). While a change of residence can be a positive experience if the decision is strategic and driven by choice (e.g., take a new job, seek better schools), moves among low-income families are often involuntary, forced, and unplanned (Clark, 2010; Cohen & Wardrip, 2011). Evictions by landlords or primary tenants, foreclosures, and other deleterious events in which children have little control, are some of the primary reasons for residential mobility among homeless families (Samuels, Shinn, & Buckner, 2010). During middle childhood (i.e., ages 5-12) residential mobility is often linked to school mobility. Homeless students often change schools in the midst of the school year, and are faced with adjusting to a new curriculum, new teacher and peers, and an unfamiliar social environment (Samuels et al., 2012). Thus, these transitions and mobility can impact students academically,

**Substantial Variability Among H/HM Students**

There is a well-established literature that homeless children are at heightened risk for academic, social, emotional, and behavioral problems when compared to their non-poor and low-income housed counterparts (e.g., Buckner, Bassuk, Weinreb, Brooks, 1999; Haber & Toro, 2004; Rafferty & Shinn, 1991; Torquati & Gamble, 2001; Zima, Wells, & Freeman, 1994). However, recent work highlights substantial variability among the educational outcomes of homeless children (Cutuli et al., 2013; Huntington et al., 2008; Obradović et al., 2009). For example, in Cutuli and colleagues (2013) analysis of a large-scale school district dataset, they found that among H/HM students, about 45% scored within the normative range or better on reading and math assessments. Furthermore, data collected by the DoE indicated that during the 2011-12 SY, roughly half of identified homeless students in grades 3-6 who took state standardized tests, met or exceeded reading and math standards (NCHE, 2014). Evidence of such within group variability underscores the need to identify factors that both promote and inhibit children’s academic success within the context of homelessness. Nonetheless, relatively little is known about the factors and processes that contribute to differential outcomes among homeless children. Therefore, my dissertation sought to address this limitation by investigating the quality of homeless children’s experiences at home and at school as potential explanatory mechanisms.
to better understand how housing instability influences children’s outcomes during middle childhood.

**Examination of Family and School Contexts are Critical for Understanding H/HM Children’s Outcomes During Middle Childhood**

According to an ecological perspective, children’s development is most strongly affected by regular and enduring interactions in one’s family and school, and the risks and resources that children bring to and encounter within these contexts (Bronfenbrenner & Morris, 2006). Recent work examining child and family processes (e.g., executive functioning, parenting) has primarily focused on young homeless children (ages 4-7) as they transition to school (Herbers et al., 2011; Obradović, 2010). While these very early years are important for establishing a strong foundation for future development, “experiences in middle childhood can sustain, magnify, or reverse the advantages or disadvantages that children acquire in the preschool years” (Huston & Ripke, 2006, p. 2). Children’s interactions with parents and teachers during the early elementary school years are associated with children’s cognitive and socioemotional development into adolescence (Magnuson, Duncan, and Kalil, 2006) and academic trajectories several years later (Entwisle & Hayduk, 1988), thus setting the stage for long-term outcomes.

Middle childhood is a time when children enter formal schooling, and gain new cognitive skills that enable them to think more flexibly and purposefully. Children at this age are also developing a sense of identity about who they are and how they fit in. They are learning how to interact and build positive relationships with peers and adults outside of the family—key developmental tasks important for cultivating competence both in and out of school (e.g., Eccles, 1999). During elementary school, children are developing their academic self-concepts, and teachers’ beliefs and expectations play an important role in shaping a child’s school experiences,
especially in the face of adversity (Eccles, 1999). Even though children’s worlds are expanding beyond the family to school and peers, the family still remains a principal influential factor, and cognitive and emotional supports in the family carry significant weight in middle childhood (Huston & Ripke, 2006). Parents and teachers can be important resources, and there is strong empirical evidence from a risk and resiliency framework, that supportive relationships with a caring adult can foster resilience, protecting the development of competence in unfavorable environments like homelessness (Masten, 2001).

**Dissertation Aims**

It is for the abovementioned reasons that Study 1 of this dissertation focused on a broad investigation of whether child behavioral processes and the quality of children’s experiences with their family (i.e., parental involvement in their child’s schooling, warmth, and control), at school (i.e., children’s perceptions of school belonging, school engagement), and with peers (i.e., peer victimization, loneliness) mediate the relation between residential mobility and children’s academic outcomes. For Study 1, survey interviews were conducted with children (n = 78) and their primary caregivers (n = 54) who were living at family homeless shelters (n = 2) in the Greater Los Angeles Area during the period from September 2011-December 2012. Using quantitative research methods, findings from Study 1 highlighted the importance of processes involving the school setting for children’s educational outcomes. Results showed that residential mobility negatively impacted parents’ involvement at their child’s school, which in turn, was related to lower academic achievement. Additionally, frequently moving residences was associated with children reporting lower levels of belongingness to their school, which was predictive of lower levels of school engagement.
Given the school-related emphasis of findings from Study 1, Study 2 provided an in-depth look at the school context, with a specific focus on teachers’ perceptions and experiences working with children from homeless families. Teachers (n = 28) were recruited from the home schools (i.e., district-assigned schools) for the local shelters from which I recruited participants. Employing qualitative research methods, I sought to understand teachers’ perceptions of homeless students, how teachers adjust their instruction to meet students’ learning and behavioral needs, challenges teachers face, and the training experiences teachers received for working with homeless students. What emerged from the data was rich information about children’s social adjustment at school, which was consistent with and elaborated upon the quantitative findings from Study 1 about how residential instability compromises children’s sense of belonging at school.

Conclusion

Taken together, this dissertation utilized a mixed methods approach to examine how the instability tied to family homelessness influenced children’s experiences in their primary developmental contexts. Major findings suggested that instability linked to experiences of family homelessness (e.g., residential mobility, school mobility, family instability) were related to the quality of children’s and parents’ relationships and connections to school, and ultimately children’s educational and socioemotional outcomes. With a record number of homeless students enrolled in our local schools, it is a critical time to help our nation’s most vulnerable children meet their full potential through education.
STUDY 1

Residential Mobility, Developmental Contexts, and Homeless Children’s Academic Outcomes

Family homelessness is most aptly characterized as a pattern of residential instability (Rog & Buckner, 2007). Homeless episodes are commonly part of a longer span of residential instability in which a family might experience frequent moves including short stays in their own apartment, doubling up with relatives and friends until wearing out their welcome, brief stays at a motel, residing in various emergency shelters, or staying in a transitional shelter for an extended period of time. Frequently moving can be stressful for both children and their parents, and there is robust evidence that residential mobility has adverse consequences for children’s socioemotional and academic development (Anderson, Leventhal, Newman, & Dupéré, 2014; Scanlon & Devine, 2001). Although homeless and highly mobile (H/HM) children face an elevated level of educational risk, not all fare poorly. Recent studies show that some H/HM children are resilient, that is, they are able to attain a high level of academic competence despite facing significant adversity (Cutuli et al., 2013; Obradović et al., 2009). Yet, less well known is what factors and processes account for differences among H/HM children, helping to explain why it is that some children demonstrate academic resilience while others do not.

Housing instability and frequent residential moves disrupt children’s routines and relationships in part by triggering shifts in the nature and quality of their most proximate developmental contexts—their family, school, and peers. There is, however, a paucity of research investigating how these key contextual pathways link residential mobility to children’s outcomes, especially among homeless school-aged children. Therefore, the current study examined the extent to which children’s experiences with their parents, at school, and with peers,
serve as conduits through which residential mobility impacts homeless children’s academic outcomes during the elementary school years.

Children’s interactions with parents and teachers during middle childhood (i.e., ages 5-12) have been linked to children’s academic trajectories (Entwisle & Hayduk, 1988) and socioemotional development into adolescence (Magnuson, Duncan, and Kalil, 2006), thus setting the stage for long-term outcomes. Middle childhood is also a period during which substantial numbers of children experience bouts of homelessness. Current estimates indicate that children ages 6-12 comprise 34% of the sheltered homeless child population (U.S. Department of Housing and Urban Development, 2009). Additionally, the elementary school years are a particularly important developmental period when children begin to establish a sense of identity. It is a time marked by cognitive changes, introduction of new social contexts such as school, and the emergence of social comparisons, all of which influence children’s self-confidence, engagement, and expectations about the future (Eccles, 1999). Understanding the impact of residential mobility on the quality of children’s relationships within key developmental contexts can enhance our understanding of the variation in academic adjustment among homeless children, and can offer guidance about where to target interventions (Anderson et al., 2014).

**Homeless and Highly Mobile Children Face Elevated Risk, Yet Also Show Evidence of Resilience**

Homelessness is considered an indicator of high risk and adversity. The impact of homelessness on children can be viewed as the extreme end of a continuum of risk tied to poverty (Buckner, Bassuk, & Weinreb, 2001; Masten, Miliotis, Graham-Bermann, Ramirez, & Neeman, 1993). Homeless children experience risk factors common to other low-income children such as limited financial resources, low levels of parental education, parental distress,
exposure to family and community violence, and poorer nutrition and healthcare (Huntington, Buckner, & Bassuk 2008; McLoyd, 1998), while also experiencing risks unique to homelessness such as additional life stress, and frequent residential and school mobility (Buckner, 2008; Buckner, Bassuk, Weinreb, & Brooks, 1999; Masten et al., 1993; Rafferty, Shinn, & Weitzman, 2004).

Recently, researchers (Cutuli et al., 2013; Obradović et al., 2009) have utilized large school district datasets to examine the academic trajectories of H/HM\(^2\) elementary school students and how they compare to their low-income yet stably housed (qualify for free or reduced price lunch but not H/HM), and relatively “advantaged” peers (neither H/HM or low-income). Findings have been concordant with the concept of a continuum of risk. That is, H/HM students were at greater risk for low academic achievement in comparison to low-income stably housed students, who in turn had lower academic achievement than their more economically advantaged counterparts. These differences persisted, even after accounting for key student characteristics (i.e., sex, English Language Learner status, attendance, ethnicity), signifying that H/HM status is an additional risk factor above and beyond the effects of other indicators of potential disadvantage.

Even though H/HM students demonstrated lower levels of academic achievement in comparison to their more economically advantaged counterparts, researchers also found striking variability among initial reading and math achievement levels within H/HM samples. For example, Obradović and colleagues (2009) found that approximately 60% of H/HM students’ reading and math trajectories fell within one standard deviation of the national mean or higher on a norm-referenced standardized achievement test. Using more stringent criteria, they found that

\(^{2}\) Children were given H/HM status if they met the McKinney-Vento definition of H/HM, and/or reported three or more changes in residence in a 12-month period (Cutuli et al., 2013; Obradović et al., 2009).
20% of H/HM students scored at the national average or better. However, other H/HM students struggled academically; about 40% scored lower than 1 SD below the mean, and some (~10%) even scored 2 SD below national averages on reading and math. This suggests that there is substantial variability in the vulnerability factors and assets in the lives of homeless children.

These researchers have made an important contribution in that they are among the first to analyze longitudinal data on academic achievement, finding evidence of resilience among large samples of H/HM children. However, their efforts to understand what might account for the variability among H/HM students by investigating factors such as attendance, ethnicity, and gender (i.e., information collected by school districts) have been fairly ineffective (Cutuli et al., 2013). Thus, it is likely that the most influential factors and processes that might foster resilience are not things routinely measured by school districts (Obradović et al., 2009), but rather “factors in the child’s psychology and ecology” (Cutuli et al., 2013, p. 854) such as child behavioral processes, effective parenting, and relationships in classrooms (Luthar, 2006; Masten, 2007). Therefore, the current study sought to build off of this work by exploring the ways in which a child’s experiences within their proximal developmental contexts (i.e., family, school, and peer) could enhance our understanding of the processes that might account for observed academic resilience as well as less adaptive academic outcomes. More specifically, this study examined to what extent homeless children’s behavioral processes, relationships with parents, at school, and with peers underlie the relation between residential mobility and child academic achievement during the developmental period of middle childhood.

**Theoretical Framework: Bioecological Theory and a Risk and Resilience Perspective**

Bioecological theory (Bronfenbrenner & Morris, 2006) more generally, and a risk and resilience framework (Masten & Coatsworth, 1998) more specifically, guided the current study.
Bioecological theory asserts that complex interactions between individuals and various environmental systems drive human development. These environments range from proximal settings (e.g., homes, schools) to larger societal structures (e.g., social policies, societal values and beliefs). Regular and enduring interactions in children’s most proximate contexts (termed proximal processes), such as relationships with others at home and school, have the strongest and most enduring influence on development. Residential moves experienced by homeless families are likely to bring about changes to children’s proximal contexts, which may be disruptive for children and their parents with the potential to adversely affect developmental outcomes (Anderson et al., 2014).

However, studies of resilience suggest that a set of core processes such as supportive and caring adults in one’s life foster and protect the development of competence in both favorable and unfavorable environments such as homelessness. Positive characteristics or assets of the child, family, and school environment (e.g., supportive parent-child relationships, feeling a sense of belonging at school) that lessen the negative impacts of adversity on children’s developmental outcomes have been shown to promote resilience (Masten, 2001). Consequently, the current study focused on examining whether processes within the child (i.e., behavioral processes), family context (i.e., parental warmth, control, involvement in their child’s schooling), school context (i.e., child perceptions of school belonging, school engagement), and peer context (i.e., victimization, loneliness) help to explain the relation between residential mobility and child academic outcomes during middle childhood [See Figure 1.1 for conceptual model].
There is strong empirical evidence that residential mobility has adverse effects on children’s behavioral, social, and emotional outcomes (Anderson et al., 2014; Jellyman & Spencer, 2008; Wood, Halfon, Scarlata, Newacheck, & Nessim, 1993; Ziol-Guest & McKenna, 2014; Zima, Bussing, By Stritsky, Widawski, Belin, & Benjamin, 1999). Furthermore, children’s behavioral characteristics influence academic functioning. Children with behavior problems may have difficulty paying attention and working with others, leading to poorer school performance (McLelland, Morrison, & Holmes, 2000). Additionally, internalizing problems may contribute to lower academic achievement through decreased motivation, participation, concentration, and
attention from teachers (Rapport, Denney, Chung, & Hustace, 2001). In fact, children’s prosocial behavior has been associated with better academic performance (Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000), while children’s internalizing and externalizing behavior problems have been predictive of academic underachievement (Arnold & Doctoroff, 2003; Masten et al., 1997; Roeser, Eccles, & Strobel, 2002). As depicted in Figure 1.1 (Paths B1-B2), the current study examined whether homeless children’s externalizing, internalizing, and prosocial difficulties mediate the relation between residential mobility and academic functioning.

**Family Context: Parenting Processes**

Family members, particularly parents, are the principal socialization agents of children (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000). Authoritative parenting, characterized by high warmth, high expectations, and appropriate and consistent discipline is associated with positive adjustment and academic success (Amato & Fowler, 2002; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). Previous work by developmental researchers has shown that one of the key ways in which economic hardship impacts children is through its effects on parenting (e.g., McLoyd, 1990; 1998). Poverty places additional stress on parents, negatively impacting parental mental health, and weakening the capacity to be a sensitive and supportive parent (Mistry, Vandewater, Huston, & McLoyd, 2002). For example, Koblinsky, Morgan, and Anderson (1997) found that homeless mothers’ financial stress (e.g., preoccupation with meeting basic needs) was linked to lower levels of warmth and cognitively and socially stimulating interactions with their children in contrast to comparably low-income, housed mothers. A recent study by Herbers and colleagues (2011) observed links between parenting practices and school adjustment among a sample of 58 predominately African American homeless children (ages 4-7).
and their parents. Specifically, they found that parenting quality was positively associated with teacher-rated school engagement and academic competence.

Parental school involvement is broadly defined as the activities parents engage in with their child and the schools they attend, with the intention of fostering their child’s academic outcomes and future success (Hill et al., 2004). Parental involvement includes school-based strategies (e.g., attending parent-teacher conferences, volunteering at school), home-based strategies (e.g., helping child with homework, reading with child), and academic socialization practices (e.g., communicating educational expectations and plans for the future; Hill & Tyson, 2009). Despite the paucity of research on parental school involvement in the context of homelessness, there is a substantial body of work showing that parental involvement is positively associated with children’s school related outcomes among normative and high-risk populations (Barnard, 2004; Fan & Chen, 2001; Grolnick & Slowiaczek, 1994; Jeynes, 2005; Miedel & Reynolds, 1999). For example, Miliotis, Sesma, and Masten (1999) conducted one of the only studies to examine the effects of parental school involvement with a sample of 59 African American homeless children (ages 6-11) and their parents. They found that high parent involvement was associated with school success as measured by school records of achievement. Interestingly, parent’s intellectual functioning, education level, psychological distress, and firm disciplinary practices were not associated with child academic success, signaling that parental school involvement may serve a particularly important role in the context of homelessness. The current study expands upon the limited work on parenting processes within homeless families, and examines whether parental warmth, control, and involvement in their child’s schooling help to explain the association between residential mobility and children’s academic achievement [see Figure 1.1, Paths C1-C2].
Children’s Experiences at School: School Belonging and School Engagement

Residential mobility is often coupled with changing schools, which means that children must adjust to a new school climate, teachers, and peers. Even if children move but do not change schools, children may face adjustment difficulties associated with moving more generally, especially if the move is tied to family instability (Cavanagh and Huston, 2006). Homeless children who experience frequent mobility may be at risk for feeling a lower sense of belonging to the school community, but it remains unknown how this might relate to children’s academic achievement (Anderson et al., 2014).

School belonging refers to a student’s belief that teachers and school personnel care about their learning and about them as individuals and takes the form of positive adult-student relationships and feelings of physical and emotional safety (Blum & Libbey, 2004). Elementary school students’ sense of relatedness to their school plays an important role in their academic motivation and performance, such that feelings of belonging may help foster enthusiasm and willingness to participate in academic activities (Furrer & Skinner, 2003). Students’ enhanced feelings of school belonging are associated with a range of positive health, social, and academic outcomes including enhanced academic motivation (Anderman, 2003) and higher academic achievement (Fredericks, Blumenfeld, & Paris, 2004; Klem & Connell, 2004). While there is less evidence for a direct association between a student’s sense of belonging to school and academic achievement, there is considerable empirical support suggesting that school belonging has an indirect effect on achievement through its influence on school engagement (Osterman, 2000). As shown in Figure 1.1 (Paths D1-D3), the current study tests whether children’s sense of school belonging and school engagement, help explain the association between residential mobility and academic achievement.
Peer Context

When homeless children move, it disrupts ties with peers and friends, and establishing new relationships may be difficult. Some homeless students face negative encounters with peers in which they are labeled and stereotyped, feel ashamed, and therefore attempt to conceal that they are homeless (Tower, 1992). Peer rejection or acceptance in elementary school has consequences for children’s achievement and behavioral outcomes (Asher & McDonald, 2009; Bukowski, Brendgen, and Vitaro, 2007). Among homeless children, feelings of social isolation, rejection, and withdrawal have been correlated with poorer educational achievement outcomes, especially for children who experienced extensive periods of homelessness (Anooshian, 2003).

Studies using data from the National Longitudinal Study of Adolescent Health have found that the relation between residential mobility and achievement outcomes is mediated by peer victimization and changing peer networks (e.g., more deviant peers, smaller less popular peer networks) (Haynie, South, and Bose, 2006; South and Haynie, 2004). However, much of the work examining associations between residential mobility and peer relationships has focused on adolescents; less research has focused on these relations during middle childhood. One exception is a study conducted by Anderson and colleagues (2014); they found that moves in middle childhood were associated with a reduction in the number of one’s peers and less positive peer interactions, signaling that additional work is needed in this area.

Existing work informs how peer victimization might be tied to children’s outcomes. Nakamoto and Schwartz’s (2009) meta-analytic review revealed a small but significant association between peer victimization and academic achievement, and there is evidence that psychosocial adjustment may mediate this relationship (Juvonen, Nishina, & Graham, 2000). Among elementary school children, negative peer relationships have been linked to feelings of
loneliness (Guay, Boivin, and Hodges, 1999), internalizing symptoms (Flook, Repetti, & Ullman, 2005), and depressive symptoms (Schwartz, Gorman, Nakamoto, and Toblin, 2005), all of which then predict lower academic functioning and achievement. The current study explored whether children’s experiences in the peer context (i.e., victimization by peers, loneliness and difficulty making friends, and internalizing symptoms) underlie the relation between residential mobility and academic outcomes [see Figure 1.1, Paths E1-E4].

The Current Study

The current study addressed the following research questions:

1) What is the association between residential mobility and homeless children’s academic achievement outcomes (i.e., math and reading scores)? [see Figure 1.1, Path A]

2) To what extent do children’s behavioral processes, and experiences within key developmental contexts—family, school, peers—mediate the association between residential mobility and academic achievement? More specifically,

   a. Do children’s behavioral processes (i.e., externalizing, internalizing, and prosocial difficulties) mediate the association between residential mobility and children’s math and reading scores? [see Figure 1.1, Paths B1-B2]

   b. Do family processes (i.e., parental warmth, control, and involvement in their child’s schooling) mediate the association between residential mobility and children’s math and reading scores? [see Figure 1.1, Paths C1-C2]

   c. Do school processes (i.e., children’s feelings of school belonging and school engagement) mediate the association between residential mobility and children’s math and reading scores? [see Figure 1.1, Paths D1-D3]
d. Do peer processes (i.e., children’s experiences of victimization, loneliness, and internalizing symptoms) mediate the association between residential mobility and children’s math and reading scores? [see Figure 1.1, Paths E1-E4]

Methods

Data Source

Families were recruited from two family homeless shelters (one transitional shelter and one emergency shelter\(^3\)) in the Greater Los Angeles Area operated by the same agency over a 14-month period, and families with 6- to 12-year old children were invited to participate. Recruitment procedures included posting signs on shelter bulletin boards and hosting four recruitment pizza parties. In addition, participants learned of the study by word-of-mouth through staff and residents, and staff also helped distribute study recruitment packets to families. Families who had been at the shelter for less than 1 month typically were not recruited; only 1 parent participated earlier at their request.

According to the agency, the most common reasons for families entering the shelters included eviction, job loss, substance abuse, mental health problems, and issues with family and relatives. The current sample was reflective of the larger shelter populations. The most frequently reported reason for entering the shelter was an inability to pay rent (with the majority being laid off from work or an inability to find work); other commonly cited reasons included conflict with family members or friends with whom they were living doubled up and eviction.

In the current sample, 18 families were living at the emergency shelter and 36 families were living at the transitional shelter. Among participating families, average length of stay was

\(^3\) The goal at the emergency shelter is to assess families for barriers, and place those with fewer barriers into permanent housing and those with more needs into transitional housing. The emergency family shelter provides housing to 27 families at a given time, and each family is allowed to stay for up to 90 days. The goal for families living at the transitional shelter is to move into permanent housing. The transitional family shelter provides housing to 65 families at a given time, and each family may stay for up to 2 years.
1.92 months (SD = 1.30; range = 0.23 – 5.75) at the emergency shelter and 5.37 months (SD = 5.01; range = 1.05 – 20.50) at the transitional shelter. While the duration of time spent at the transitional shelter was significantly longer than the emergency shelter (F (1, 53) = 6.21, p = 0.016), the duration of the current homeless episode (M = 15.03 months, SD = 18.73 and M = 15.63 months, SD = 15.04 for the emergency and transitional shelter, respectively) did not differ significantly between the two sites (F (1, 53) = 0.017, p = 0.898). One-way analysis of variance (ANOVA) models were conducted to test for mean-level differences on all model variables by shelter type. The only variable for which there was a significant difference between emergency and transitional shelter participants was for level of parental involvement at school (F (1, 76) = 13.13, p = 0.001). Parents living at the emergency shelter reported higher levels of involvement (M = 4.04, SD = 0.87) than parents at the transitional shelter (M = 3.23, SD = 0.98). Therefore, the two shelter groups were pooled, and all model analyses controlled for shelter type.

**Participants**

A total of 54 families and 78 school-age children (M = 9.08, SD = 2.04) participated in the current study. The primary caregiver (48 mothers and 6 fathers) and up to two children (40 boys, 38 girls) participated per family. Children were predominately Latino (44%) and African American (31%). Primary caregivers were 35.35 years, on average (SD = 7.44; range = 22.58 – 50.72); over a third reported never having been married, 35% reported less than a high school education, and only about 17% were employed at the time of the interview. The average number of children currently living in each family was 3, and ranged from 1 to 8. Participant demographic information is provided in Table 1.1.
Table 1.1

**Study Sample Demographics** (n = 54 primary caregivers, n = 78 children)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage</th>
<th>M</th>
<th>SD</th>
<th>Min. - Max.</th>
</tr>
</thead>
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<td>Child gender</td>
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<tr>
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<td>48.70</td>
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<tr>
<td>Male</td>
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<tr>
<td>Child age</td>
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<td>2.05</td>
<td>5.36 - 12.90</td>
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<td>Child's race/ethnicity</td>
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<tr>
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<tr>
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<tr>
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<td>Biracial / Multiracial</td>
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<tr>
<td>Other</td>
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<td></td>
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<tr>
<td>Primary caregiver's relationship to child</td>
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<td></td>
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<tr>
<td>Mother</td>
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</tr>
<tr>
<td>Father</td>
<td>11.11</td>
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<tr>
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<td>22.58 - 50.72</td>
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<tr>
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<tr>
<td>Other</td>
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<tr>
<td>Primary caregiver foreign born (1 = yes)</td>
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<tr>
<td>Elementary / junior high</td>
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<td>Some high school</td>
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<tr>
<td>Completed high school</td>
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<td>Technical / vocational school</td>
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<td>Some college</td>
<td>24.07</td>
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<td></td>
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<tr>
<td>Completed college</td>
<td>3.70</td>
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<tr>
<td>Primary caregiver's employment status (1 = employed)</td>
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<td>Employed</td>
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<tr>
<td>Unemployed</td>
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<tr>
<td>Not married, but cohabitating</td>
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<tr>
<td>Other</td>
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<tr>
<td>Number of children currently living with family</td>
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<td>1.74</td>
<td>1.00 - 8.00</td>
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<tr>
<td>Shelter</td>
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<td>Transitional shelter</td>
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<td>Emergency shelter</td>
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<tr>
<td>Duration of current homeless episode (in months)</td>
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<td>16.18</td>
<td>2.00 - 86.00</td>
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</tr>
<tr>
<td>Duration of time at current shelter (in months)</td>
<td>4.21</td>
<td>4.35</td>
<td>0.23 - 20.50</td>
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</tbody>
</table>
Procedure

Structured interviews and assessments were conducted with one primary caregiver and up to 2 target children per family. When possible, family members were interviewed simultaneously by separate interviewers at different quiet and private spaces at the shelter. All interviewers were graduate or undergraduate university students who had undergone rigorous training before individually administering interviews. Depending on the primary caregivers’ preferred spoken language, interviews were conducted in either English or Spanish by bilingual interviewers. Parents received a $20 Target gift card if they participated in the interview and answered questions about one target child, and a $30 Target gift if they answered questions about 2 target children. Children received school supplies (e.g., notebooks, pencils, books valued around $5).

Measures

A note about measurement. For all applicable measures in which I created a composite (aggregate) score, I first conducted an exploratory factor analysis (EFA) in which items were included in a principal axis factor analysis with promax rotation to explore the most appropriate factor structure for the data. Factor inclusion criteria included having an eigen value greater than 1.0, and item factor loadings greater than or equal to .40. After examining and determining the dimensionality of the scales, I assessed the reliability of the scale by computing Cronbach’s alpha. More detailed information about EFA results and decision-making processes for carrying forward certain factors in analyses can be found in Appendices A – H.

Child residential mobility. Parents reported the total number of places the focal child had lived since birth. This included any type of permanent or temporary residence such as an apartment or home before the family experienced homelessness, the home of a family member or friend while living “doubled up” (i.e., living with relatives, friends, or other non-relatives due to
economic or other reasons), shelters, and/or a foster care home. Child residential mobility was calculated by dividing the total number of parent-reported lifetime residential moves by the age of the child. This measurement approach provides the number of moves per year of a child’s life, and has been used by Wood and colleagues (1993).

**Academic achievement.** Academic achievement was assessed using the Woodcock-Johnson III Tests of Achievement (WJ III; Woodcock, McGew, & Mather, 2001). Children completed two reading sub-scales (letter-word identification and passage comprehension) and two math sub-scales (calculation and applied problems). The WJ III Compuscore and Profiles Program (Schrank & Woodcock, 2011) was used to generate reading and math age-standardized scores with a mean of 100 and a standard deviation of 15. The WJ III is based on a normative sample, including children from diverse ethnic backgrounds (McGrew & Woodcock, 2001).

**Socioemotional outcomes.** Parents reported on their child’s externalizing and internalizing behavior problems, and prosocial difficulties using the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). Parents were asked whether various descriptions (e.g., “restless, overactive, cannot stay still for long”; “many worries or often seems worried”; “often fights with other children or bullies them”) were *Not true, Somewhat true, or Certainly true* of their child’s behavior over the last 6 months. Items were later recoded to be on a scale from 0 = *Not true* to 2 = *Certainly true*, to align with how the SDQ is typically scored. The SDQ is highly correlated with the much longer Child Behavior Checklist (Achenbach, 1991), and has been shown to function equally well (Goodman & Scott, 1999). Dickey and Blumberg (2004) found that among a national probability sample of U.S. children and adolescents, a three-factor model consisting of externalization problems, internalization problems, and a positive construal factor was more appropriate than the original five-component model. Results of the EFA conducted for
this study sample aligned with those of Dickey and Blumberg’s (2004) three-factor model [see Appendix A]. These three factors included: externalizing behavior (10 items), internalizing behavior (8 items), and positive construal (7 items). Items for each factor were averaged so that higher scores reflected more problematic behavior. Thus, for interpretative purposes, the positive construal factor was reverse-scored to reflect greater prosocial difficulties. Cronbach’s alphas indicated adequate reliability for all three factors (α = .88, .81, and .75 for externalizing, internalizing, and prosocial difficulties composites, respectively).

**Family process variables.** Primary caregivers reported information about warmth and control in their parenting practices, and involvement in their child’s schooling.

Parental warmth and control items were taken from the evaluation of the Canadian Self-Sufficiency Project (Statistics Canada, 1995), and have demonstrated reliability and validity among low-income parents (Huston et al., 2005). *Parental warmth* was assessed by asking parents 3 items in which they reported how frequently in the past week (1 = *Never* – 6 = *Many times a day*) they praised their child, talked or played with their child, and did something special with their child that he/she enjoys. These three items were averaged (α = .62), with higher scores reflecting more frequent behaviors indicative of parental warmth. *Parental control* was assessed by asking parents to report on their sense of efficacy with regard to disciplining their child (5 items; e.g., “How often do you feel you are having problems managing him/her in general? “When you discipline your child does he/she ignore the punishment”). Parents responded on a scale of 1 (*Never*) – 5 (*All the time*), and items were reverse-coded. The five items were averaged (α = .86); higher scores indicated higher levels of parental efficacy with regards to disciplining his/her child. [See Appendices B and C for EFA results for parental warmth and control, respectively.]
Parental involvement in school-based practices was measured using 4 items (e.g., “I take my child to school or other school-related activities,” “I go to parent-teacher conferences or open houses”). Items were adapted from the National Center for Educational Statistics (NCES) sponsored Educational Longitudinal Study (ELS) and Early Childhood Longitudinal Study (ECLS-K). Parents responded on a scale of 1 (I never do this) – 5 (I always do this). These four items were averaged with higher scores indicating more frequent parental involvement at school (α = .70). [See Appendix D for a description of how these items were chosen and EFA results.]

School process variables. School belonging. Children answered questions signifying the extent to which they felt connected to their school (5 items - e.g., “I feel like I am a part of this school,” “I feel close to people at this school”). Items were modified from the AddHealth Study and California Healthy Kids Survey (Waters & Cross, 2010). Children ages 6-8 responded on a 3-point scale and children ages 9-12 responded on a 5-point scale to ensure that response scales were developmentally appropriate. Therefore, younger children’s scores were transformed to a 5-point scale (1 = Not at all true to 5 = Always true) by multiplying scores by 5/3. Items were averaged such that higher scores reflected greater levels of school belonging. The composite measure demonstrated adequate reliability (α = .80). [See Appendix E for EFA results.]

School Engagement. Parents rated their child’s school engagement using the MacArthur Health and Behavior Questionnaire Parent Version, school engagement subscale (Armstrong, Goldstein, & The MacArthur Working Group on Outcome Assessment, 2003). Parents responded to 8 items (e.g., “Currently to what extent does your child seem interested in school”) on a scale of 1 (Not at all) – 4 (Quit a bit). EFA results yielded a two-factor structure, (r = -.53), with eigen values greater than 1.0. Due to evidence of cross-loading for nearly all items, and prior use of all items in a single scale, a confirmatory factor analysis was also conducted to
examine whether a one or two-factor structure was most appropriate. Based on exploratory and confirmatory factor analysis results (see Appendix F), I decided to retain a two-factor structure. The four items with a positive valence (e.g., happy about school, excited about school) were averaged to create a positive school engagement composite such that higher scores were indicative of greater levels of positive school engagement. The four items with a negative valence (e.g., upset about school, frustrated about school) were averaged to create a negative school engagement composite; higher scores reflected greater levels of negative school engagement. Cronbach’s alpha indicated adequate reliability for both factors ($\alpha = .88$ and .88 for negative and positive school engagement indices, respectively).

**Peer process variables.** For the following measures, children ages 6-8 responded on a 3-point scale and children ages 9-12 responded on a 5-point scale to ensure that response scales were developmentally appropriate. Therefore, younger children’s scores were transformed to a 5-point scale by multiplying scores by 5/3.

**Child victimization.** Child victimization was measured using four items (e.g., “I get picked on by other kids at school,” “Other kids at school make fun of me,”). Children responded on a scale of 1 (*Not at all true about me*) – 5 (*Always true about me*). These four items were averaged such that higher scores denoted greater levels of child victimization, and the composite showed adequate internal reliability ($\alpha = .86$). This measure was taken from Rigby and Slee (1991) and has been used with homeless school-aged children (Anooshian, 2003). [See Appendix G for EFA results]

**Child loneliness and difficulty making friends.** Children reported on their perceived quality of peer relationships and friendships using The Loneliness and Social Dissatisfaction Questionnaire (Asher & Wheeler, 1985; Cassidy & Asher, 1992). Six items (e.g., “Do you feel
alone? “Is it hard for you to make new friends?”) capturing children’s sense of loneliness and difficulty making friends were averaged to create a composite score. Children responded on a scale from 1 (Not at all true) – 5 (Always true). Higher scores reflected greater levels of child loneliness and difficulty making friends. This composite demonstrated adequate internal reliability ($\alpha = .84$). [See Appendix H for EFA results]

**Covariates.** Due to the relatively small sample size, covariates were chosen based on study design features. That is, all analyses control for child age and shelter type (1 = transitional shelter). I conducted preliminary analyses examining correlations among other potential covariates of interest (e.g., child gender, child race/ethnicity, receipt of special education services, parental mental health, parent education, parental employment, negative life events, school mobility) and model variables; however few consistent relationships emerged (see Appendix I).

**Plan of Analyses**

To test the primary pathways of influence, I conducted path analysis within a structural equation modeling (SEM) framework (Bollen, 1989) using the software Mplus v.7 (Muthén & Muthén, 1998 – 2012). Path analysis allows for simultaneous testing of both direct and indirect (i.e., mediating) effects, which is not possible with an ordinary least squares regression approach (Stage, Carter, & Nora, 2004). Figures 1.4 – 1.11 show the modeled relations among residential mobility; child behavioral, family, school, and peer processes; and child outcomes.

To evaluate how well the hypothesized models fit the data, I used the following goodness-of-fit indices: Chi-square tests, comparative fit index (CFI), and root mean square error of approximation (RMSEA). For smaller sample sizes, as is the case in the current study, a non-significant chi-square value signifies a “failure to reject the null hypothesis that the hypothesized
covariance matrix is identical to the observed covariance matrix” and is usually accepted as
ranges in value from 0 to 1, and values greater than .90 are commonly regarded as indicative of
reasonably good fit (Hu & Bentler, 1999). A RMSEA (Browne & Cudeck, 1993) value less than
.05 denotes close approximate fit, between .05 - .08 indicates acceptable fit, and between .08 -.10
suggests mediocre fit. However, some of the models I estimated were just identified (i.e., all
paths estimated; no remaining degrees of freedom); therefore, model fit estimates are not
available. These just identified models were concordant with my conceptual models based on
theoretical underpinnings and the extant literature.

Full-information maximum likelihood (FIML) estimation procedures were used to handle
missing data in the path analyses. FIML is one of the preferred methods that allows
generalization of results to the population and uses all of the available data (Muthén & Muthén,
1998-2012). FIML does not estimate the missing data, but instead, fits the covariance structure
model directly to the observed raw data for each participant (Arbuckle, 1996; Enders, 2006). To
address the violations to independence assumptions created by the nested structure of the data
(i.e., children nested within families), the CLUSTER feature in Mplus was used which adjusts
the standard errors, resulting in less biased results.

To examine whether the proposed sets of variables helped to explain the association
between residential mobility and academic achievement, Mplus estimation of indirect effects
were used, which estimates indirect effects with delta method standard errors (Muthén &
Muthén, 1998-2012) as recommended by MacKinnon, Lockwood, Hoffman, West, and Sheets
(2002). Due to sample size constraints, separate path analysis models were tested for each set of
potential explanatory processes (i.e., child-specific behavioral processes, family-, school- and, peer- processes) with math and reading achievement outcomes modeled separately.

Results

Descriptive Findings

Tables 1.2 – 1.5 present the correlations, means, and standard deviations of all model variables. Among the current study sample, the number of child lifetime residential moves ranged from 2 to 17 ($M = 6.42, SD = 2.99$). Child lifetime residential mobility (i.e., number of residential moves divided by child age) ranged from 0.18 to 2.51 ($M = 0.74, SD = 0.41$). On average, children’s academic achievement test scores were slightly below average but in the normative range (math: $M = 94.56, SD = 17.56$; reading: $M = 93.89, SD = 15.23$). A subset of children (43.7%) scored at or above the mean on math and 38% of children scored at or above the mean on reading. Furthermore, 8.5% and 2.8% of students scored 1 $SD$ or above the mean for math and reading, respectively. Yet, there were also students who performed far below norms academically (i.e., 9.9% and 5.6% of students scored 2 $SD$ or below the mean on math and reading, respectively).
Table 1.2

*Bivariate Correlations among Child Behavioral Processes Model Variables and Covariates*

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***p < .001, **p < .01, *p < .05, † p < .10
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***p < .001, **p < .01, *p < .05, † p < .10
Table 1.4

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M: 0.74 4.24 3.37 1.71 94.56 93.89 9.08 0.64
SD: 0.41 0.80 0.76 0.83 17.56 15.23 2.06 0.48
Range: 0.18 - 2.51 2.00 - 5.00 1.25 - 4.00 1.00 - 4.00 51.00 - 129.00 38.00 - 127.00 5.36 - 12.90 0.00 - 1.00

***p < .001, **p < .01, *p < .05, † p < .10
### Table 1.5

*Bivariate Correlations among Peer Processes Model Variables and Covariates*

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<td>0.41</td>
<td>1.08</td>
<td>0.91</td>
<td>0.46</td>
<td>17.56</td>
<td>15.23</td>
<td>2.06</td>
<td>.48</td>
</tr>
<tr>
<td>Range</td>
<td>0.18 - 2.51</td>
<td>1.00 - 5.00</td>
<td>1.00 - 5.00</td>
<td>0.00 - 1.88</td>
<td>51.00 - 129.00</td>
<td>38.00 - 127.00</td>
<td>5.36 - 12.90</td>
<td>0.00 - 1.00</td>
</tr>
</tbody>
</table>

***p < .001, **p < .01, *p < .05, † p < .10
Direct and Indirect Effects of Residential Mobility on Child Academic Achievement

RQ 1: Association between residential mobility and academic achievement.

Controlling for child age and shelter site, child residential mobility significantly predicted both math and reading achievement (see Figures 1.2 and 1.3). That is, a one standard deviation increase in child residential mobility was associated with a -.31 standard deviation decrease in math achievement, and a -.33 standard deviation decrease in reading achievement.

Figure 1.2 Path analysis results for full sample (n = 78). Shown are standardized path coefficients (on top) and unstandardized path coefficients and standard errors (on bottom) after accounting for the influence of the following covariates: child age and shelter (1 = transitional shelter). Because the model was just identified, fit statistics do not apply.

**p < .01

Figure 1.3 Path analysis results for full sample (n = 78). Shown are standardized path coefficients (on top) and unstandardized path coefficients and standard errors (on bottom) after accounting for the influence of the following covariates: child age and shelter (1 = transitional shelter). Because the model was just identified, fit statistics do not apply.

*p < .05
RQ 2a: Do child behavioral processes account for the association between residential mobility and academic achievement? The hypothesized models for examining children’s behavioral processes as mediating the relation between residential mobility and math achievement, and residential mobility and reading achievement are summarized in Figures 1.4 and 1.5 and Tables 1.6 and 1.7, respectively. Because the models were just identified, fit statistics do not apply. Results indicated little evidence of indirect effects of residential mobility on children’s math and reading test scores through the set of child-specific behavioral processes (i.e., externalizing, internalizing, and prosocial difficulties). Counter to expectations, residential mobility was not predictive of any of the child behavioral difficulties, and the only significant pathway from child behavior problems to academic achievement was an association between externalizing behavior and math achievement wherein higher levels of externalizing behavior were associated with lower levels of math achievement.
Covariates: child age, shelter (dummy code)

**Figure 1.4** Path analysis results for full sample (n = 78). Shown are standardized path coefficients (on top) and unstandardized path coefficients and standard errors (on bottom) after accounting for the influence of the following covariates: child age and shelter (1 = transitional shelter). Because the model was just identified, fit statistics do not apply.

***p < .05, **p < .01, *p < .05
Figure 1.5 Path analysis results for full sample (n = 78). Shown are standardized path coefficients (on top) and unstandardized path coefficients and standard errors (on bottom) after accounting for the influence of the following covariates: child age and shelter (1 = transitional shelter). Because the model was just identified, fit statistics do not apply.

***p < .05, **p < .01, *p < .05, †p < .10
### Table 1.6

**Unstandardized and Standardized Path Coefficient Estimates for Relations From Path Analysis of Residential Mobility, Children's Behavioral Processes, and Math Achievement**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Direct paths</th>
<th>Indirect pathways</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Externalizing behavior $b$ (SE) $\beta$</td>
<td>Internalizing behavior $b$ (SE) $\beta$</td>
<td>Prosocial difficulties $b$ (SE) $\beta$</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>0.08 (0.15) 0.07 0.04 (0.13) 0.04 -0.02 (0.09) -0.2 -12.09 (5.19)* -0.29</td>
<td>-0.87 (1.55) -0.02 -0.09 (0.36) 0.00</td>
<td>0.02 (0.15) -0.2 -13.02 (4.56)** -0.31</td>
</tr>
<tr>
<td>Covariates</td>
<td>Child age -0.04 (0.03) -19 0.04 (0.02) 0.16 -0.02 (0.02) 0.12 -1.29 (0.96) -0.15</td>
<td>-0.77 (4.09) -0.02 -1.47 (0.78) -0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shelter ($1 = $transitional$)$ 0.21 (0.13) 0.20 0.11 (0.11) 0.12 0.09 (0.09) 0.13 -11.65 (6.26) -0.32</td>
<td>-0.47 (0.81) -0.01 0.07 (0.27) 0.00</td>
<td>0.09 (0.51) 0.00 -11.97 (5.84)* -0.33</td>
</tr>
</tbody>
</table>

**p < .01, *p < .05

### Table 1.7

**Unstandardized and Standardized Path Coefficient Estimates for Relations From Path Analysis of Residential Mobility, Children's Behavioral Processes, and Reading Achievement**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Direct paths</th>
<th>Indirect pathways</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Externalizing behavior $b$ (SE) $\beta$</td>
<td>Internalizing behavior $b$ (SE) $\beta$</td>
<td>Prosocial difficulties $b$ (SE) $\beta$</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>0.09 (0.02) 0.07 0.05 (0.12) 0.04 -0.01 (0.08) -0.2 -11.65 (6.26)* -0.32</td>
<td>-0.47 (0.81) -0.01 0.07 (0.27) 0.00</td>
<td>0.09 (0.51) 0.00 -11.97 (5.84)* -0.33</td>
</tr>
<tr>
<td>Covariates</td>
<td>Child age -0.04 (0.03) -19 0.04 (0.02) 0.17 -0.02 (0.02) 0.12 -1.47 (0.78) -0.20</td>
<td>-0.47 (0.81) -0.01 0.07 (0.27) 0.00</td>
<td>0.09 (0.51) 0.00 -11.97 (5.84)* -0.33</td>
</tr>
<tr>
<td></td>
<td>Shelter ($1 = $transitional$)$ -0.04 (0.03) -19 0.11 (0.11) 0.12 0.09 (0.09) 0.13 -4.02 (3.51) -0.13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, † p < .10
RQ 2b: Do parenting processes account for the association between residential mobility and academic achievement? Results of the path analyses examining parenting processes (i.e., parental involvement, warmth, and control) as mediating processes of the relation between residential mobility and math achievement, and between residential mobility and reading achievement are summarized in Figures 1.6 and 1.7, respectively. Because the models were just identified, fit statistics do not apply. I observed a similar pattern of findings across both academic outcomes: with the addition of the parenting variables (i.e., parental involvement, control, and warmth) and covariates in the model, the direct relation between residential mobility and children’s academic achievement scores was no longer significant (see Figures 1.6 and 1.7 and Tables 1.8 and 1.9). Furthermore, across both math and reading achievement outcome models, higher levels of residential mobility predicted lower levels of parents’ involvement in their child’s schooling, which in turn, was associated with higher levels of math and reading achievement (standardized indirect effects estimate: $\hat{\beta} = -.08$, $p = .059$ and $\hat{\beta} = -.07$, $p = .080$, for math and reading, respectively; see Tables 1.8 and 1.9). Interestingly, I observed no direct significant associations between residential mobility and the two remaining indicators of parenting—warmth and control. Surprisingly, and counter to expectations and prior work, parental warmth was observed to be negatively associated with children’s math scores (see Figure 1.6). Base correlations were also in the same direction and non-significant (see Table 1.3).
Figure 1.6 Path analysis results for full sample (n = 78). Shown are standardized path coefficients (on top) and unstandardized path coefficients and standard errors (on bottom) after accounting for the influence of the following covariates: child age and shelter (1 = transitional shelter). Because the model was just identified, fit statistics do not apply.

**p < .01, *p < .05, †p < .10
Figure 1.7 Path analysis results for full sample (n = 78). Shown are standardized path coefficients (on top) and unstandardized path coefficients and standard errors (on bottom) after accounting for the influence of the following covariates: child age and shelter (1 = transitional shelter). Because the model was just identified, fit statistics do not apply. **p < .01, *p < .05, † p < .10
### Table 1.8

Unstandardized and Standardized Path Coefficient Estimates for Relations From Path Analysis of Residential Mobility, Parenting Processes, and Math Achievement

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Parental involvement</th>
<th>Parental control</th>
<th>Parental warmth</th>
<th>Math achievement</th>
<th>Direct paths</th>
<th>Indirect pathways</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$ (SE)</td>
<td>$\beta$</td>
<td>$b$ (SE)</td>
<td>$\beta$</td>
<td>$b$ (SE)</td>
<td>$\beta$</td>
<td>$b$ (SE)</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>-0.60 (0.28)*</td>
<td>-0.24</td>
<td>-0.47 (0.37)</td>
<td>-0.14</td>
<td>-0.07 (0.35)</td>
<td>-0.03</td>
<td>0.25 (1.21)</td>
</tr>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child age</td>
<td>-0.03 (0.05)</td>
<td>-0.06</td>
<td>-0.01 (0.09)</td>
<td>-0.02</td>
<td>-0.15 (0.07)*</td>
<td>-0.32</td>
<td>0.25 (1.21)</td>
</tr>
<tr>
<td>Shelter (1 = transitional)</td>
<td>-0.83 (.24)**</td>
<td>-0.40</td>
<td>-0.43 (0.38)</td>
<td>-0.15</td>
<td>0.24 (0.26)</td>
<td>-0.12</td>
<td>0.33 (4.62)</td>
</tr>
</tbody>
</table>

**$p < .01$, *$p < .05$, †$p < .10$**

### Table 1.9

Unstandardized and Standardized Path Coefficient Estimates for Relations From Path Analysis of Residential Mobility, Parenting Processes, and Reading Achievement

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Parental involvement</th>
<th>Parental control</th>
<th>Parental warmth</th>
<th>Reading achievement</th>
<th>Direct paths</th>
<th>Indirect pathways</th>
<th>Total Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$ (SE)</td>
<td>$\beta$</td>
<td>$b$ (SE)</td>
<td>$\beta$</td>
<td>$b$ (SE)</td>
<td>$\beta$</td>
<td>$b$ (SE)</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>-0.59 (0.03)*</td>
<td>-0.24</td>
<td>-0.50 (0.37)</td>
<td>-0.14</td>
<td>-0.08 (0.35)</td>
<td>-0.03</td>
<td>0.25 (1.05)</td>
</tr>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child age</td>
<td>-0.03 (0.05)</td>
<td>-0.06</td>
<td>-0.01 (0.09)</td>
<td>-0.02</td>
<td>-0.15 (0.07)*</td>
<td>-0.32</td>
<td>0.25 (1.05)</td>
</tr>
<tr>
<td>Shelter (1 = transitional)</td>
<td>-0.83 (.24)**</td>
<td>-0.39</td>
<td>0.43 (0.38)</td>
<td>-0.15</td>
<td>0.24 (0.26)</td>
<td>-0.12</td>
<td>0.33 (4.62)</td>
</tr>
</tbody>
</table>

**$p < .001$, *$p < .05$, †$p < .10$**
RQ 2c: Do children’s sense of school belonging and engagement account for the association between residential mobility and academic achievement? The primary goal for examining the role of children’s experiences at school was to assess the direct and indirect effects of residential mobility on children’s math and reading achievement outcomes. Additionally, a secondary aim was to determine the significance of the direct and indirect pathways by which residential mobility influenced children’s school engagement.

The overall model for school processes with math as the outcome showed close fit, \( \chi^2(1, N = 78) = 0.42, p = .516; \) CFI = 1.00; RMSEA = 0.000, and the model with reading as the outcome had adequate fit, \( \chi^2(1, N = 78) = 1.66, p = .198; \) CFI = .991; RMSEA = 0.092.

Results indicated that above and beyond the influence of covariates and school belonging, there was a marginal direct association between residential mobility and positive school engagement, but no direct relation between residential mobility and negative school engagement (see Figures 1.8 and 1.9 and Tables 1.10 and 1.12). Residential mobility was negatively related to school belonging; higher levels of feeling a sense of belonging to one’s school were associated with higher levels of positive school engagement. Tests of indirect effects indicated that residential mobility exerted its influence on children’s positive school engagement, in part, through perceptions of belonging to their school (standardized indirect effects estimate: \( \beta = -.16, p = .018 \)).

After accounting for covariates and mediating variables (i.e., school belonging, positive and negative school engagement), there was a marginally significant direct effect of residential mobility on math achievement (Figure 1.8). However, no direct relation of residential mobility to reading achievement was observed (Figure 1.9). Negative school engagement was the only significant predictor of children’s math achievement; higher levels of negative school
engagement were associated with lower levels of math achievement. There was no evidence of an indirect effect of residential mobility on children’s academic achievement outcomes (see Tables 1.11 and 1.13).
Figure 1.9 Path analysis results for full sample (n = 78). Shown are standardized path coefficients (on top) and unstandardized path coefficients and standard errors (on bottom) after accounting for the influence of the following covariates: child age and shelter (1 = transitional shelter). Model fit statistics: $\chi^2(1, N = 78) = 1.66, p = .198; CFI = .991; RMSEA = 0.092$

***$p < .001$, **$p < .01$, *$p < .05$, †$p < .10$
### Table 1.10

**Unstandardized and Standardized Direct Path Coefficient Estimates for Relations From Path Analysis of Residential Mobility, School Processes, and Math Achievement**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Direct Paths</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School belonging</td>
<td>Positive school engagement</td>
</tr>
<tr>
<td></td>
<td>( b ) (SE)</td>
<td>( \beta )</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>-0.80 (0.28)**</td>
<td>-.41</td>
</tr>
<tr>
<td>Covariates</td>
<td>Child age</td>
<td>-0.08 (0.05)</td>
</tr>
<tr>
<td></td>
<td>Shelter (1 = transitional)</td>
<td>-0.27 (0.17)</td>
</tr>
</tbody>
</table>

** **p < .01, † p < .10

### Table 1.11

**Unstandardized and Standardized Indirect Path Coefficient Estimates for Relations From Path Analysis of Residential Mobility, School Processes, and Math Achievement**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Indirect Pathways</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School belonging</td>
</tr>
<tr>
<td></td>
<td>( b ) (SE)</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>-0.29 (0.14)*</td>
</tr>
<tr>
<td>Covariates</td>
<td>Child age</td>
</tr>
</tbody>
</table>

* p < .05
### Table 1.12

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Direct Paths</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School belonging</td>
<td>Positive school engagement</td>
</tr>
<tr>
<td></td>
<td>$b$ (SE)</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>-0.80 (0.28)**</td>
<td>-0.46 (0.26)†</td>
</tr>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child age</td>
<td>-0.08 (0.05)</td>
<td>-0.20</td>
</tr>
<tr>
<td>Shelter (1 = transitional)</td>
<td>-0.27 (0.17)</td>
<td>-0.16</td>
</tr>
</tbody>
</table>

**$p < .01$, *$p < .05$, † $p < .10$**

### Table 1.13

<table>
<thead>
<tr>
<th>Indirect Pathways</th>
<th>School belonging</th>
<th>Positive school engagement</th>
<th>Negative school engagement</th>
<th>Reading achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$ (SE)</td>
<td>$\beta$</td>
<td>$b$ (SE)</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>-0.29 (0.14) *</td>
<td>-.16</td>
<td>0.20 (0.14)</td>
<td>.10</td>
</tr>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelter (1 = transitional)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*$p < .05$
RQ 2d: Do experiences within children’s peer context account for the association between residential mobility and academic achievement? The hypothesized models for experiences within children’s peer context mediating the relation between residential mobility and math achievement (see Figure 1.10), and residential mobility and reading achievement (see Figure 1.11) indicated close model fit \( \chi^2(1, N = 78) = 1.69, p = .639, \text{CFI} = 1.00, \text{RMSEA} = 0.000 \) and \( \chi^2(1, N = 78) = 1.50, p = .682; \text{CFI} = 1.00; \text{RMSEA} = 0.000, \) for math and reading as outcome models, respectively. Results indicated that there was still a persistent effect of residential mobility on math achievement (and a marginal effect on reading achievement), even after accounting for the influence of covariates, peer victimization, loneliness, and internalizing symptoms. Residential mobility was not, however, significantly related to peer victimization. Peer victimization was significantly predictive of higher levels of child loneliness, and marginally predictive of greater internalizing behavior. However, these child psychosocial difficulties (i.e., loneliness, internalizing behavior) were not predictive of academic achievement outcomes. Consequently, there was no evidence of an indirect effect of residential mobility on children’s academic achievement outcomes for the peer context models (see Tables 1.14 and 1.15).
Covariates: child age, shelter (dummy code)

Figure 1.10 Path analysis results for full sample (n = 78). Shown are standardized path coefficients (on top) and unstandardized path coefficients and standard errors (on bottom) after accounting for the influence of the following covariates: child age and shelter (1 = transitional shelter). Model fit statistics: $\chi^2(1, N = 78) = 1.69, p = .639; CFI = 1.00; RMSEA = 0.000$

**p < .01, *p < .05, †p < .10

---

Covariates: child age, shelter (dummy code)

Figure 1.11 Path analysis results for full sample (n = 78). Shown are standardized path coefficients (on top) and unstandardized path coefficients and standard errors (on bottom) after accounting for the influence of the following covariates: child age and shelter (1 = transitional shelter). Model fit statistics: $\chi^2(1, N = 78) = 1.50, p = .682; CFI = 1.00; RMSEA = 0.000$

**p < .01, *p < .05, †p < .10
Table 1.14

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Direct Paths</th>
<th></th>
<th>Indirect Pathways</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Child Victimization</td>
<td>Math achievement</td>
<td>Child victimization</td>
<td>Loneliness</td>
</tr>
<tr>
<td></td>
<td>$b$ (SE) $\beta$</td>
<td>$b$ (SE) $\beta$</td>
<td>$b$ (SE) $\beta$</td>
<td>$b$ (SE) $\beta$</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>0.40 (0.37) .15</td>
<td>-11.53 (4.98)* -.27</td>
<td>-0.41 (0.58) -.01</td>
<td>-0.34 (0.33) -.01</td>
</tr>
<tr>
<td>Covariates</td>
<td>Child age</td>
<td>-0.24 (0.05)***</td>
<td>-.46</td>
<td>-1.06 (1.17)</td>
</tr>
<tr>
<td></td>
<td>Shelter (1 = transitional)</td>
<td>0.18 (0.23) .08</td>
<td>-2.07 (4.26)</td>
<td>-.06</td>
</tr>
<tr>
<td></td>
<td>***p &lt; .001, *p &lt; .05</td>
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</tbody>
</table>

Table 1.15

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Direct Paths</th>
<th></th>
<th>Indirect Pathways</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Child Victimization</td>
<td>Reading achievement</td>
<td>Child victimization</td>
<td>Loneliness</td>
</tr>
<tr>
<td></td>
<td>$b$ (SE) $\beta$</td>
<td>$b$ (SE) $\beta$</td>
<td>$b$ (SE) $\beta$</td>
<td>$b$ (SE) $\beta$</td>
</tr>
<tr>
<td>Child residential mobility</td>
<td>0.38 (0.37) .15</td>
<td>-11.07 (6.14)* -.27</td>
<td>-0.19 (0.42) -.01</td>
<td>-0.12 (0.22) -.00</td>
</tr>
<tr>
<td>Covariates</td>
<td>Child age</td>
<td>-0.24 (0.05)***</td>
<td>-.46</td>
<td>-1.12 (0.80)</td>
</tr>
<tr>
<td></td>
<td>Shelter (1 = transitional)</td>
<td>0.18 (0.23) .08</td>
<td>-4.81 (3.84)</td>
<td>-.06</td>
</tr>
<tr>
<td></td>
<td>***p &lt; .001, †p &lt; .10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion

This study examined how residential mobility influenced children’s academic outcomes in the context of family homelessness. Guided by bioecological theory, the current study focused on the ways in which a child’s experiences within their primary developmental contexts during middle childhood—family, school, and peers—serve as pathways through which residential mobility influences homeless children’s academic adjustment.

Family homelessness is characterized by housing instability and frequent residential moves (Rog & Buckner, 2007). On average, children in the current study sample experienced about 6 residential changes in their lifetime (ranging from 2 to 17 moves). Child age was negatively associated with rates of residential mobility, indicating that young children were susceptible to frequent mobility. This is consistent with findings that homelessness (an acute form of residential instability) and poverty disproportionately occur among young children (McLoyd, 1998; Rog, Holupka, & Patton, 2007; U.S. Department of Housing and Urban Development, 2010), in part due to having younger parents who have less work experience and lower earnings (Bronfenbrenner, McClelland, Wethington, Moen, & Ceci, 1996). Consistent with much of the prior work (e.g. Adam, 2004; Scanlon & Devine, 2001), residential mobility was negatively associated with children’s math and reading achievement. Similar to other recent studies (e.g., Cutuli et al., 2013; Obradović et al., 2009), there was substantial variability in academic outcomes among the current study sample. That is, 38% of children scored at or above the mean on reading achievement and 43.7% scored at or above the mean on math achievement, based on the Woodcock Johnson Tests of Achievement.

One of the aims of the current study was to understand what risks and resources might account for this variation in how children performed academically, a task at which recent studies
utilizing large school district datasets have been less adept at addressing due to the lack of such data (Cutuli et al., 2013; Obradović et al., 2009). I focused on children’s experiences with their family, at school, and with peers as potential explanatory mechanisms for unpacking the association between residential mobility and child outcomes.

Within the family context, residential mobility was negatively associated with parental involvement at school such as attending parent-teacher conferences and school events. This finding may be reflective of greater life instability more generally. Parents experiencing housing instability and homelessness may have less time and resources to devote to their child’s schooling as they likely face other priorities such as meeting their basic needs. Moreover, residential mobility is often tied to school mobility, and parents may be less likely to attend school activities or meet with teachers when they are new to a school. They could also be more hesitant to get involved in their child’s school if they anticipate moving in the near future. Additionally, H/HM parents may have experienced negative interactions with school personnel due to the stigma attached to homelessness, and might be somewhat reluctant to get involved at their child’s school. As expected and consistent with findings by Miliotis and colleagues (1999), higher levels of parental involvement at school were linked to better reading and math achievement. There was also emerging evidence that parental involvement at school helps to explain (or mediates) the relation between residential mobility and child academic achievement.

Findings also indicated that residential mobility was associated with children’s experiences at school. Children who moved more frequently were less likely to feel a sense of belonging to their school (e.g., feeling close to people at school). This finding makes intuitive sense given that residential mobility (especially during middle childhood) is often tied to school mobility. Homeless students often change schools in the midst of the school year, and are faced
with adjusting to a new curriculum, new teacher and peers, and an unfamiliar social environment (Samuels, Shinn, & Buckner, 2012). Thus, these transitions and mobility can impact students not only academically, but also psychologically and socially (Rumberger, 2003). Furthermore, consistent with the literature (Anderman, 2003; Osterman, 2000), findings indicated that children’s feelings of belonging to their school were predictive of school engagement. That is, children who reported higher levels of school belonging also showed higher levels of parent-reported positive school engagement. Overall, I found support for the pathway by which residential mobility influenced children’s sense of school belonging, which in turn, was associated with school engagement. I did not, however, find evidence that school engagement significantly predicted children’s math and reading scores. This was surprising given that there is a strong empirical research base supporting the association between engagement and academic performance (Fredericks et al., 2004; Greenwood, Horton, Utley, 2002). Even though positive school engagement did not significantly predict academic achievement in my path analysis models, base correlations between positive school engagement and math scores, and positive school engagement and readings scores were positive and significant (see Table 1.4).

Contrary to expectations and prior work (Jellyman & Spencer, 2008; Ziol-Guest & McKenna, 2014), there was not a significant association between residential mobility and children’s behavioral difficulties. However, Buckner, Bassuk, Weinreb, and Brooks (1999) also did not find evidence for residential mobility predicting behavior problems among homeless and low-income housed children, and hypothesized that this was because children may become accustomed to residential instability and less affected by changing residences. Another possibility is that the relation between residential mobility and behavioral outcomes may be
dependent on more nuanced factors associated with mobility such as the distance of moves and how recently it occurred (Scanlon & Devine, 2001).

There was also no evidence of a pathway by which residential mobility was linked to peer victimization, psychosocial difficulties, and thereby academic achievement outcomes. Testing this pathway was fairly exploratory in nature as there is little empirical work that examines how residential mobility relates to children’s peer contexts during the elementary school years. The literature documenting homeless youth being ostracized by peers is somewhat dated (Tower, 1992), and more recent work typically reports on the experiences of older homeless adolescents feeling stigmatized at school (Tierney & Hallett, 2010; 2012). In general, children in the current study sample reported relatively low levels of peer victimization. However, results may have differed if data were collected from other respondents such as classmates through the use of sociometric reports, or through teacher-report surveys. Future work should further investigate H/HM children’s peer relationships during elementary school using measures other than child self-report.

**Limitations**

While the current study makes important contributions to our understanding of the potential explanatory processes underlying the association between residential mobility and children’s academic achievement, there are also important limitations to acknowledge. The current study sample was relatively small which meant reduced power to test the hypothesized models. Sample size constraints also limited the number of variables for which I could control. This is of concern because researchers have argued that residential mobility may be a marker or “proxy” of other family characteristics related to poverty more generally (Murphey, Bandy, & Moore, 2012). Thus, unmeasured characteristics of the child and family not accounted for in my
models may explain associations between residential mobility and child academic achievement. However, among the current study sample, well-established risk factors related to poverty such as parent mental health (Rubin et al., 1996) and economic hardship (Koblinsky et al., 1997; McLoyd, 1998) were not strongly associated with residential mobility or academic achievement outcomes.

Data for the current study are cross-sectional; therefore, inferences cannot be made about causality. Future work should pair longitudinal data (such as that collected by school districts) with more in depth analyses of family and school processes. However, efforts to use school district data can present its own challenges. For example, in the current study, despite collecting school district achievement data, linking these data to behavioral data proved to be challenging and ultimately not feasible due to high rates of missing data for children in my sample. This may be attributed to H/HM students missing school on test administration days, or in general having less complete school records due to frequent mobility.

It is important to note that study findings are not representative of all family shelters, or the broader context of family homelessness (e.g., those living doubled up with family or friends). For example, shelters in the current study sample were specifically designed to support the needs of homeless families. Both the emergency and transitional shelter were exclusively for families (broadly defined as at least one adult and one child), and enabled families of various compositions to stay together. For example adolescent sons, fathers, and even boyfriends were permitted to remain with their families at these shelters. In contrast, other shelters often do not allow adolescent and adult males to stay in the same shelter facility as women and children (Molnar, Rath, & Klein, 1990; Shinn & Weitzman, 1996). The shelters in the current study also offered a range of housing and social services (e.g., case management, employment search and
job training, after school programs for students) through their own programs and in partnership with other organizations. Thus, homeless families living in shelters may be more advantaged with regards to having stronger connections to the social service system than families living doubled up (Samuels et al., 2010).

**Contributions and Implications**

The current study makes an important contribution by investigating what vulnerability factors and assets might account for the observed variation among homeless elementary school children’s educational outcomes. Recent large-scale longitudinal studies have been successful at highlighting the heterogeneity among samples of H/HM students (Cutuli et al., 2013; Obradović et al., 2009), but have not examined family and school processes that might differentiate homeless children who evidence more or less adaptive outcomes. The current study sought to address this gap by examining potential pathways by which residential mobility might relate to shifts in the quality of children’s experiences within their primary developmental contexts (i.e., family, school, peers), which thereby influence children’s academic outcomes.

Findings indicated that residential mobility has significant consequences for children and their parents, particularly in relation to their experiences within the school context. Frequently moving was associated with parents being less involved in their child’s schooling, which can have negative implications for children’s academic achievement. Furthermore, children who experienced higher rates of residential mobility reported feeling less connected to their school, and in turn, lower levels of school engagement.

Given these findings, broad scale efforts to strengthen the residential stability of families, and localized efforts targeted at the school context are warranted. Within schools, information about a student’s residential mobility could be used as a preliminary screener to signify that other
challenges might be present, and that they child may benefit from additional educational support (Anderson et al., 2014). Furthermore, teachers and school personnel should employ strategies for integrating H/ HM students into the classroom and school community, such as pairing them up with a buddy if they enter the classroom in the middle of the school year. Additionally, special outreach efforts may need to be targeted to parents of H/HM students (e.g., at shelters) to strengthen connections between parents and schools. School personnel should receive appropriate training for working with H/HM families, so that parents are made to feel welcomed and respected at the school and perceived as critical to their child’s academic success.

Ultimately, homelessness is a housing issue, and efforts to support family residential stability include increasing availability and access to affordable housing, investing in low-income rental housing assistance and construction of affordable housing (Crowley, 2003), and utilizing rapid rehousing approaches which aim to get homeless families back into stable housing immediately.
STUDY 2

Homelessness in the Elementary School Classroom: Social and Emotional Consequences

Homelessness impacts countless children and the schools they attend. Nationally, over a million students were identified as homeless during the 2011-12 school year (NCHE, 2013), and homeless students are at significant risk for negative educational, behavioral, and mental health outcomes (Samuels, Shinn, & Buckner, 2010). The McKinney-Vento Homeless Assistance Act’s Education for Homeless Children and Youth (EHCY) Program is the primary piece of federal legislation to promote homeless children’s educational access, stability, and success. Even though the Act has been in place for over two decades, little scholarly work has attended to the implementation of the EHCY Program at a local level, including how schools are responding to the growing homeless student population.

Ironically, the EHCY Program provides little guidance about teachers’ roles and responsibilities given that they are students’ primary contact point and play a formidable role in shaping children’s learning experiences (Moore, 2013). Many homeless children experience isolation (lacking social attachments and high quality social interactions), and effective teachers can foster positive interactions at school with peers and adults (Anooshian, 2000; 2003). Furthermore, there is a paucity of research on teachers’ experiences working with homeless students, including the strategies they use and the challenges they face. Thus, the current study addressed this gap by interviewing teachers who work at elementary schools serving students who live at family homeless shelters. Specifically, we focused on how the instability tied to homelessness impacted children’s social and emotional adjustment, and how teachers’ own social and emotional competencies (e.g., perspective taking, interpersonal skills in developing
teacher-student relationships) influenced the manner in which teachers addressed the affective needs of homeless students.

**Homelessness Impacts Children’s Social and Emotional Development**

The impact of homelessness on children can be viewed as the extreme end of a continuum of risk tied to poverty (Masten, Miliotis, Graham-Bermann, Ramirez, & Neeman 1993). Homeless children experience risk factors common to other poor housed children such as limited financial resources, parental distress, and poorer nutrition (Huntington, Buckner, & Bassuk, 2008; McLoyd, 1998), while also experiencing risks and stress unique to homelessness (Masten et al., 1993; Miller, 2011). For example, homeless students often change schools in the midst of the school year, and are faced with adjusting to a new curriculum, new teachers and peers, and unfamiliar social environments (Samuels et al., 2010). Thus, mobility can impact students academically, psychologically, and socially (Rumberger, 2003). School mobility is linked with lower reading and math achievement (Reynolds, Chen, & Herbers, 2009), and homeless students in particular are at greater risk for exhibiting these academic concerns (Fantuzzo, LeBeouf, Chen, Rouse, & Culhane, 2012; Samuels et al., 2010).

Homeless children are not only at greater risk for academic difficulties, but also behavioral, emotional, and social challenges. In comparison to normative child populations, homeless children tend to exhibit higher levels of internalizing (depression and anxiety) and externalizing (aggressive, hyperactive, noncompliant) behavior (Samuels et al., 2010). Additionally, homeless children experience isolation resulting from high mobility and literal separation from parents and other family members (Fantuzzo & Perlman, 2007), as well as social and psychological isolation in school (Anooshian, 2003). Tierney and Hallett (2010; 2012) found that among older homeless youth, feelings of shame and embarrassment tied to the stigma of
homelessness may prevent youth from opening up to teachers and peers, resulting in the silence and invisibility of homeless youth in the classroom. Among elementary school-aged homeless children, Fantuzzo and colleagues (2012) found that children who had experienced family homelessness faced more difficulties cooperating with peers and teachers than did children without a homelessness or school mobility experience. The authors posited that during bouts of homelessness, children often lose connection with important social support figures such as family and friends, and disturbance to social bonds is linked to students’ difficulty in developing relationships inside the classroom. Feelings of social isolation, rejection, and withdrawal have been correlated with poorer educational achievement outcomes, especially for children who experienced extensive periods of homelessness (Anooshian, 2003).

Attention to children’s social and emotional development is critical because it has important implications for academic success and lifelong learning (Zins, Bloodworth, Weissberg, & Walberg, 2007). Moreover, socioemotional skills are especially important for low-income students placed at risk because a student’s ability to regulate his/her emotions when confronted with feelings of frustration, anger, or hopelessness will influence to what extent a child is able to dedicate attention and energy to learning, despite the difficulties s/he may be facing both inside and outside of school (Elias & Haynes, 2008). In fact, recent studies have linked young (i.e., 5-6 year old) homeless children’s executive functioning skills (e.g., inhibitory control) to higher levels of academic achievement, peer acceptance, prosocial behavior, and fewer behavior problems (Masten et al., 2012; Obradović, 2010).

The elementary school years are an important developmental period marked by cognitive changes, new social contexts, and social comparison, and have the potential to strongly influence children’s budding social identity, self-confidence, engagement, and expectations about success.
and failure. Supportive adults such as teachers can help children effectively navigate the elementary school years, especially in the face of challenges (Eccles, 1999).

**The Missing Role of Teachers in the McKinney-Vento Act’s EHCY Program**

In an effort to address the problematic link between homelessness and poorer educational outcomes, in 1987 Congress created the McKinney-Vento Education for Homeless Children and Youth (EHCY) Program by passing what is now the Stewart B. McKinney-Vento Homeless Assistance Act. This Act was most recently reauthorized in 2002 by No Child Left Behind and is the main piece of federal legislation addressing the educational needs of homeless children and youth (NCHE, 2013). The EHCY Program under this Act ensures that children and youth who lack “a fixed, regular, and adequate nighttime residence” (Section 25 of McKinney-Vento Act) (e.g., living in shelters, cars, doubled up with others for financial reasons) have equal access to the same free public education as other children (NCHE, 2013). State Educational Agencies, Local Educational Agencies, and homeless education liaisons in school districts are responsible for ensuring that this Act is implemented and its regulations are followed. Even though teachers work most closely with students, there is surprisingly minimal McKinney-Vento guidance addressing the actual classroom context other than that students must be enrolled in school and supported to meet state achievement standards (Moore, 2013). Liaisons are supposed to provide professional development for school staff to raise awareness about homeless students (Cunningham, Harwood, & Hall, 2010), yet little has been done to actually support teachers in meeting the needs of homeless students (Moore, 2013). Often teachers are not routinely notified about students’ unstable living conditions and must figure out for themselves strategies for working with highly mobile students (Moore, 2013). The current study adds to the small extant literature on teachers’ experiences in working with homeless students by drawing on qualitative
interviews conducted with 28 teachers working at three elementary schools designated as the home schools for students living at family homeless shelters in Southern California.

**Ecological Theory and a Risk and Resilience Framework Inform Our Focus on Teachers**

Ecological theory and a risk and resilience framework guide our focus on the classroom context and the role of teachers. According to an ecological perspective, children’s development is most strongly affected by regular and enduring interactions in one’s school and family, and the resources that are available to children within these contexts (Bronfenbrenner & Morris, 2006). Children spend a substantial portion of their time in school, and schools are an important site for the delivery of not only academic support but also social and emotional services, especially for students experiencing homelessness (Cunningham et al., 2010). Teachers are one key resource, and there is strong empirical evidence from a risk and resiliency framework, that supportive relationships with a caring adult can foster resilience, protecting the development of competence in unfavorable environments like homelessness (Masten, 2001).

**The Role of Effective Teachers: The Promise They Hold and the Obstacles They Face**

Schools can be an important source of stability and support for students experiencing homelessness, who often lack social attachments and high quality social interactions (Anooshian, 2000). High quality teacher-child relationships provide students with a supportive and emotionally secure environment that allows children to better regulate their emotions, interact with others, and focus on academics (Pianta, 1999). Furthermore, positive teacher-child relationships are associated with better academic and behavioral outcomes throughout the elementary school years (Elias & Haynes, 2008; Maldonado-Carreño & Votruba-Drzal, 2011). Teacher support is particularly important for students at-risk of negative school adjustment (e.g., exhibiting behavioral, social, or academic problems). Recent studies show that among at-risk
students, those with a positive teacher-child relationship do better academically than those who lack a warm and emotionally supportive teacher (Baker, Grant, & Morlock, 2008). Furthermore, for children who experience frequent mobility, teacher support has been strongly associated with positive attitudes towards school (Gruman, Harachi, Abbott, Catalano, & Fleming, 2008).

Despite the promise that positive teacher-child relationships hold for helping homeless students, there are also certain challenges teachers need to overcome when working with homeless children and their families. Just as children’s social and emotional skills are important for school success, teachers’ own social and emotional competencies (e.g., interpersonal skills, perspective taking) influence the quality of teacher-student relationships they foster with their students (Jones & Bouffard, 2012). The ability to interact positively with students and parents and respond with empathy and flexibility to meet students’ needs are important skills for teachers to possess (Jones, Bouffard, & Weissbourd, 2013). Furthermore, it is imperative that teachers are willing and able to take on the perspective of homeless families, and resist stereotyped thinking about the poor and homeless (e.g., the poor devalue education, lack a strong work ethic, abuse drugs) that is pervasive in society (Gorski, 2012; Schiff, 2010).

Thus, one of the barriers homeless children and families face are teachers who hold negative attitudes toward the homeless and poor more generally. The few empirical studies on teachers’ experiences with homeless students have mostly focused on pre-service early childhood teachers, finding that unless teachers reflected on their ideas about children and families who are homeless through coursework or service-learning activities, they tended to see them in a deficit manner (e.g., Kim, 2013; Swick, 1996). For example, Kim (2013) found that before engagement in community-based experiences, pre-service early childhood teachers held negative and stereotypical views of homeless children and families, describing them as “messy,
chaotic, and dysfunctional” (p. 167). However, teachers’ interaction with mothers and staff at homeless shelters challenged their perceptions of parents in poverty as devaluing or being disinterested in their child’s education and helped them develop a more accurate understanding of the complex situations associated with homelessness. Yet, far less is known about the perceptions of in-service elementary school teachers who work at schools serving high proportions of homeless students, which is the focus of the current study.

At present, work on successful teaching strategies exclusively for homeless students is scant (Moore, 2013; Grant, Stronge, & Popp, 2008; Isernhagen & Bulkin, 2011). One of the few studies was conducted by Grant and colleagues (2008) who based their recommendations off of six case studies with teachers identified as being highly effective (i.e., won a national and/or state award) at working with at-risk and/or highly mobile students. Successful teachers identified and sought to meet the academic, technical (e.g., food), and affective needs (e.g., emotional needs) of children, and viewed students’ academic and affective needs as intertwined.

In this study we focused on the social and emotional consequences of homelessness on students due to the interrelated nature of children’s academic and socioemotional adjustment, and our belief that addressing students’ affective needs is a precursor to strong academics. More specifically, based on the self-described experiences of elementary school teachers, we concentrate on describing how the mobility and instability associated with homelessness brings up important socioemotional considerations and ramifications for homeless students and their teachers, how teachers support students’ affective needs, and the challenges teachers face when working in classrooms with homeless students.

Methods

The Research Setting
This study took place in California, the state comprising the largest percentage (21.3%) of enrolled homeless students in the nation during the 2011-12 school year (NCHE, 2014). The current study is part of a larger project in which we interviewed children and their parents who were living at family homeless shelters in Southern California to learn more about the potential risks and promotive factors associated with the variability among homeless children’s educational adjustment. There was a designated elementary home school for each shelter, meaning that it was the local public school assigned to that residential area. Thus, we recruited and interviewed teachers from a total of three public elementary home schools for these family shelters. All schools were part of a large urban school district in Southern California, which served over 15,000 identified homeless students during the 2011-12 school year. Furthermore, each of the selected schools in the current study served majority low-income (all were designated as Title 1 schools) and Hispanic or Latino students. Nearly half of the teachers at each school were also Hispanic or Latino. See Table 2.1 for information about school-wide student and teacher demographic information. Each school was offered a $200 donation as an incentive to participate, and teachers received a $10 Target gift card for their participation.

Lincoln Elementary School was the designated home school for children living at a transitional shelter for homeless families. The transitional family shelter provided housing to 65 families at a given time, and each family could stay for up to 2 years. It was a new school, and only in its second year of existence at the time we conducted teacher interviews. Mulberry Elementary was the former home school for the transitional shelter for homeless families. We still recruited and interviewed teachers from this school because teachers had a wealth of knowledge from previous years of working with children who were living at the shelter.
Table 2.1

*School, Student, and Teacher Demographics*

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<tr>
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<th>School-wide Student Demographics</th>
<th>School-wide Teacher Demographics</th>
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<tbody>
<tr>
<td></td>
<td># of Teachers Interviewed</td>
<td>Grades Enrolled</td>
</tr>
<tr>
<td>Lincoln</td>
<td>14</td>
<td>K - 5</td>
</tr>
<tr>
<td>Mulberry</td>
<td>9</td>
<td>K - 5</td>
</tr>
<tr>
<td>Peterson</td>
<td>5</td>
<td>K - 6</td>
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Source: Ed-Data - Fiscal, Demographic, and Performance Data on California's K-12 Schools

Data for Lincoln and Mulberry from 2010-11 school year (with exception of ELL % from 2011-12 school year).

Data for Peterson for 2011-12 school year.
Peterson Elementary was the designated home school for children living at an emergency shelter for homeless families, which provided housing to 27 families at a given time, and each family was allowed to stay for up to 90 days.

Participants

We present data on the self-described experiences and practices of 28 teachers in kindergarten through sixth grades: 2 special education teachers, 4 kindergarten, 3 first grade, 5 second grade, 4 third grade, 3 fourth grade, 2 fifth grade, and 5 sixth grade teachers. Teachers’ total years of teaching experience ranged from 5 to 38 years, and 26 teachers were female.

Data Collection

The lead author conducted one individual interview with each teacher in his/her classroom during recess, lunch, or afterschool, using a semi-structured interview protocol (see Appendix J). The protocol was designed to address four main areas of inquiry: 1) teachers’ awareness and perceptions of students and families who are homeless, 2) how teachers adjust their instruction to meet students’ learning and behavioral needs, 3) challenges teachers face when working with homeless students and their families, and 4) professional development or training experiences for working with homeless students and their families. All participants were asked the same sequence of questions. Interviews averaged about 20 minutes and ranged from 13-51 minutes. Interviews were audio recorded and transcribed by trained research assistants omitting any identifying information about participants and their students. A denaturalized transcription method was used in which we attempted a verbatim depiction of speech while removing interview noise (e.g., stutters) because we were most interested in the informational content, meanings, and perceptions shared during the interview (Oliver, Serovich, & Mason,
We used Dedoose Version 4.5 (2013), a qualitative and mixed methods analysis program, to code the data.

**Analysis**

To counteract the dearth of empirical work on teachers’ experiences working with homeless students, we shed light on the issue via rich description using aspects of a consensual qualitative research approach (CQR; Hill et al., 2005). CQR primarily employs a constructivist perspective with some postpositivist elements (Hill et al., 2005). A constructivist perspective guided the current study in that we recognize that people construct meanings by making sense of the world based on their historical and social perspective; that there are multiple, equally valid, socially constructed versions of “the truth”; and that the researcher inductively develops meaning from the data collected (Crotty, 1998). We also drew upon a postpositivism perspective in that we aimed to be objective by remaining close to the data and summarizing participants’ words rather than making substantial interpretations.

The lead author and an undergraduate student who helped code and analyze the data had both spent a substantial amount of time volunteering at family homeless shelters. Before analyzing the interviews, researchers discussed any personal biases or expectations about what they would find in the data and always emphasized supporting any assertions with evidence.

After reading the interview transcripts multiple times independently and discussing emerging themes, we developed a list of broader topics (or domains) that addressed social and emotional issues facing both students and teachers. Domains included 1) student social and emotional behavior, 2) teachers providing social and emotional support for students and their families (or lack thereof), 3) challenges teachers face, and 4) support for teachers. Research team members individually sorted excerpts of the interview data into these different domains,
disagreements were resolved by consensus, and excerpts were double-coded when appropriate. Then, within each domain, the lead author summarized the content of each excerpt to capture the core idea of what was said. This was then double-checked by another team member, and discrepancies were resolved by consensus. For each domain, we conducted a cross-analysis of these core ideas to develop common themes across participants. For example, within the domain of “teachers providing social and emotional support for students and their families” we identified the following themes: fostering relationships with peers, supportive teacher-child relationships, and sensitivity and understanding to family circumstances.

Results

How Teachers Addressed Students’ Social and Emotional Concerns

I will have two students partner up with them for the first week and generally I will have them be the ones to kind of show them where things are… and they’ll be their partners during playtime… I guess it’s almost like implementing a friendship (Kindergarten teacher Ms. Taylor)

In response to a question about practices employed to welcome new students to the classroom, 22 teachers discussed pairing new students up with a buddy to help them adjust to the daily routines and make the social transition easier. Students experiencing homelessness often enter the classroom at irregular times during the school year, and teachers were cognizant that joining a new school and classroom community can be a potentially anxiety provoking situation. As sixth grade teacher Ms. Allen commented, “they’re afraid and scared and just a new environment, new people, new friends, new teacher.” Some teachers consciously viewed the practice of partnering new students as an opportunity to help the child develop a friendship. First-grade teacher Ms. Chen expressed being very deliberate about whom she selected to help
new students and looked for “somebody who will take leadership and is also open about which
students they communicate with and converse with, and they have a wide social circle.”

Yet despite these efforts, 16 teachers—more than half—still mentioned the challenges
homeless students experienced in developing relationships with classmates. Six teachers
commented on how homeless students tend to lack social skills and seven teachers characterized
students as quiet, shy, introverted, withdrawn, or lacking confidence and thus struggled with
making friends. Second-grade teacher Ms. Mancini reflected on her experiences, saying,
“They’re pretty quiet but I think they don’t want to…stand out, they don’t want to be made fun
of. It’s like somehow they live in secrecy…They don’t want anyone to, to know about it.” This
illustrates how some students experiencing homelessness may be more cautious about
developing social ties because they are embarrassed and/or fear being teased by classmates.

The challenge of interacting with peers was sometimes in response to overt negative peer
relations. Four teachers reported witnessing or hearing that other students teased or made unkind
remarks to students experiencing homelessness (e.g., calling students “hobos”, making
comments about students smelling). Yet 13 teachers reported they had not observed homeless
students getting teased because of their housing situation. Teachers often attributed this to
students being kind and respectful, the prevalence of homeless students at the school, or because
the larger school population was lower-income and thus there likely weren’t striking disparities
among students.

While peer victimization may not have provided full explanation for students’ withdrawn
behavior, there was evidence that the residential and school mobility associated with
homelessness appeared to hinder students’ ability to develop relationships with peers in the
classroom. Three teachers explicitly connected the instability in students’ lives to attachment and bonding issues. Kindergarten teacher Mr. Cooper described:

I see how destructive it is to the children generally speaking when they've been here long enough to develop social relationships and they've bonded and then of course to be removed again…I notice children who move a lot take at least a month longer to adjust in the classroom when they arrive. Um, they come in with a fear of bonding for the fear of being ripped away from their friends again…that to me is the hardest thing, so it's hard on me emotionally more than it is as a professional.

Mr. Cooper proposed that due to prior experiences, homeless students are hesitant to connect and develop relationships with classmates because they anticipate moving and fear losing any friendships they have built. He also commented on how observing these patterns is difficult for him emotionally, illustrating how homeless students’ social and emotional well-being affects not only the student, but also their teachers.

This instability, uncertainty, and insecurity tied to homelessness also seemed to manifest in terms of students’ externalizing behavior as described by eight teachers. The following examples provide insight into some of the challenging family and life circumstances tied to homelessness and the ways in which teachers tried to develop supportive relationships with students. Special Education teacher Ms. Howard recounted:

The one kid that I told you that was really smart…one of the times where he really started to act up. They had a dog…finally the mother said that they have to get rid of the dog and for that week it was a living hell for that child, it was a living hell for me…I’ll try to teach him… ‘You’re living in a car. Let’s look at the pros and cons. What is good? All your entire family is all together. Your mother has a plan to support you right now, right
now…she cannot support you and the dog.’ … It was a German Sheppard, and I think they kept it for like 2 or 3 months before she broke down and said, “We just can’t do this anymore.” I said you can have a plan for this dog. Make a poster, and see if one of these teachers would take this dog… Your mother’s taking it to the pound; she’s not releasing it into the community. Your mother is doing the right thing…You can write a note at the pound “this dog deserves a good home.” You need to do these things in order to survive.”

In this example, the dog may be more broadly symbolic of important individuals to whom a child becomes attached and the relationships and possessions that often must be left behind or given up when one becomes homeless. It is clear that the emotional strain tied to losing important relationships must first be addressed before a teacher can expect to make any academic progress with a child, even for a student who is academically competent. Furthermore, it brings to the forefront the tough decisions and priorities parents are forced to make when experiencing homelessness. This teacher was cognizant of the dilemma this mother was faced with and gives her credit for doing what she deemed best in this situation. The teacher also tried to empower the child by providing suggestions for what he can do to retain some sense of hope and control in order to make it through adverse circumstances.

Fifth-grade teacher Mr. Diaz described the uncertainty in one homeless student’s family relationships and how this affected his performance at school:

Out of those five siblings, he’s the only sibling left in the household… every other sibling’s living in…protective services or at a foster care service and he’s the only one with the family so he always pulls that card… When he first showed up to my class, tantrums …you’ve seen his cum[ulative record] from school to school to school to school to school. So he had tantrums like a little kid…so I let him know, “You know what? It’s
not right, it’s not fair, I’m not gonna, you know, give you that attention, that negative attention. If you want attention, it’s gonna be positive and he stopped, that all stopped. And then, I’m telling you, we’ve held a good rapport, we’re doing so well and then he gets pulled away, so we had to start all over. So he came back more pensive, just thinking of, you know, I guess he’s just afraid of what if they do pull him, what if they do take him?... he actually came back just not motivated anymore; he’s not as motivated as when he first showed up…I’ve been talking to his tutor, working trying to work together how to motivate him, but he’s very low because of that instability… he’s below grade average, but he’s very smart, very bright. He’s lived life.

As this example illustrates, there can be many layers of instability, including not only frequent school mobility but also attachment and relationship issues within one’s family, which may interfere with a child’s behavior in the classroom. Witnessing the removal of one’s own siblings from the household and living with a sense of insecurity about whether or not you will be taken away from your parents carries tremendous emotional weight, and may elicit feelings of anxiety and stress. In this case, the student’s difficulties at home exhibited themselves in externalizing behavior that was disruptive to the class. Mr. Diaz responded by holding this student accountable for his behavior and maintained high expectations in order to break an unproductive cycle of behavior that would be detrimental for this student’s long-term educational opportunities. Mr. Diaz also recognized this student’s unique strengths and what he must have endured up until this point, and attributed his academic struggles to situational factors rather than innate inadequacies of the child. The challenges teachers face due to the instability and insecurity in students’ lives also became evident in this example. After working at developing a relationship with this student and making progress, this student was taken into custody by Child
Protective Services and displaced from his family and his school for 5 weeks. When he came back, it was like having to start back at square one. Understandably, the upheaval left this student emotionally preoccupied with issues such as whether he would be suddenly uprooted from his parents, leaving him with fewer resources to be engaged and motivated about school.

Three teachers described how students’ expectations about moving sometimes interfered with their motivation in class. As second grade teacher Ms. Patmore described:

They don’t want to buy into sometimes you know what we’re doing because they’re afraid they might not be here when we do it…So I try to make things more here and now-ish…just try to have some little incentive at the end of the day versus … at the end of the month…I did notice that “oh, we’re going to plan for our field trip next month” and sometimes, you know, I could see that they didn’t even get excited about something that would happen you know far away.

Some homeless students had a time frame as to when they anticipated moving (e.g., at the end of the month), but sometimes their expectations about moving did not come to fruition. A few teachers described how students were less invested in doing their work, putting forth effort, or buying into incentives because they foresaw themselves being in the classroom only temporarily. In this case, Ms. Patmore demonstrated flexibility by adapting the timeline of her incentive system to take into account her students’ concerns in an effort to keep them more motivated.

The above examples illustrate the effort teachers made to develop and build supportive relationships with students experiencing homelessness. We identified a total of eight teachers who described practices that were indicative of developing a warm and caring relationship with students that addressed children’s social and emotional needs. Other teachers described explicitly coaching students on how to make friends, reassuring students they can succeed even in the face
of extreme hardship by providing them with inspirational stories of homeless individuals who have succeeded coupled with reminding students they will always support them, being someone they can always talk to and cry to, and providing students with basic needs and hygienic support to ensure they would be accepted by classmates. However, working with homeless students and their families was often challenging for teachers.

**When Homelessness Comes to School, Teachers Also Face Challenges**

Twenty-three teachers talked about the challenges they encountered when working with the parents of homeless students, which often centered on difficulties getting in contact with parents and securing involvement in their child’s education. Despite these challenges, 15 teachers also expressed a level of sensitivity and understanding when thinking about why parents experiencing homelessness might be less involved at times. As third-grade teacher Ms. Hughes reflected,

> I think that maybe their parents...have more worries and concerns; they’re trying to figure out how are we as a family going to get a permanent place to live. So, it’s harder for them to focus on their children and their school work when there’s still this huge underlying problem of a permanent place to live and a job to get, and whatever else may be the underlying issue for them being in that shelter.

Similar to Ms. Hughes, others were also cognizant of the struggles homeless families encounter and how this likely forced parents to prioritize attending to basic living needs like shelter, food, and finding work to support their family. Thus, there may have been less time and resources for parents to be as hands-on in their child’s education. Teachers’ sensitivity and ability to take the perspective of what homeless families endure is reflective of teachers’ own social and emotional
competencies, and being sympathetic is important for building positive relationships with parents and students from homeless families.

However, five teachers evidenced a lack of sensitivity and voiced negative views about homeless families without reflecting on the hardship families might experience. For example, fourth-grade teacher, Ms. Nelson, described poor housed parents as hard working and instilling those values in their children, yet stated, “people in the shelter, those same values are not very important…my main problems are always with kids in the shelter—always. Just behavior, everything; they’re not being taught like appropriate behavior.” Such beliefs are problematic because teachers’ beliefs are connected to their practice (Pajares, 1992). In this case, these negative beliefs were coupled with using punitive practices such as having homeless students attend “recess academy” to practice social skills:

I have to always deal with the emotional aspect of it because they always have some emotional problem…either depression, ADHD, um, lack of proper skills, like even social skills. This is what I have to work on with these kids, ‘cause no one teaches them that. I mean, I had to have recess academy today, we call it recess academy to teach them the appropriate behavior in a class.

Ms. Nelson seemed to characterize all of her homeless students’ as problematic and expressed frustration with having to address their social and emotional needs. This practice not only restricted students’ free time, but also further segregated them from their classmates, possibly only exacerbating any social difficulties they had. While such cases are rare in this study sample, it is important to point out examples that are cause for concern because teachers play a powerful role in shaping a child’s schooling experiences including their attitudes towards school.
In contrast, eight teachers focused on the variation among homeless students instead. For example, third-grade teacher Ms. Richardson recalled, “last year I had a really really bright articulate student and she was just, I think, in a bad circumstance, but she was amazingly smart, so, and very well kempt and looked, you know, like everybody else.” In thinking about what might account for differences among students Ms. Richardson said:

I think it would depend what kind of homelessness it is because…I’ve had students in homeless shelters who have done amazing work. Um, I’ve suspected some students, maybe like live in a garage or a car or some kind of inconsistent home…I think in those instances you see a lot more, um… I don’t want to say irresponsibility, but lack of follow through with assignments and no homework. I think if they’re…with a par- a relative that, you know, is really on them, or if they themselves are very bright, they might take care of it on their own. I don’t know, it kinda just depends.

Ms. Richardson, as well as other teachers, highlighted instances of homeless students performing well in school in addition to mentioning some of the challenges other homeless students faced in the classroom. They avoided making generalizations about all homeless students. Teachers proposed that whether or not a child did well at school depended on factors such as the type of homelessness, their caregivers, and the stability of their living situation.

While the majority of teachers did not voice overtly negative perceptions of homeless students and their families, eleven teachers described the challenges they experienced as educators due to the mobility of students in and out of their classroom, revealing a sentiment of being overwhelmed. As third-grade teacher Ms. Reyes explained,

They come in, you assess them, you try and catch them up, you get them on board and then they're gone. And then it's like, okay…that was kind of like a bump in the road and
then two weeks later a new one comes in…As a teacher any movement or change in the classroom is disruptive not only with you know the flow of what's going on and what you've been teaching but it disrupts the students too…it's inconsistence unexpected so it's like you never really are prepared for it, you just kind of have to take it as it comes.

Teachers described their efforts to help homeless students make academic progress, but alluded to how it can be discouraging to put forth so much time and energy only to see the student leave shortly after arriving. Furthermore, special education teachers, Ms. Howard and Ms. Reed, described how their attempts at developing individual education plans (IEPs) for homeless students were often stymied because students would sometimes move in the middle of the assessment process, meaning that the next school they attended would likely repeat the same procedure. As Ms. Reyes commented, this movement is also disruptive to the larger classroom environment. Teachers discussed how it involved spending additional time reviewing rules and routines (instead of making progress on new material) and how a new student could really impact the dynamic of the classroom depending on his/her behavior. Ms. Reyes described her situation as anticipating the unexpected, or as fifth-grade teacher Ms. Aguilar explained, “They constantly move so I’m constantly getting new students and I feel what they feel. They feel the uncertainty.” Lacking a sense of security and control is unsettling and can take an emotional toll on teachers especially when they lack a sense of support. As Ms. Howard explained:

The family gets a lot of support, but the teachers on the other hand that are sometimes just as connected to the child as their family…this support is lacking. Meaning, we were at a student study team yesterday for a student that we’re gonna test…There were three teachers and the last teacher just started to cry up. I said I was so mad at her because when she started to cry then mother started to cry. And I was just like, you were crying,
it’s already cut-and-dried. They don’t know their ABC’s, they missed all their school, no need to cry, we’re gonna test, just call it a day…there’s no help for those teachers.

This example is indicative of the type of emotional turmoil teachers may experience when working with vulnerable students, such as those experiencing homelessness. It also sheds light on why it is so important for teachers to also receive support and strategies in how to work with families experiencing homelessness, including training in how to regulate their own emotions. In working with economically disadvantaged students or children who have undergone traumatic events, teachers may experience a range of emotions including sadness, guilt, and frustration, and will need to find ways to cope with these emotions in a productive manner so they can be a resource and source of support for their students and families.

**Additional Support and Training Would be Beneficial for Teachers and Students Alike**

A total of 16 teachers reported having no explicit training or professional development about working with homeless students. However, five of these teachers had prior experience interacting with homeless students or discussed receiving broader training about meeting the needs of diverse students. The pupil services and attendance counselor and/or a local shelter representative typically led discussions, and much of the training focused on making teachers aware of resources and services to which they could refer homeless families. Other topics included how to identify homeless students, eliminating myths, attendance issues, being sensitive to their needs, and their rights about attending school. However, some teachers suggested that it might not be enough. For example, Ms. Chen described the training as “very brief; it opened up a lot of questions, but a lot of unanswered questions. So there wasn’t a whole lot of follow up in terms of how to accommodate or strategies.”
In a similar vein, 12 teachers said they would like to have additional training opportunities to increase their awareness of the needs of homeless students and families, learn about specific strategies for working with homeless students (e.g., how to help students who feel hopeless), and gain information about resources to which they can refer families. Furthermore, seven teachers also suggested that their schools make stronger connections with the local shelters as a way to better support students. Interestingly, Ms. Nelson, a teacher who expressed negative perceptions of homeless families, stated “…it would be more beneficial like if they took all of us teachers over there and really let us see what it's like. You know, to really see. Maybe we need to have more compassion, and maybe more...relatability(sic).” Other teachers also recommended staff developments that involved visiting the shelter. Special Education teacher Ms. Reed said:

I think we should go over there. I think we should see. I mean, I think that we were just kind of winging it a lot …I think that better communication, I think that would help…with the shelter and to know what services they are providing…after I learned oh it’s like cafeteria style and everybody eats there at the same time or they have assigned times to eat…that gave me a better picture of why homework wasn’t even done.

Visiting the shelters may foster greater compassion by providing teachers with a concrete picture of what life might look like for a family experiencing homelessness. As Ms. Reed points out, understanding the routines and constraints homeless families are subjected to could shed light on why students might be performing in certain ways in the classroom. Perhaps seeing with their own eyes can enhance their ability to take the perspective of homeless families, and even force them to contemplate how they themselves might feel if they were in a similar position.
Discussion

In this study, we sought to examine and describe how the instability and mobility tied to homelessness influenced elementary school students’ behavioral, social, and emotional challenges at school, and how this impacted their teachers. We also illustrated how teachers’ own social and emotional competencies (e.g., perspective taking, ability to develop caring relationships with students) shaped the manner in which they worked with homeless students and handled the challenges and stress of teaching in a classroom with highly mobile students. Elementary school teachers described how the uncertainty in homeless students’ lives seemed to manifest itself in terms of social and emotional concerns including externalizing problems, difficulty developing peer relationships, lacking social skills, withdrawn behavior, attachment issues, and lack of motivation. Teachers responded to students’ affective needs by attempting to foster peer relationships by pairing up newcomers entering the classroom community, developing caring relationships with students, and by engaging in perspective taking to empathize with what homeless students and families endure. Few teachers in our sample expressed stereotypical or deficit views of homeless students and their parents, but the presence of such beliefs at all should not be taken lightly. Working with homeless families presented challenges to teachers such as communication with parents and dealing with the turbulence of students moving in and out of their classroom. There was evidence that some teachers felt overwhelmed and lacked necessary supports to handle the stress of working in a school with homeless students. Surprisingly, over half of teachers did not receive any training about working with homeless students, warranting the need for professional development opportunities.

While ours is only one of a handful of studies to conduct qualitative interviews with in-service elementary school teachers about their experiences working with homeless students, our
findings corroborate with earlier findings. As clearly evident through teachers’ accounts, homelessness is linked to more than just loss of housing. It is also associated with attachment disruption, breaks in relationships with family and friends, out-of-home placements, and shattered routines (Moore, 2013; Samuels et al., 2010). For example, Kirkman and colleagues’ (2010) analysis of qualitative accounts of ethnically diverse homeless children living in Australia, found that as families frequently moved from one temporary location to the next, they often lost communication with friends and family, and had to leave behind possessions, toys, and even pets. Children cope with this upheaval in different ways including anger and aggressive behavior or withdrawn and depressed affect (Anooshian, 2000), which can hinder children’s ability to form positive relationships with peers and adults.

The current study’s focus on children’s relationships with teachers and peers in school is critical because such interactions help develop self-regulation, that is, the ability to control one’s emotions, behaviors, and attention (Masten, 2001). Self-regulation is developed through a process called other-regulation, in which children learn about socially acceptable behavior and self-management strategies through their interactions with adults and peers (Jones & Bouffard, 2012). There is strong evidence that having good self-regulation skills fosters resilience in unfavorable environments such as homelessness (Masten, 2001). Additionally, children’s sense of relatedness to peers and teachers has been found to impact students’ academic engagement from third through sixth grade (Furrer & Skinner, 2003).

Our interviews with teachers not only illustrated the emotional, social, and relational challenges homeless students faced, but also showed how teachers addressed students’ concerns and needs. Several of the strategies teachers employed align with recommended practices when working with homeless or highly mobile students. In Grant and colleagues’ (2008) analysis of
effective teachers who worked with at-risk and homeless students, developing a caring relationship with students was a salient theme, and one that we identified in the current study. Teachers who are successful at teaching poor and/or homeless students hold high expectations for their students, but do so with compassion and flexibility to help students succeed (Landsman, 2006). Mr. Diaz maintained high standards for a male homeless student in his class, yet also put time and energy into building a personal relationship with this student and recognized the assets he brought to school. Additionally, after perceiving that students seemed less invested in long-term incentives, Ms. Patmore remained flexible by providing more short-term motivations for highly mobile students. Effective teachers also become “bearers of hope” for students and their families, not falling into despair no matter how grave the situation may seem (Landsman, 2006, p. 28). Ms. Howard modeled this ideology in how she handled a student’s despair when his family had to give up their dog due to living in a car, and even stated, “We believe in good things can happen, and that’s the other piece that I bring to the table.” As modeled by some of our interviewed teachers, part of developing a supportive relationship with students is respecting students and families, valuing their perspective, background, and priorities, and making learning socially and culturally meaningful to them (Barton, 2003; Kozoll, Osborne, & Garcia, 2010).

Another theme that emerged was the challenges of student mobility on the teachers themselves. Mobility has been described as a “chaos” factor that dampers teacher morale, disrupts classroom learning activities and routines, and takes away from instructional time (Rumberger, 2003, p. 11; Isernhagen & Bulkin, 2011). Thus, it is imperative that teachers themselves are supported so they are in a better position to meet the needs of their most vulnerable students. Teachers should not only be provided with information and training for working with homeless families, but also opportunities to continually foster and develop their
own social and emotional growth. Teachers with stronger social and emotional competencies will likely have more positive relationships with their students and will be less likely to suffer from burnout (Jennings & Greenberg, 2009). As revealed by Ms. Howard, one teacher literally broke down in front of a mother because she was overwhelmed by how academically behind her students were after experiencing multiple homeless episodes. Thus, one suggestion then is to provide teachers with mentor teachers who have more experience and expertise working with homeless students, who can be a source of technical and moral support.

**Contributions and Implications**

Our interviews with elementary school teachers revealed that greater attention should be paid to homeless children’s social and emotional well-being, as it could be an important explanatory factor in better understanding the ways in which homelessness and instability impact children’s educational outcomes. Study findings also suggest that critical components may be lacking emphasis in McKinney-Vento’s EHCY Program, such as more explicit attention to the responsibilities of teachers and how to best support teachers in meeting the needs of homeless students. Teachers should participate in professional development opportunities about working with homeless students, such as visiting shelters and learning about best practices for how to address the unique academic, social and emotional challenges homeless children may face (e.g., incorporating cooperative learning opportunities to foster peer relationships). As seen both in the extant literature and in our data, school mobility has negative impacts on children’s academic and social development. Thus, it is important to reinforce aspects of the McKinney-Vento Act such as children’s rights to stay in their school of origin when it is in the best interest of the child and ensuring that families are provided with the necessary supports such as free transportation. Furthermore, the “coordination” clause of the McKinney-Vento Act calls for homeless education
liaisons and school personnel to work collaboratively with other school districts and social
service agencies to provide needed services to homeless children and their families (Miller,
2012). Some teachers in our study suggested that schools make stronger connections with local
homeless shelters, which coincides with a push for stronger collaboration between schools and
shelters by researchers and policymakers alike (Miller, 2012). Future studies should aim to
capture a more comprehensive picture of how schools implement the EHCY Program by also
interviewing principals, pupil services and attendance counselors, homeless education liaisons,
and local shelter staff because teachers are just one player in the system of school and
community members working to meet the needs of homeless students.

Conclusion

This study provides insight into elementary school teachers’ experiences working with
homeless students, and highlights how the instability tied to homelessness impacts both students
and their teachers socially and emotionally. Children’s life experiences associated with family
homelessness played out in different ways in the classroom including externalizing behavior
problems and difficulty developing relationships with peers. Teachers’ own social and emotional
capacity became evident in how they handled the stress of working in a classroom with highly
mobile students, and in how they perceived and responded to homeless students and their
families. Some teachers developed positive teacher-child relationships and responded with
sensitivity, but a minority endorsed negative stereotypes about the homeless. Our findings
suggest that critical components may be lacking articulation and emphasis in the McKinney-
Vento Act’s EHCY Program legislation such as guidelines for teacher responsibilities, supports
for teachers, and underscoring not only homeless children’s academic but also social and
emotional needs and well-being. Study findings can help inform the ways in which policy,
schools, and teachers can more effectively support the needs of homeless students, arguably one of the most vulnerable segments of the student population in our schools.
GENERAL DISCUSSION

The purpose of my dissertation was to better understand what might account for the variation among homeless children’s educational outcomes. To do this, I focused on how children’s experiences in their most proximate settings—family and school—might help to explain the relation between the instability associated with homelessness and children’s academic (Study 1) and socioemotional adjustment (Study 2).

The overarching results from Studies 1 and 2 revealed that instability tied to experiences of family homelessness (e.g., residential mobility, school mobility, family instability) were related to the quality of children’s and parents’ relationships and connections to school. These relationships mattered because they influenced children’s socioemotional well being, school engagement, and academic achievement. Furthermore, teachers’ accounts in Study 2 revealed that when homelessness comes to school, it impacts more than just homeless students themselves, but also their teachers. A discussion of the broader themes, study contributions, and implications from this dissertation project follows.

Variability Among Homeless Children – Not All Are Alike

Similar to other recent studies (e.g., Cutuli et al., 2013; Huntington et al., 2008; Obradović et al., 2009), quantitative results revealed substantial variability in the academic achievement outcomes among children experiencing family homelessness. About 44% of children in the current study sample scored average or better on math, and 38% scored average or better on reading. However, some children struggled academically; about 10% and 6% of students scored 2 standard deviations or more below the mean on math and reading, respectively. Qualitative findings from Study 2 also alluded to the heterogeneity among students experiencing homelessness. Some teachers discussed the variation among homeless students they have taught,
commenting that some students performed exceptionally well in their classroom while others never quite settled in or settled down; they posited that differential academic performance often depended on things such as who the primary caregiver was and the stability of the students’ living situation.

**Instability Influences Children’s, Parents’, and Teachers’ Experiences at Schools**

*Mobility tied to lower levels of parental involvement at school.* Results from Study 1 indicated that residential mobility negatively impacted parents’ involvement at their child’s school, which in turn, was related to lower academic achievement outcomes among children. That is, children with higher levels of residential mobility had parents who were less involved at their school. Consistent with one of the few studies to examine parental involvement among homeless school-aged children (Miliotis et al., 1998), higher levels of parental involvement were predictive of higher math and reading achievement scores. Interviews with teachers corroborated these quantitative findings. The majority (over 80%) of interviewed teachers discussed the challenges of contacting homeless parents and getting them involved in their child’s education. While teachers did not ascribe lower levels of parental involvement to residential mobility specifically, several teachers talked around issues related to socioeconomic disadvantage more broadly. For example, roughly half of teachers exhibited sensitivity and understanding to the perceived lack of parental involvement, attributing this to parents’ need to prioritize attending to basic living needs like food, housing, and finding work to support their family. This is consistent with the idea that residential mobility is a proxy for other family characteristics connected to poverty more generally (Murphey et al., 2012). However, a minority of teachers (i.e., 5) expressed stereotypical views of parents, describing them as holding poor values and not caring
about their child’s education, which is certainly cause for concern given that teachers (and their beliefs) play an instrumental role in shaping a child’s school experiences.

**Mobility linked to children’s social experiences at school.** Study 1 showed that children who moved more frequently were also less likely to feel a sense of belonging to their school (e.g., in terms of feeling close to people at school, feeling like they are a part of their school), and in turn, school belonging was predictive of positive school engagement. Qualitative findings from Study 2 helped to unpack and contextualize how school belonging relates to mobility and what it might look like in the classroom, based on the perceptions of elementary school teachers who worked at the home schools for the shelters in Study 1. Over half (57%) of interviewed teachers discussed the challenges homeless students experienced in developing relationships with classmates. Teachers commonly described their homeless students as lacking social skills, being quiet and withdrawn in their classroom and with their peers—characteristics that made it more challenging for students to make friends. A few teachers explicitly described how the residential and school mobility tied to homelessness hampered children’s capacity to develop relationships with peers in the classroom. They reported that children whose families were homeless sometimes appeared to be hesitant to bond with classmates due to the fear of losing friendships when they moved again.

Across both Study 1 and Study 2, there were minimal findings with regards to the victimization of children experiencing homelessness. In Study 1, there was no evidence of a link between residential mobility and peer victimization among our elementary school sample. This is in contrast to research conducted with adolescents (Haynie et al., 2006; South and Haynie, 2004), perhaps signaling a potential timing difference. For example, it may be that negative peer relations in response to one’s housing status may be less common during the elementary school
years. In Study 2, teachers rarely described incidents in which homeless children were victimized or bullied. Some teachers attributed this to the high proportion of homeless students at the school, and more generally to the predominately lower socioeconomic demographic of the student body. However, there were a few exceptions. Ms. Mancini discussed how sometimes students experiencing homelessness seemed to live in secrecy, not wanting others to know about their housing situation, in fear that they might be teased. Furthermore, four teachers reported observing students teasing or making unkind remarks to homeless students (e.g., calling them “hobos”). The fact that even some teachers reported that homeless students in their classrooms had been harassed is a concern; it is probable that negative peer interactions among homeless children occur more frequently, such as when teachers are not directly supervising students.

While Study 1 did not find evidence of residential mobility predicting children’s externalizing, internalizing, and prosocial difficulties, findings from Study 2 alluded to other forms of instability that may be related to homeless children’s behavioral difficulties. Teachers’ accounts illustrated how homelessness is linked to more than just loss of housing and residential mobility, but also instability in terms of breaks in relationships with family, friends, and pets, and out-of-home placements. These other forms of instability seem to capture what Harden (2004) describes as family instability, that is, lacking a stable home environment that consistently provides warmth, emotional availability, stimulating experiences, a cohesive family, and daily routines. The converse of this—family stability—is imperative because there is robust evidence that family stability has a positive influence on children’s health behaviors and outcomes, academic achievement, social skills development, and emotional functioning, and negative consequences when it is lacking from children’s lives (Harden, 2004).
**Mobility and homelessness also impact teachers.** Study 2 added to the dearth of literature on elementary school teachers’ experiences working with homeless students. A salient theme that emerged from teachers’ interviews was the challenges of student mobility on the teachers themselves. Similar to prior work that has described mobility as a “chaos” factor that disheartens teacher morale, and disrupts learning activities and routines (Rumberger, 2003, p. 11; Isernhagen & Bulkin, 2011), several of the interviewed teachers discussed how stressful and unpredictable it is to work in a classroom with H/HM students. Teachers discussed the challenge of trying to help students catch up academically and the frustration of seeing them go just as they began to make progress, or how the unexpected arrival of a new student meant having to carve out time to review material. Given the unique challenges of working in a school serving a high proportion of homeless students, it was a concern that over half of interviewed teachers reported having no explicit training in working with homeless students even though they were teaching at the designated home school of a local shelter.

**Contributions to the Literature**

This dissertation makes important contributions to the literature on family homelessness. Study 1 sought to build off the findings of recent work by researchers such as Cutuli and colleagues (2013) and Obradović and colleagues (2009) who have found evidence of substantial variability in the academic achievement outcomes among H/HM children in elementary school, but have not examined the underlying processes in children’s lives that account for this heterogeneity. In Study 1, I examined how child behavioral processes, and children’s experiences with parents, at school, and with peers might serve as conduits through which residential mobility influences elementary school children’s educational outcomes. Focusing on these proximal processes during middle childhood is unique because most of the recent work has
concentrated on younger children as they transition to school (Herbers et al., 2011; Obradović, 2010). Furthermore, I examined these processes using a methodological approach that has rarely been used in the extant literature on family homelessness. I employed path analysis within a structural equation modeling (SEM) framework, which allowed me to test multiple pathways simultaneously, something that traditional ordinary least squares regression approaches do not permit.

Additionally, I included a focus on the school context in both my quantitative and qualitative analyses. Study 1 is the first to my knowledge to assess school belonging among homeless school-aged children, and is one of the few (see exception; Miliotis et al., 1999) to examine how parental involvement at school relates to children’s academic achievement. Study 2 makes an important contribution by interviewing in-service elementary school teachers about their experiences working with homeless students and parents. The extant literature on teachers working with students experiencing family homelessness is scant, and the few studies that do address this topic have primarily focused on pre-service early childhood teachers (Kim, 2013; Swick, 1996).

The current sample is unique in comparison to recent studies that have examined the variability among homeless children. Prior studies have focused primarily on data on majority African American families living in the upper Midwest (e.g., Herbers et al., 2011; Obradović, 2010) whereas the sample for the current project was predominately Latino and African American families living in shelters in the Greater Los Angeles Area. It is informative to examine child developmental processes with multiple samples in different geographical areas given that the proportion of racial/ethnic groups in shelters vary by geographic region across the country. For example, Latinos represent a higher proportion of sheltered persons in the West,
Southwest, and Northeast regions (ICPH, 2013). Research on homeless African American and Latino families is imperative given their increased risk for experiencing poverty and homelessness (see Figures 3.1 and 3.2). In 2010, close to one-third of African American and Latino families with children lived in poverty. Despite the similarity in poverty levels between these two groups, fewer Latino family members stayed in shelters. As shown in Figure 3.2, African American families are greatly overrepresented in sheltered homeless populations, and Latino families are moderately overrepresented (ICPH, 2013). However, there is some speculation that these statistics may underrepresent the number of Latino homeless families. For example, characteristics unique to this population, such as language barriers, migratory labor patterns, and fear of deportation of an undocumented family member, may prevent some Latino families from utilizing resources, thus resulting in an underrepresentation in statistics on homeless families. Latino families may also prefer to rely on kinship-based supports (e.g., living doubled-up) instead of agency-run social services (ICPH, 2013). Therefore, even though the current study did not find preliminary evidence for ethnic group differences, continued research on Latino homeless family populations is necessary.

![Figure 3.1](source)

**Figure 3.1**

Study Limitations and Future Directions

While my dissertation makes novel contributes to the extant literature on family homelessness, study findings should also be considered with regards to certain limitations. In terms of generalizability, given that data were collected in Southern California at two family homeless shelters and the surrounding schools, findings are not representative of all family shelters or the broader context of family homelessness. For example, students meeting the Department of Education’s definition of homelessness, which includes a significant proportion of children who are living “doubled up” with family or friends, are not accounted for in my dissertation results. Future work should explore if and how different types of homelessness (e.g., living in a shelter, doubled up, motel/hotel, car) relate to different developmental outcomes for children.

Additionally, the project’s cross-sectional nature limits the ability to infer causation. Future work should pair longitudinal data (such as that collected by school districts) with more in-depth analyses of family and school processes. There is a need for longitudinal work because family homelessness is a temporary state and not a permanent condition. Most families will
eventually be re-housed and some oscillate in and out of homeless episodes (Samuels et al., 2010). Thus, to really understand how homelessness matters for children, we need to be able to follow them over time to examine both their concurrent and long-term outcomes, as well as see what happens once families attain more stable and permanent housing.

There is also a demonstrated need for more studies examining H/HM children’s social relationships at school and in the classroom. Novel use of measurement techniques such as sociometric data collected from students at schools with high proportions of homeless students could be extremely informative for identifying if and when H/HM children experience exclusion at school.

Future work should also examine the impacts of homelessness and high residential mobility across developmental periods including early childhood and adolescence. It is important to understand the ways in which moving may not be “an equivalent experience for all children during all developmental periods” as pathways of influence “may shift or vary in relevance across developmental periods” (Anderson et al., 2014, p. 15).

**Practice and Policy Implications**

Findings from Studies 1 and 2 illuminate how the instability (e.g., residential mobility, school mobility) in homeless children’s lives can influence both their socioemotional and academic adjustment. Thus, results have implications for schools and the broader policy context to focus on supporting the stability and needs of children experiencing homelessness, in addition to working to prevent and end homelessness.

The U.S. Interagency Council on Homelessness (USICH), which includes various federal agencies such as the Department of Housing and Urban Development, Department of Education, and Health and Human Services, outlined a plan to end family homelessness by 2020,
demonstrating the Obama Administration’s commitment on policies pertaining to homelessness (USICH, 2014). Furthermore, as previously mentioned, the McKinney-Vento Homeless Assistance Act’s Education for Homeless Children and Youth (EHCY) Program is the primary piece of federal legislation that seeks to address the needs of homeless students. However, the EHCY Program provides little guidance about the roles and responsibilities of teachers. Findings from Study 2 indicated that critical components might be lacking emphasis and articulation in the EHCY Program such as more explicit attention to the responsibilities of teachers and how to best support teachers in meeting the needs of homeless students. For example, schools can provide teachers with training and professional development opportunities to learn more about working with homeless students and their parents, causes of family homelessness, the prevalence of family homelessness, ways to identify homeless students, and best practices for not only meeting students’ academic needs, but also their unique social and emotional needs. Findings from both studies also point to the need for outreach efforts targeted at parents of H/HM students to foster stronger connections between parents and schools. Such efforts should ensure that all school personnel make parents feel welcome and respected at the school because some homeless parents may be reluctant to be involved at their child’s school due to the stigma attached to homelessness. Additionally, schools can collaborate with local shelters to build stronger rapport with families experiencing homelessness. In an effort to promote greater stability for homeless families, it is important to reinforce aspects of the McKinney-Vento Act such as children’s rights to stay in their school of origin when it is in the best interest of the child and guaranteeing that families are provided with the necessary supports such as free transportation.

Ultimately, homelessness is a largely a housing issue and my dissertation findings point to the importance of supporting the housing stability of economically disadvantaged families.
While my dissertation did not examine the longitudinal impact of housing instability, other researchers have found that students tend to have lower reading and math achievement scores the year following periods during which they were identified as H/HM versus when they were not (Cutuli et al., 2013; Rafferty et al., 2004). Moreover, Rafferty and colleagues (2004) found that the achievement gap between homeless and low-income housed adolescents dissipated at a five-year follow-up in which the formerly homeless adolescents were housed, signaling that a period of stable housing can help narrow the gap. My study findings in tandem with prior research bolster the need to prioritize plans set forth by the USICH’s Federal Strategic Plan to Prevent and End Homelessness among families. For example, the plan seeks to expand affordable housing opportunities by improving rental subsidies for existing housing, in addition to rehabilitating housing and constructing new affordable housing units. Also, USICH advocates for rapid-rehousing and Housing First models, which are interventions that assist families with moving quickly into permanent housing with support services that will enable a family to achieve and sustain housing stability (USICH, 2010).

Conclusion

Family homelessness is much more than just a loss of housing; it is a period of instability marred by residential moves, changing schools, shifting family dynamics, and severing bonds with important figures in one’s life. Despite the adverse circumstances associated with homelessness, there is substantial variability regarding the educational outcomes of homeless students. Thus, it is important to understand the pathways in which homelessness influences children’s outcomes. Findings from the current study showed how instability can influence the quality of relationships among children, parents, teachers, and peers, and ultimately affect children’s socioemotional and academic adjustment during the elementary school years. The role
of parents’ involvement in their child’s schooling and supportive teachers who can successfully support the socioemotional needs of homeless students are clearly important. In order to promote and protect the development of homeless children, policy and practice efforts must be aimed at strengthening the stability of homeless families.
Appendix A

Exploratory Factor Analysis Results for Strengths and Difficulties Questionnaire (SDQ)

All items from the SDQ were included in a principal axis factor analysis with promax rotation; I specified 5 factors to conform to the original 5-factor structure. Factor loadings did not reveal the same five substantive categories. Therefore, informed by Dickey and Blumberg’s (2004) findings of a 3-factor model (externalization problems, internalization problems, and a positive construal factor), I conducted a subsequent EFA in which I specified 3 factors. This resulted in the same three-factor model; the only exception was that I reverse-scored what Dickey and Blumberg (2004) labeled the ‘positive construal factor’ to instead reflect ‘prosocial difficulties’. The first factor (i.e., externalizing behavior; 10 items) accounted for 30.19% of the variance, the second factor (i.e., internalizing behavior; 8 items) explained 9.48% of the variance, and the third factor (i.e., prosocial difficulties; 7 items) explained 7.98% of the variance. Table A1 provides a summary of the factor analysis results. For analytic purposes, composite scale scores were computed for each factor by averaging across the items such that higher scores reflected more problematic behavior. Cronbach’s alpha indicated adequate reliability for all three factors (α = .88, .81, and .75 for externalizing, internalizing, and prosocial difficulties indices, respectively).
Table A1

**Factor Loading for Externalizing Behavior, Internalizing Behavior, and Prosocial Difficulties Composites**

<table>
<thead>
<tr>
<th>Factor 1: Externalizing Behavior</th>
<th>Factor 2: Internalizing Behavior</th>
<th>Factor 3: Prosocial Difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easily distracted, concentration wanders</td>
<td>.86</td>
<td>.49</td>
</tr>
<tr>
<td>Restless, overactive, cannot stay still for long</td>
<td>.76</td>
<td>.27</td>
</tr>
<tr>
<td>Often loses temper</td>
<td>.75</td>
<td>.52</td>
</tr>
<tr>
<td>Good attention span, sees work through to the end (reverse-coded)</td>
<td>.72</td>
<td>.39</td>
</tr>
<tr>
<td>Constantly fidgeting or squirming</td>
<td>.67</td>
<td>.47</td>
</tr>
<tr>
<td>Often lies or cheats</td>
<td>.66</td>
<td>.30</td>
</tr>
<tr>
<td>Generally well behaved, usually does what adults request (reverse-coded)</td>
<td>.65</td>
<td>.24</td>
</tr>
<tr>
<td>Thinks things out before acting (reverse-coded)</td>
<td>.56</td>
<td>.33</td>
</tr>
<tr>
<td>Steals from school, home, or elsewhere</td>
<td>.48</td>
<td>.11</td>
</tr>
<tr>
<td>Often fights with other children or bullies them</td>
<td>.42</td>
<td>.41</td>
</tr>
<tr>
<td>Nervous or clingy in new situations, easily loses confidence</td>
<td>.57</td>
<td>.70</td>
</tr>
<tr>
<td>Many worries or often seems worried</td>
<td>.47</td>
<td>.69</td>
</tr>
<tr>
<td>Often unhappy, depressed, or tearful</td>
<td>.37</td>
<td>.69</td>
</tr>
<tr>
<td>Many fears, easily scared</td>
<td>.34</td>
<td>.66</td>
</tr>
<tr>
<td>Picked on or bullied by other children</td>
<td>.29</td>
<td>.58</td>
</tr>
<tr>
<td>Gets along better with adults than with other children</td>
<td>.08</td>
<td>.55</td>
</tr>
<tr>
<td>Rather solitary, prefers to play alone</td>
<td>.16</td>
<td>.45</td>
</tr>
<tr>
<td>Often complains of headaches, stomach-aches, or sickness</td>
<td>.27</td>
<td>.39</td>
</tr>
<tr>
<td>Kind to younger children (reverse-coded)</td>
<td>.33</td>
<td>.30</td>
</tr>
<tr>
<td>Generally liked by other children (reverse-coded)</td>
<td>.30</td>
<td>.26</td>
</tr>
<tr>
<td>Helpful if someone is hurt, upset, or feeling ill (reverse-coded)</td>
<td>.27</td>
<td>.33</td>
</tr>
<tr>
<td>Considerate of other people's feelings (reverse-coded)</td>
<td>.28</td>
<td>.24</td>
</tr>
<tr>
<td>Shares readily with other children, for example toys, treats, pencils (reverse-coded)</td>
<td>.34</td>
<td>.44</td>
</tr>
<tr>
<td>Often offers to help others (parents, teachers, other children) (reverse-coded)</td>
<td>.22</td>
<td>.18</td>
</tr>
<tr>
<td>Has at least one good friend (reverse-coded)</td>
<td>.13</td>
<td>.32</td>
</tr>
</tbody>
</table>

**Note.** The extraction method used was principal axis factoring with promax rotation. Only the highest factor loading for each item is in boldface.
Appendix B

Exploratory Factor Analysis Results for Parental Warmth

Table B1

<table>
<thead>
<tr>
<th>How often do you...</th>
<th>Factor 1 Parental Warmth</th>
</tr>
</thead>
<tbody>
<tr>
<td>praise your child by saying something like &quot;that's good,&quot; &quot;thank you,&quot; &quot;great&quot;?</td>
<td>.39</td>
</tr>
<tr>
<td>and your child talk or play with each other focusing attention for five minutes or more, just for fun?</td>
<td>.89</td>
</tr>
<tr>
<td>do something special with your child that he or she enjoys</td>
<td>.56</td>
</tr>
</tbody>
</table>

Eigenvalue 1.72

% variance 57.23

Note. Extraction method: Principal axis factoring. Because only one factor was extracted, the solution could not be rotated.
## Appendix C

Exploratory Factor Analysis Results for Parental Control

Table C1

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1 Parental Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often...</td>
<td></td>
</tr>
<tr>
<td>does your child get away with things that you think should have resulted in punishment?</td>
<td>.59</td>
</tr>
<tr>
<td>do you get angry when you punish him/her?</td>
<td>.62</td>
</tr>
<tr>
<td>do you feel you are having problems managing him/her in general?</td>
<td>.72</td>
</tr>
<tr>
<td>when you discipline your child, does he/she ignore the punishment?</td>
<td>.81</td>
</tr>
<tr>
<td>do you have to discipline him/her repeatedly for the same thing?</td>
<td>.83</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>3.05</td>
</tr>
<tr>
<td>% variance</td>
<td>61.01</td>
</tr>
</tbody>
</table>

*Note. All items were reverse-scored. Extraction method: Principal axis factoring. Because only one factor was extracted, the solution could not be rotated.*
Appendix D

Exploratory Factor Analysis Results for Parental Involvement

Twelve items in which parents reported about his/her involvement in the focal child’s education were included in a principal axis factor analysis with a promax rotation. The following three factors emerged: monitoring and materials, parental involvement at school, and homework support (see Table D1). The monitoring and materials scale was skewed and kurtotic, and the homework support scale had somewhat low internal reliability and was not significantly correlated with the primary predictor (residential mobility) and outcomes of interest (math and reading achievement scores). Therefore, these two scales were not included in further analyses. To check for the unidimensionality of the parental involvement at school scale, I included these 4 items in a principal axis factor analysis with promax rotation, which resulted in one factor, accounting for 53.13% of the variance (see Table D2).

Table D1

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1 Monitoring and Materials</th>
<th>Factor 2 Involvement at School</th>
<th>Factor 3 Homework Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know how my child is doing in school.</td>
<td>.74</td>
<td>.22</td>
<td>.39</td>
</tr>
<tr>
<td>I keep track of my child’s progress in school or know his/her grades in school.</td>
<td>.83</td>
<td>.25</td>
<td>.26</td>
</tr>
<tr>
<td>I make sure my child has school supplies.</td>
<td>.54</td>
<td>.15</td>
<td>.13</td>
</tr>
<tr>
<td>I take my child to school or other school related activities (i.e., games, school fairs, etc.)</td>
<td>.05</td>
<td>.70</td>
<td>.24</td>
</tr>
<tr>
<td>I go to parent-teacher conferences or open houses.</td>
<td>.34</td>
<td>.65</td>
<td>.17</td>
</tr>
<tr>
<td>I attend school events (i.e., science fair, bake sales, athletic games)</td>
<td>.25</td>
<td>.66</td>
<td>.36</td>
</tr>
<tr>
<td>I volunteer at my child’s school.</td>
<td>.28</td>
<td>.49</td>
<td>.04</td>
</tr>
<tr>
<td>I help my child with homework.</td>
<td>.36</td>
<td>.18</td>
<td>.80</td>
</tr>
<tr>
<td>I give my child extra assignments.</td>
<td>.27</td>
<td>.23</td>
<td>.62</td>
</tr>
<tr>
<td>I set aside space in our home for homework and studying.</td>
<td>.04</td>
<td>.17</td>
<td>.45</td>
</tr>
</tbody>
</table>

Eigenvalue 3.05 1.60 1.47
% variance 30.47 16.03 14.73

Note. The extraction method used was principal axis factoring with a promax rotation. Factor loadings > .40 are in boldface.
Table D2

*Factor Loadings for Parental Involvement at School*

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1 Parental Involvement at School</th>
</tr>
</thead>
<tbody>
<tr>
<td>I take my child to school or other school related activities (i.e., games, school fairs, etc.)</td>
<td>.64</td>
</tr>
<tr>
<td>I go to parent-teacher conferences or open houses.</td>
<td>.67</td>
</tr>
<tr>
<td>I attend school events (i.e., science fair, bake sales, athletic games)</td>
<td>.68</td>
</tr>
<tr>
<td>I volunteer at my child's school</td>
<td>.46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Eigenvalue</th>
<th>% variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.13</td>
<td>53.13</td>
</tr>
</tbody>
</table>

*Note.* Extraction method: Principal axis factoring. Because only one factor was extracted, the solution could not be rotated.
Appendix E

Exploratory Factor Analysis Results for School Belonging

Table E1

Factor Loadings for School Belonging

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel close to people at this school</td>
<td>.52</td>
</tr>
<tr>
<td>I feel like I am a part of this school</td>
<td>.71</td>
</tr>
<tr>
<td>I am happy to be at this school</td>
<td>.85</td>
</tr>
<tr>
<td>The teachers at this school treat students fairly</td>
<td>.49</td>
</tr>
<tr>
<td>I feel safe at my school</td>
<td>.70</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalue</td>
<td>2.72</td>
</tr>
<tr>
<td>% variance</td>
<td>54.45</td>
</tr>
</tbody>
</table>

Note. Extraction method: Principal axis factor analysis. Because only one factor was extracted, the solution could not be rotated.
Appendix F

Exploratory and Confirmatory Factor Analysis Results for School Engagement

To examine the unidimensionality of the scale for the current study sample, all 8 items for the school engagement subscale were included in a principal axis factor analysis using promax rotation, with negatively worded items (e.g., “To what extent does [focal child] feel distressed about school”) reverse-coded. However, the factor analysis yielded a two-factor structure, \( r = -0.53 \), with eigen values greater than 1.0, with the first factor (i.e., negative school engagement; 4 items with original negative valence) accounting for 57.69% of the variance and the second factor (i.e., positive school engagement; 4 items) explaining 17.76% of the variance. Table F1 provides a summary of the exploratory factor analysis results.

Table F1

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1 Negative School Engagement</th>
<th>Factor 2 Positive School Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>happy about school</td>
<td>.60</td>
<td>.95</td>
</tr>
<tr>
<td>interested in school</td>
<td>.50</td>
<td>.85</td>
</tr>
<tr>
<td>excited about school</td>
<td>.58</td>
<td>.87</td>
</tr>
<tr>
<td>eager about school</td>
<td>.28</td>
<td>.60</td>
</tr>
<tr>
<td>irritable about school (reverse-scored)</td>
<td>.86</td>
<td>.42</td>
</tr>
<tr>
<td>upset about school (reverse-scored)</td>
<td>.83</td>
<td>.50</td>
</tr>
<tr>
<td>frustrated about school (reverse-scored)</td>
<td>.82</td>
<td>.55</td>
</tr>
<tr>
<td>distressed about school (reverse-scored)</td>
<td>.75</td>
<td>.45</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>4.62</td>
<td>1.42</td>
</tr>
<tr>
<td>% variance</td>
<td>57.69</td>
<td>17.76</td>
</tr>
</tbody>
</table>

Note. Extraction method: Principal axis factoring. Because only one factor was extracted, the solution could not be rotated.

Due to evidence of cross-loading for nearly all items, and prior use of all items in a single scale, a confirmatory factor analysis was also conducted to examine whether a one or two-factor structure was most appropriate. For the confirmatory factor analysis, the original items were included (not the reverse-coded items). A one-factor model yielded poor model fit \( \chi^2(1, N = 78) = 87.13 \ p = .000; \ CFI = 0.750; \ RMSEA = 0.207 \), while a two-factor model demonstrated good
model fit $[\chi^2(1, N = 78) = 13.45, p = .815; \text{CFI} = 1.00; \text{RMSEA} = 0.000] \text{ (see Figure F1).}$. Based on these results, the four items with a negative valence were averaged to create a negative school engagement composite score with higher scores reflecting lower levels of school engagement. The four items with a positive valence were averaged to create a positive school engagement composite such that higher scores were indicative of greater levels of school engagement. Cronbach’s alpha indicated adequate reliability for both factors ($\alpha = .88$ and $.88$ for negative and positive school engagement, respectively).

Figure F1. Confirmatory factor analysis for school engagement measure. Model fit statistics: $\chi^2(1, N = 78) = 13.45, p = .815; \text{CFI} = 1.00; \text{RMSEA} = 0.000$. Note. $1^*$ is the fixed parameter.

***$p < .001$, **$p < .01$, *$p < .05$
Appendix G

Exploratory Factor Analysis Results for Child Victimization

Table G1

Factor Loadings for Child Victimization

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1 School belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get called names by other kids at school</td>
<td>.91</td>
</tr>
<tr>
<td>I get picked on by other kids at school</td>
<td>.80</td>
</tr>
<tr>
<td>I get hit and pushed around by other kids</td>
<td>.72</td>
</tr>
<tr>
<td>Other kids make fun of me at school</td>
<td>.69</td>
</tr>
</tbody>
</table>

Eigenvalue        2.82
% variance        70.56

Note. Extraction method: Principal axis factor analysis. Because only one factor was extracted, the solution could not be rotated.
Appendix H

Exploratory Factor Analysis Results for Loneliness and Difficulty Making Friends

All 16 items from The Loneliness and Social Dissatisfaction Questionnaire (Asher & Wheeler, 1985; Cassidy & Asher, 1992) were included in a principal axis factor analysis using promax rotation, with negatively worded items (e.g., “Is it hard for you to make friends?” “Do you feel alone?”) reverse-coded. In prior work (e.g., Asher & Wheeler, 1985; Huston et al., 2005), all items have loaded on one factor. Exploratory factor analysis results for the current study sample yielded 4 factors with eigen values greater than 1.0 (see Table H1). However, inspection of the structure matrix factor loadings revealed a fair amount of cross-loading for several items across factors 2, 3, and 4. Items loading onto factor 1 (Loneliness and difficulty making friends) were consistently high (above .70) and did not cross-load onto the other factors. Therefore, only factor 1, which accounted for 34.04% of the variance and included 6 items (e.g., “Do you feel alone?” “Is it hard for you to make new friends?”), was carried forward in analyses. These six items (i.e., the original items, not the reverse-coded items) were averaged so that higher scores reflected greater levels of child loneliness and difficulty making friends. This composite revealed adequate internal reliability (α = .84).
Table H1

**Factor Loadings for The Loneliness and Social Dissatisfaction Questionnaire**

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1 Loneliness and Difficulty Making</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it easy for you to make new friends?</td>
<td>.23</td>
<td>.44</td>
<td>.47</td>
<td>.71</td>
</tr>
<tr>
<td>Do you have other kids to talk to?</td>
<td>.12</td>
<td>.58</td>
<td>.21</td>
<td>.31</td>
</tr>
<tr>
<td>Are you good at working with other kids?</td>
<td>.15</td>
<td>.22</td>
<td>.05</td>
<td>.47</td>
</tr>
<tr>
<td>Do you have lots of friends?</td>
<td>.15</td>
<td>.75</td>
<td>.38</td>
<td>.52</td>
</tr>
<tr>
<td>Can you find a friend when you need one?</td>
<td>.09</td>
<td>.35</td>
<td>.72</td>
<td>.31</td>
</tr>
<tr>
<td>Do you have kids to play with?</td>
<td>.07</td>
<td>.69</td>
<td>.57</td>
<td>.43</td>
</tr>
<tr>
<td>Do you get along with other kids?</td>
<td>.23</td>
<td>.61</td>
<td>.42</td>
<td>.53</td>
</tr>
<tr>
<td>Are there kids you can go to when you need help?</td>
<td>.22</td>
<td>.47</td>
<td>.80</td>
<td>.29</td>
</tr>
<tr>
<td>Do kids at school like you?</td>
<td>.08</td>
<td>.64</td>
<td>.58</td>
<td>.79</td>
</tr>
<tr>
<td>Do you get along with other kids?</td>
<td>.11</td>
<td>.80</td>
<td>.69</td>
<td>.32</td>
</tr>
<tr>
<td>Is it hard for you to make friends? (reverse-coded)</td>
<td>.88</td>
<td>.08</td>
<td>.21</td>
<td>.13</td>
</tr>
<tr>
<td>Do you feel alone? (reverse-coded)</td>
<td>.93</td>
<td>.28</td>
<td>.26</td>
<td>.21</td>
</tr>
<tr>
<td>Is it hard to get other kids to like you?</td>
<td>.71</td>
<td>.21</td>
<td>.10</td>
<td>.24</td>
</tr>
<tr>
<td>Do you feel left out of things? (reverse-coded)</td>
<td>.82</td>
<td>.13</td>
<td>.16</td>
<td>.21</td>
</tr>
<tr>
<td>Is it hard for you to get along with other kids? (reverse-coded)</td>
<td>.73</td>
<td>.21</td>
<td>.16</td>
<td>.28</td>
</tr>
<tr>
<td>Are you lonely? (reverse-coded)</td>
<td>.94</td>
<td>.08</td>
<td>.12</td>
<td>.12</td>
</tr>
</tbody>
</table>

| Eigenvalue | 5.45 | 3.43 | 1.35 | 1.09 |
| % variance | 34.04 | 21.44 | 8.45 | 6.81 |

*Note. The extraction method used was principal axis factoring with a promax rotation. Factor loadings > .40 are in boldface.*
## Appendix I

Correlations Among Residential Mobility, Math and Reading Achievement, and Potential Covariates (Not Included in Models)

Table II

<table>
<thead>
<tr>
<th>Correlations Among Residential Mobility, Math and Reading Achievement, and Potential Child-level Covariates of Interest (ultimately not included in models)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Residential mobility</td>
<td>--</td>
<td></td>
<td></td>
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**p < .01, *p < .05, † p < .10
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**p < .01,*p < .05, † p < .10

Note. 1 Primary caregivers completed the Mental Health Inventory-5 (MHI-5; Berwick et al., 1991)
2 Socioeconomic risk index was computed by creating a sum score for the following four risk factors: primary caregiver unemployed, primary caregiver had less than a high school education, single adult household, and 3 or more siblings in the family.
3 An average was computed for 6 items in which the primary caregiver reported the extent to which they worried about paying their bills; getting or keeping a job; getting medical care if they or a family member gets sick; having enough money to buy food; being able to afford adequate housing; and not having enough money for their children to take part in special activities on a scale of 1 = not at all - 5 = a great deal.
4 Negative life events index was computed by creating a sum score for 13 negative life events (e.g., death of a family member of close friend, child victim of violence, parent arrested or went to jail, child left home to live under the care of another adult) that had occurred during the past 12 months (based on primary caregiver report). Items were modeled off of an index developed by Buckner et al. (1999) in their assessment of negative life events experienced by homeless families.
Appendix J

Semi-Structured Interview Protocol for Teachers

1. How many years have you been teaching?

2. How many years have you been working at ____________________ Elementary School?

3. What brought you to you ____________________ Elementary School?

4. When a new student joins your class (at a time other than the start of the school year), what are some strategies you use, if any, to welcome him/her and help him/her adjust to the class? Are there any particular practices that you have found to be more beneficial in helping children settle in to a new class? Please tell me about those.

5. In the past or currently, have you known or suspected if any of your students are homeless?
   a. [If yes] How did you know they were homeless? Or what were some of the signs that made you suspect the child was homeless?
   b. [If yes] What have your experiences been like when working with students who are, or may be homeless?
      i. Do you think that some of the students feel there is a stigma attached to being homeless? Do you notice students being teased who are homeless?
   c. [If yes] What have your experiences been like when working with the parents who are, or may be homeless?
      i. Do you think that some of the parents feel there is a stigma attached to being homeless?

6. If you know or suspect a child is homeless, are there any changes or modifications you make to your curriculum? Please tell me about those.
7. If you know or suspect a child is homeless, do you use specific behavioral strategies or interventions? If so, please describe them.

8. What are some of the challenges you face when working in a classroom with students who are highly mobile or homeless?
   a. Do you have a lot of new students moving in and out of your classroom throughout the school year?
      i. [If yes] What impact does that have on you and the other students?

9. What do you think are some of the reasons why families with children become homeless?

10. In what ways, if any, do you believe highly mobile and homeless children are different from children who are poor but have stable housing?

11. Have you received any professional development about working with homeless and highly mobile students, or the educational rights of homeless students and their families?

12. What are some of the ways you think your school and/or the district can help you and other teachers identify and work with families and students who may be homeless?
REFERENCES


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National Association for the Education of Homeless Children, and Youth (NAEHCY), National Center for Homeless Education (NCHE), National Coalition for the Homeless (NCH), National Law Center for Homelessness and Poverty (NLCHP), & National Network for


