

# **The Negative Effects of Instability on Child Development: A Research Synthesis**

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# Contents

Executive Summary	4
What Do We Know about Instability?	4
What Are the Effects of Various Types of Instability on Child Development?	5
Implications for Policy and Practice	7
The Negative Effects of Instability on Child Development	9
What Do We Mean by Instability?	10
Why Does Instability Matter?	12
Theoretical Framework	13
Economic Instability	15
Employment Instability	21
Family Instability	24
Residential Instability	28
Instability in Out-of-Home Contexts: School and Child Care	32
The Role of Parenting and Parental Mental Health among Unstable Families	38
Conclusions	40
Notes	46
References	47
About the Authors	57

## Executive Summary

Children’s early experiences shape who they are and affect lifelong health and learning. To develop to their full potential, children need safe and stable housing, adequate and nutritious food, access to medical care, secure relationships with adult caregivers, nurturing and responsive parenting, and high-quality learning opportunities at home, in child care settings, and in school.

Research shows that a large number of children face instability in their lives. Researchers from various fields of study—developmental psychology, sociology, economics, public policy, demography, and family studies—have independently explored different domains of instability in the supportive structures that predict children’s outcomes. However, little effort has been made to look across research disciplines and study contexts to synthesize our knowledge base and draw connections among the various domains of instability. In this synthesis paper, we build this knowledge base by exploring the extant literature on the effects of instability on children’s developmental outcomes and academic achievement.

In our discussion, we review and synthesize research evidence on five identified domains of instability that have been well established in the literature: family income, parental employment, family structure, housing, and the out-of-home contexts of school and child care. In our review of the evidence, we also discuss some of the key pathways through which instability may affect development. Specifically, research points to the underlying role of parenting, parental mental health, and the home environment in providing the stability and support young children need for positive development. We conclude with recommendations for policy and practice to alleviate the impact of instability. This examination will serve as a resource to policymakers and practitioners concerned with programs and services for children and families, and build a foundation for future research in this area.

### What Do We Know about Instability?

The term *instability* is often used in social science research to reflect change or discontinuity in one’s experience; however, operational definitions of instability vary by field and are often determined by the data and measures available for research. Whereas some literature looks at the effects of *change* measured broadly, change itself can have both positive and negative implications depending on the context, including whether the change is voluntary, planned in advance, and moving the individual

or family to better circumstances. For our purposes, *instability* is best conceptualized as the experience of change in individual or family circumstances where the change is abrupt, involuntary, and/or in a negative direction, and thus is more likely to have adverse implications for child development.

Changes do not occur in isolation but rather a disruption in one domain (e.g., parent employment) often triggers a disruption in another domain (e.g., child care) in a “domino effect” fashion. In some cases, the causality of instability is not one-dimensional but a result of a complicated series of events that compound over time. This domino effect may be most evident among low-income or lower middle-class families who lack savings and assets that they can tap into during temporary periods of transition (McKernan, Ratcliffe, and Vinopal 2009; Mills and Amick 2010).

Children thrive in stable and nurturing environments where they have a routine and know what to expect. Although some change in children’s lives is normal and anticipated, sudden and dramatic disruptions can be extremely stressful and affect children’s feeling of security. Within the context of supportive relationships with adults who act as a buffer against any negative effects of instability, children learn how to cope with adversity, adapt to their surroundings, and regulate their emotions (National Scientific Council on the Developing Child 2007). When parents lack choice or control over change, they may be less likely to support their children in adapting to the change. “Unbuffered” stress that escalates to extreme levels can be detrimental to children’s mental health and cognitive functioning (Evans, Brooks-Gunn, and Klebanov 2011; Shonkoff and Garner 2011).

## **What Are the Effects of Various Types of Instability on Child Development?**

### **Economic Instability**

- The experience of economic instability causes increased material hardship, particularly when families lack personal assets.
- Low family income negatively affects children’s social-emotional, cognitive, and academic outcomes, even after controlling for parental characteristics.
- Children’s cognitive development during early childhood is most sensitive to the experience of low family income.
- Literature on the effects of economic instability on child development is limited, though there are bodies of literature on economic instability, and on the relationship between poverty and child development.

## **Employment Instability**

- Parental employment instability is linked to negative academic outcomes, such as grade retention, lower educational attainment, and internalizing and externalizing behaviors.
- The effect on grade retention is strongest for children with parents with a high school education or less, whereas the effect on educational attainment is stronger for blacks than whites, males, and first-born children.
- In dual-income households, a father's job loss may be more strongly related to children's academic outcomes than a mother's job loss.
- Job instability leads to worse child behavioral outcomes than when a parent voluntarily changes jobs, works low-wage jobs full-time, or has fluctuating work hours.

## **Family Instability**

- Family instability is linked to problem behaviors and some academic outcomes, even at early ages.
- Children's problem behaviors further increase with multiple changes in family structure.
- Family transitions that occur early in children's development, prior to age 6, and in adolescence appear to have the strongest effects. While young children need constant caregivers with whom they can form secure attachments, adolescents need parental support, role models, and continuity of residence and schools to succeed.
- Children demonstrate more negative behaviors when they lack the emotional and material support at home that they need to smoothly handle a family transition.

## **Residential Instability**

- Children experiencing residential instability demonstrate worse academic and social outcomes than their residentially-stable peers, such as lower vocabulary skills, problem behaviors, grade retention, increased high school drop-out rates, and lower adult educational attainment.
- Academically, elementary school children appear to be the most sensitive to residential change as compared with younger, non-school-age children and older children, but residential instability is related to poor social development across age groups.
- Home and neighborhood quality may mediate the effect of residential instability on children as housing moves lead to changes in children's environments.

## **Instability in Out-of-Home Contexts: School and Child Care**

- Changes in schools and child care arrangements are common, particularly as families move or change jobs, but school mobility and child care instability are most prevalent among low-income families.
- For infants, changes in child care arrangements can lead to poor attachment with providers and problem behaviors. For preschoolers, early care and education settings support children's development of foundational school readiness skills; changes in care settings can

disrupt the continuity of learning. For school-age children, changes in schools impede children's academic progress and decrease social competence.

- School mobility has the strongest effect during early elementary and high school, with multiple school transfers leading to worse effects.

## **What More Do We Need to Learn about Instability?**

- Few studies systematically examine the effect of a short-term decrease in household income on child development, particularly among average income earners who might not necessarily fall into poverty during these short-term decreases. Additional research is needed to understand the level of income change and duration of economic instability that make a difference in children's developmental outcomes.
- Research suggests the importance of interconnections between domains, such as family structure, employment, housing, and child care. However, few studies to date include a broader view of instability to understand patterns of multiple changes and the combined effects on children. Additional research is needed that explores instability in multiple domains and how simultaneous events interact, trigger instability in other areas, and affect child outcomes.
- More studies looking across developmental periods are also needed to fully understand how various types of instability affect children at different ages and when instability matters most. This information has implications for the design of policies and practices that can target children and families experiencing instability.
- A challenging issue with this research is that the reason for change and whether changes are unpredictable and unplanned as opposed to intentional are unclear. There is a strong need for further research that clearly distinguishes the effects of voluntary and involuntary changes across various family domains.
- Learning innovative strategies or methods from programs serving children and families facing instability is an important next step. For example, lessons from programs that serve special populations of unstable families, such as migrant workers or military families experiencing chronic mobility and family separation, might help us understand some of the unique experiences and needs of families experiencing instability and effective approaches to help them cope.

## **Implications for Policy and Practice**

This research has important policy implications for programs that serve and support families with children. Having systems and policies in place in early childhood programs and schools to identify families who are experiencing a lot of changes is one method to target extra services and case management. Given the central role parents play in how children are affected in the long-term,

additional efforts could be made to target parental mental health and parental skill-building. Well-designed, two-generational intervention programs aimed at supporting positive parenting, reducing parental and childhood stress, and strengthening family coping strategies can ease the impact of instability on children.

Although parents are primary in assuring their children's well-being and healthy development, a broad range of government programs also play an important role, especially for children in low-income families. Safety net programs provide financial assistance to families in the form of cash payments or subsidized housing, child care, or food, all of which help to alleviate the immediate effects of instability. But the programs might be able to do more to stabilize the situation for children, by considering whether any administrative practices inadvertently increase instability. Simplified reporting procedures, longer eligibility periods, and a single, centralized eligibility process for multiple programs are some potential strategies.

## The Negative Effects of Instability on Child Development

Children's early experiences shape who they are and affect lifelong health and learning. To develop to their full potential, children need safe and stable housing, adequate and nutritious food, access to medical care, secure relationships with adult caregivers, nurturing and responsive parenting, and high-quality learning opportunities at home, in child care settings and in school.

The recent financial crisis of the Great Recession has taken a negative toll on families across the country and beyond. High parental unemployment, home foreclosures, and strained household resources have weakened the stability and quality of home environments for many children and limited access to proper care and nutrition. As parents struggle to provide financially for their families, the chronic stress they face may make it difficult for them to give their children the care and attention they need. Some children who have grown up during this time period have experienced a great deal of instability in their lives. This lack of security and continuity can have deep and lasting impacts on children's development physically, emotionally, and cognitively.

Although instability has been a longstanding issue for some families, its increased prevalence during the recession has heightened awareness of the issue. Coupled with recent advances in the study of toxic stress and its adverse effects on child development (National Scientific Council on the Developing Child 2007), there is a growing need to understand what it means for children to experience instability and how any negative effects can be prevented.

Bodies of research from various fields of study—developmental psychology, sociology, economics, public policy, demography and family studies—independently explore different domains of instability in the supportive structures that predict children's outcomes. However, there has been little effort to look across research disciplines and study contexts to synthesize the knowledge base and draw connections among the various domains of instability.

In this synthesis paper, we build this knowledge base by exploring the literature on the effects of instability on children's developmental outcomes and academic achievement. In our discussion, we review and synthesize research evidence on five identified domains of instability that have been well established in the literature: family income, parental employment, housing, family structure, and the out-of-home contexts of school and child care.<sup>1</sup> We also discuss some of the key pathways through which instability may affect development. Specifically, research points to the underlying role of parenting, parental mental health, and the home environment in providing the

stability and support young children need for positive development. We conclude with recommendations for policy and practice to alleviate the impact of instability. This examination will serve as a resource to policymakers and practitioners concerned with programs and services for children and families, and build a foundation for future research in this area.

## **What Do We Mean by Instability?**

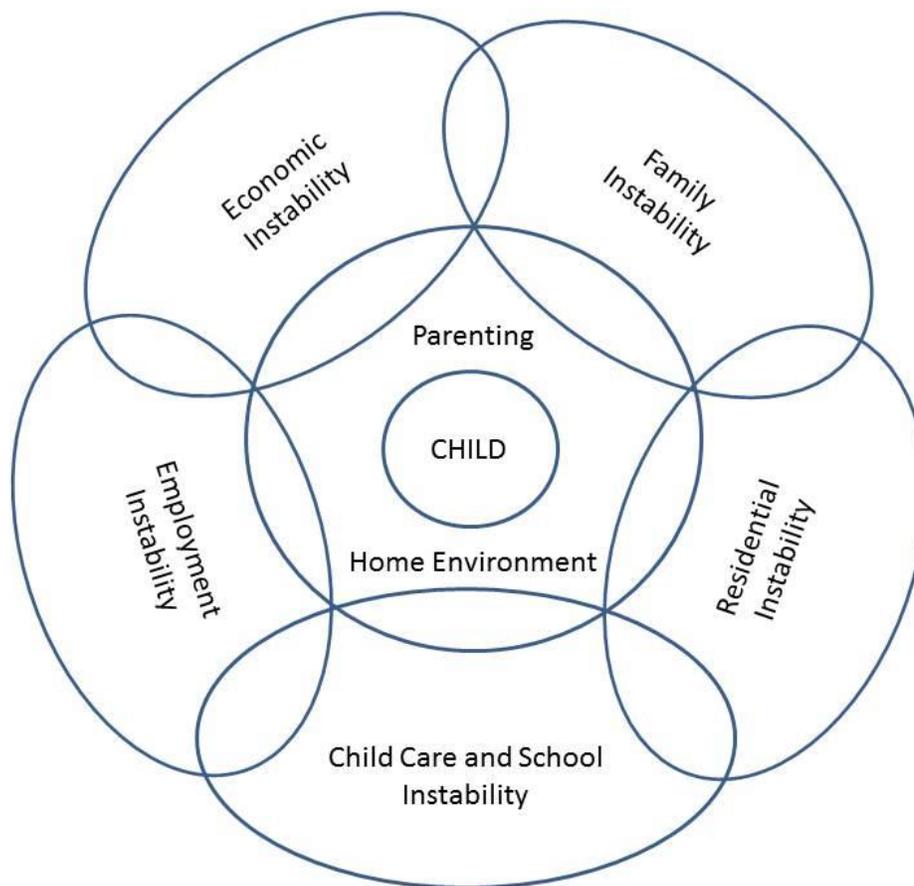
The term *instability* is often used in social science research to reflect change or discontinuity in one's experience; however, operational definitions of instability vary by field and are often determined by the data and measures available for research. Whereas some literature looks at the effects of *change* measured broadly, change itself can have both positive and negative implications depending on the context, including whether the change is voluntary, planned in advance, or moving the individual or family to better circumstances. For the purposes of this synthesis, *instability* is best conceptualized as the experience of abrupt, involuntary, and/or negative change in individual or family circumstances, which is likely to have adverse implications for child development. Examples include a father unexpectedly losing his job and income, a residential move as a result of foreclosure, and the dissolution of a parental union. When parents lack choice or control over change, they may be less able to support their children in adapting to the change.

Instability has been studied from various angles, with the underlying theme that certain kinds of change, and changes at certain points in their lives, predict negative outcomes for children (Moore, Vandivere, and Ehrle 2000). These changes do not occur in isolation. A disruption in one domain (e.g., parent employment) often triggers a disruption in another domain (e.g., child care) in a “domino effect” fashion. In some cases, the causality of instability is not one-dimensional but a result of a complicated series of events that compound over time. This domino effect may be most predominant among low-income or lower middle-class families who lack savings and assets that they can tap into during temporary periods of transition (McKernan, Ratcliffe, and Vinopal 2009; Mills and Amick 2010). The relationships among different domains are complex and involve a balancing act, such as cutting back or giving more to some domains to maintain overall stability for the family.

The conceptual framework displayed in figure 1 illustrates how the various domains of instability under examination in this paper are interconnected. For example, employment instability is connected to economic instability, since parental employment and family income are directly related. Family economics are also connected to the family structure and housing. As parents

separate or form new unions, a family may change residences and the household income may vary. A change in residence may lead to a change in schools or child care providers, which may also vary as a result of changes in parental employment or income. The domains of instability are depicted as overlapping circles that form an outer ring around the child, who is at the center of the model. Parenting and the home environment act as a buffer between instability and the child. When they are positive and supportive, parents can protect the child from the effects of instability; however, instability can potentially weaken the quality of parenting and the home environment, thus negatively influencing the child.

**Figure 1. Conceptual Framework of the Effects of Instability on Children and the Supportive Role of Parenting and the Home Environment**



This literature synthesis does not directly examine the interrelationships across domains, but it does highlight how these domains are related. Because of methodological challenges, few studies

consider changes across multiple domains and how they relate to each other and to children's development across the life span. Another key challenge is disentangling the effects of family income from the effects of instability in a given domain, since instability is somewhat more frequent among low-income families, and poverty itself has a strong negative association with child development (Brooks-Gunn and Duncan 1997; Brooks-Gunn, Duncan, and Maritato 1997). Specifically, research suggests there are two forms of instability: *chronic instability* that is inherent of being low-income and *episodic instability* that occurs from external shocks, such as a job loss or parental divorce. This synthesis includes literature that demonstrates that both forms of instability are negatively associated with children's developmental outcomes.

More generally, while some literature on instability attempts to estimate the causal impacts of instability on children, other studies are more descriptive in nature, documenting associations that may or may not be causal. It is thus difficult to identify the leading causes of the instability and how targeted external supports can alleviate the effects of instability. This synthesis advances the study of instability by drawing together disparate literatures on the effects of instability in different domains and identifying common themes across multiple domains in how instability relates to children's development.

## **Why Does Instability Matter?**

Children thrive in stable and nurturing environments where they have a routine and generally know what to expect from their daily lives. Although some change in children's lives is normal and anticipated, sudden and dramatic disruptions can be extremely stressful and affect children's feeling of security. Within the context of supportive relationships with adults who act as a buffer against any negative effects of instability, children learn how to cope with adversity, adapt to their surroundings, and regulate their emotions (National Scientific Council on the Developing Child 2007). Unbuffered stress, however, that escalates to extreme levels can be detrimental to children's mental health and cognitive functioning (Evans, Brooks-Gunn, and Klebanov 2011; Shonkoff and Garner 2011).

Recent research from the National Scientific Council on the Developing Child shows that experiencing some stress is normal and even essential for healthy development (2007). Young children deal with emotionally stressful situations everyday: an infant separates from his mother on the first day of child care, a toddler argues with a peer over a preferred toy, or a preschooler gets a shot at the doctor's office. Such common events produce positive stress, characterized by brief

increases in heart rate and mild elevations in stress hormone levels. Human bodies are built to respond to environmental stress in ways that protect us from harm. Even more moderate levels of stress, such as the loss of a pet, are viewed by experts as being tolerable for children when buffered by supportive adults.

Yet children exposed to strong, frequent, and/or prolonged adversity, or *toxic stress*, are at risk for cognitive impairment and stress-related disease (2007). Toxic stress causes an over-activation of the stress response system so the body is constantly in a heightened state of arousal, which disrupts normal brain and organ development and, consequently, damages brain architecture and neurocognitive systems. The result is poor academic performance, a lack of social competence, and an inability to regulate emotions. Even adult cognitive abilities have been shown to be impaired in part by elevated chronic stress during childhood (Evans and Schamberg 2009).

Although it may not be clear how much stress is tolerable, when stress becomes toxic, and how these levels vary across individuals, it is evident that extreme forms of stress can have lasting impacts on development. Moreover, supportive relationships with adults are necessary for children to recover from distressing life events. Most transitions in children's lives do not provoke stress at a toxic level; however, this emerging body of research raises the question of what we know about the impact of more pervasive stress stemming from instability. The research also highlights how stress may be a mechanism through which instability affects development.

## **Theoretical Framework**

Grounding our review of the research literature within an existing theoretical framework can help shape the way we conceptualize instability and the effects it has on children and families. Three selected research theories each contribute to our understanding of how environmental factors influence young children's experiences within their families.

The first is the family stress theory (McCubbin and Patterson 1983; Patterson 2002), which is often applied in the fields of family studies and psychology. This theory suggests that three factors interact to predict the likelihood of a crisis or the inability to maintain stability: a stressful event, a family's perception of the stressor, and a family's existing resources. If the family has the resources to handle the burden of the stressor, then a crisis can be avoided. During difficult life circumstances, families implement coping strategies, such as turning to their support networks and community

resources, to effectively manage the stress. Effective coping, or family resiliency, leads to adaptation that can restore balance to the family's functioning. However, some families experience a "pile-up" of stress when they have difficulties coping and managing change, which can lead to maladaptation and poor family functioning over time.

To build on that theory and explore how family functioning relates to children's outcomes, we turn to Bronfenbrenner's ecological systems theory (1979). According to this framework, multiple and complex layers of social contexts influence and support children's development, although "the family is the principal context in which human development takes place" (1986, p. 723). When children are engaged in positive interactions with their caregivers, children are more capable of meeting their full potential (e.g., high competence, low problem behaviors) (Bronfenbrenner and Ceci 1994). However, when interactions are negative or absent, then children's capacities are not realized and they demonstrate more difficulties. Under this framework, we would view parents' roles as buffering their children from the negative effects of stress and stimulating positive development through active engagement and sensitive caregiving.

A third theory, the parent investment model (Mayer 1997), more closely identifies the types of parental contributions to their children. According to this model, children's success depends on the time, money, energy, and support their parents invest in their "human capital." From this perspective, parents foster children's development by providing them with a safe and stimulating home environment and engaging and supporting them in learning opportunities inside and outside of home. Family income influences children's development by way of parents' decisions about how to allocate their resources. The money families spend on their children, such as the purchasing of toys, books, and learning materials for the home or enrollment in higher quality child care and extracurricular activities, are investments that contribute to positive child outcomes. The time and energy spent on children are also important investments. Families with lower financial resources that cannot physically provide for their children may be able to compensate in other ways that do not require additional spending. Moreover, cultural endowments, such as the value parents place on education, work, and service, contribute to children's motivation to learn and to give back to society. Under this framework, we would posit that instability may hinder parents' ability to provide for their children in multiple ways—economically and emotionally. However, parental motivation and high expectations may help to drive children to overcome the challenges of limited resources.

Researchers often integrate two or more of these theories to provide a more comprehensive framework for understanding how the interplay between family stress and parental investments shape children's developmental outcomes and future adult potential (see Conger 2005; Whittaker et al. 2011). The overarching view is that, when parents face extremely stressful life situations and are unable to effectively cope, their ability to provide the necessary resources and support for their children is constrained. Their children then experience a great deal of unbuffered stress—potentially toxic stress, in the most extreme cases—and have more difficulties reaching their full potential, academically and socially. This research synthesis draws from these frameworks as we examine how instability in children's lives, marked by stressful life events, lead to adverse outcomes.

## Economic Instability

### Summary of Key Findings

- The experience of economic instability causes increased material hardship, particularly when families lack personal assets.
- Low family income negatively affects children's social-emotional, cognitive, and academic outcomes, even after controlling for parental characteristics.
- Children's cognitive development during early childhood is most sensitive to the experience of low family income.
- Literature on the effects of economic instability on child development is limited, though there are bodies of literature on economic instability, and on the relationship between poverty and child development.

Economic instability—also referred to as income instability or economic insecurity—describes a drop in family income from which families may or may not recover. Family income can include job earnings, public income support, such as temporary cash assistance, and private income support, such as child support (Mills and Amick 2010). Though economic instability is directly tied to instability in other family domains (i.e., parental employment, family structure), in this section, we review what the literature tells us about the importance of income and the stability of income for children's development.

### Instability of Children during the Great Recession

- The Great Recession produced the **highest unemployment rates seen in the past quarter century**, hitting a national average of more than 10 percent in 2009.<sup>a</sup> Among those who were unemployed, nearly 30 percent had children under age 18, and 14 percent had children under age 6.<sup>b</sup> From 2007 to 2009, the number of children under 18 living with at least one unemployed parent more than doubled, from 3.5 million children to 7.3 million (Isaacs 2013; Mossad, Mather, and O'Hare 2011). That does not include the nearly 4 million children whose parents were underemployed, working part-time involuntarily (Isaacs 2013).
- **Male workers were hardest hit during the recession** (Loprest and Mitchell 2012). Wives whose husbands lost their jobs during the recession were two times more likely to seek employment or increase work hours than those whose husbands remained employed (Mattingly and Smith 2010). Having a child under 5 decreased the probability that a mother would seek employment or increasing work hours. Accordingly, young, non-school age children were more likely than older children to live in families with unemployed or underemployed parents.
- During the Great Recession, **the subprime mortgage crisis displaced millions of children and their families**. In 2010, one in 33 homeowners faced foreclosure,<sup>c</sup> leaving 2.3 million children in homes undergoing foreclosure, with another 3 million living in homes at serious risk of foreclosure (Isaacs 2012). An additional 3 million children were evicted or faced eviction from rental properties suffering from foreclosure (Isaacs 2012)—approximately 38 percent of all foreclosures were on rental properties (Figlio, Nelson, and Ross 2010). Families affected by foreclosure are more likely to move to more affordable neighborhoods of lower quality (Been et al. 2011; Comey and Grosz 2011; Kingsley, Smith, and Price 2009), temporarily share housing or “double up” with friends or family (Kingsley, Smith, and Price 2009; Isaacs 2012), or become homeless (Been et al. 2011). With the wave of foreclosures during the recession, more than 14 percent of households with children were overcrowded between 2009 and 2011.<sup>d</sup> More than 1.6 million children, or 1 in 45, were homeless during each year of the recession, 40 percent of whom were under the age of 6 (Bassuk et al. 2011). The number of homeless children in America's public schools increased by 41 percent between the 2006 and 2008 school years (Children's Defense Fund 2011). Homelessness among preschoolers ages 3 to 5 increased by 43 percent over the same period (Children's Defense Fund 2011).

➤ High unemployment and foreclosure rates, and uncertainties about financial resources, **tested the resiliency of many married couples**. Recent analyses of U.S. census data show that the national divorce rate did not increase during the recession but actually slightly dropped in 2009; however, some experts argue this may be the result of the high expense associated with divorce and that these figures do not reflect parental separations or the quality of marriage (Cohen 2012). Researchers point to the positive association between job loss and subsequent divorce or separation (Peters and Lindner, forthcoming) as well as foreclosure and divorce (Cohen 2012), which suggests that the recession may have produced a back-log in divorces that will not be evident until future years.

a. “Table 2. Employment status of the civilian noninstitutional population 16 years and over by sex, 1970–2009 annual averages,” US Bureau of Labor Statistics, <http://www.bls.gov/cps/wlf-table2-2010.pdf>, accessed September 2, 2013.

b. “Table 5. Employment status by sex, presence and age of children, race, and Hispanic or Latino ethnicity, March 2009,” US Bureau of Labor Statistics, <http://www.bls.gov/cps/wlf-table5-2010.pdf>, accessed September 2, 2013.

c. “U.S. Foreclosure Market Report,” RealtyTrac, <http://www.realtytrac.com>, 2009.

d. “Children Living in Crowded Households by Children in Immigrant Families,” Kids Count Data Center, <http://datacenter.kidscount.org>, accessed September 6, 2013.

Research shows that some fluctuations in income are common: two in five adults living with children lose a quarter of their income at least once at some point over a year (Acs, Loprest, and Nichols 2009). Economic instability is most prevalent among low-income families, followed by those in the highest income range (Acs, Loprest, and Nichols 2009). Specifically, in the lowest income quintile about 20 percent of individuals with children lose at least half their income at some point during the course of a year, and only about 50 percent recover to pre-drop income levels within another year. Among the highest income quintile, 16 percent of individuals with children experience substantial income drops, and only 23 percent fully recover (Acs, Loprest, and Nichols 2009; Acs and Nichols 2010).

Economic instability occurs for various reasons. A parental job loss (particularly an involuntary one) and a change in family structure (specifically an adult family member leaving the household) are the most common causes of economic instability. Both of these life changes are significantly associated with experiencing a substantial 50 percent drop in income over the course of four months (Acs, Loprest, and Nichols 2009; Acs and Nichols 2010). Long-term unemployment

often leads to families falling into poverty; the poverty rate triples from 12 to 35 percent among parents experiencing six or more months of unemployment (Zedlewski and Nichols 2012).

Families facing economic instability have greater material hardship than more economically stable families. They are more likely to have trouble paying utility bills and skip seeing a doctor when needed because of the cost (Mills and Amick 2010). Economic instability may also lead to food insecurity—or a lack of reliable access to proper nutrition—which currently affects 10 percent of US households with children (Coleman-Jensen et al. 2012). Extensive research highlights the link between food insecurity and adverse child outcomes. Children who experience food insecurity have higher rates of school absenteeism than their food-secure peers (Alaimo, Olson, and Frongillo Jr. 2001; Cook and Frank 2008; Ramsey et al. 2011) and are more than twice as likely to repeat a grade in elementary school (Alaimo et al. 2001). Children, especially girls, who become food insecure between 2nd and 3rd grade—an important period for literacy development—demonstrate poorer reading skills than children who continue to be food secure during this period (Jyoti, Frongillo Jr., and Jones 2005). Moreover, young girls who experience food insecurity in kindergarten show greater weight gains and body mass index (BMI) and fewer gains in mathematics achievement by 3rd grade (Jyoti et al. 2005).

Without liquid assets to rely on as a safety net during difficult times, families may experience even greater material hardship (Mills and Amick 2010). As Kalil and Wightman (2011) describe, financial assets serve as a “psychological buffer” by alleviating economic pressures and protecting families against the impacts of stress. Rothwell and Han (2010) found that among low-income working families, the possession of assets (i.e., cash savings, home values, and retirement funds) was related to a reduced sense of family strain during an economically stressful event. Of course, for families lacking such assets, the accompanying feeling of economic strain has implications for children’s experiences and their development. A recent analysis showed that children of low-income parents with savings below the median were less likely to experience upward economic mobility—or greater future earnings—than their low-income counterparts whose parents had a large amount of savings (Cramer et al. 2009). Therefore, although high-income families also experience high volatility, the impact on family resources and, subsequently, child development, may be buffered by financial assets. Moreover, if families quickly recover their lost income, then the consequences of a short-term drop in income may be modest (Acs and Nichols 20010).

A large body of research reveals significant associations between family income and children's physical health, socioemotional and behavioral outcomes, cognitive abilities, and school achievement, even after controlling for family characteristics other than income (Brooks-Gunn and Duncan 1997; Conger 2005; National Institute of Child Health and Human Development Early Child Care Research Network [NICHD ECCRN] 2005). Low-income children are at a greater risk of failure in school and more likely to experience grade retention, receive special education services, and drop out of high school (Brooks-Gunn, Duncan, and Maritato, 1997; Jencks and Mayer, 1990; Laird et al. 2006). Poor children, in contrast to children whose families have incomes of at least twice the poverty line, are more likely to complete two years less of school, earn less than half as much, use public assistance, report poor overall health and high levels of psychological distress, be overweight as adults, and, for females, have a child out of wedlock before the age of 21, and, for males, be arrested as adults (Duncan, Ziol-Guest, and Kalil 2010). As described by Evans, Brooks-Gunn, and Klebanov (2011), adverse early experiences are "stressing out the poor."

Although being raised in persistently poor conditions had severely detrimental effects on children, children who fall into poverty during an economic recession may fare worse long-term than children whose family incomes stay above the poverty line throughout a recession (First Focus 2009). A report from First Focus shows that children age 5 to 14 who experience poverty during a recession are less likely to graduate high school and are less likely to attain postsecondary education. Once these children become adults, they earn less, have less stable employment, are more likely to live in or near poverty, and report having worse health than their peers who stayed out of poverty (2009). Note, however, that this study did not control for underlying parental and child characteristics that are associated with both child outcomes and the likelihood of the family falling into poverty.

Studies show that the measured effects of family income on cognitive abilities and early academic achievement are notably larger than the effects on any other outcome (Duncan, Yeung, Brooks-Gunn, and Smith 1998). The period of early childhood is most sensitive (Guo 1998) since this is when children are developing critical skills such as executive functioning, language, and memory, which serve as a foundation for all future learning (Farah et al. 2006). Although persistently low family income leads to the worst outcomes, even a short-term spell can have a significant effect on children. One national study shows that children who are not low-income through age 3 and then experience a drop in family income between ages 4 and 9 (median income under 200% of the federal

poverty level) demonstrate less favorable academic and social outcomes than children who never experienced low income (NICHD ECCRN 2005). These results suggest that economic instability may be detrimental as young children are transitioning into kindergarten and being exposed to the academic and social demands of a school environment. Few other studies systematically examine the effect of a short-term decrease in household income on child development, particularly among average income earners who might not necessarily fall into deep poverty. Additional research is needed to understand the level of income change and duration of instability that make a difference in developmental outcomes.

The research on the effects of poverty provides some insight into the potential mechanisms through which economic instability affects child development. Brooks-Gunn and Duncan (1997; 2000) discuss six potential mechanisms: (1) health and nutrition; (2) parental mental health; (3) parental interactions with children; (4) home environment; (5) neighborhood conditions and (6) quality of child care. More specifically, the nutritional diets of low-income children are often lacking the proper nutrients for optimal development, causing malnutrition, health problems, and potential brain damage (Tanner and Finn-Stevenson 2002). Family income largely influences parental mental health (i.e., stress and depression) and, as a result, parent-child interactions that promote children's learning and development (Brooks-Gunn, Klebanov, and Liaw 1995; Gershoff et al. 2007; Whittaker et al. 2011). The influence is bidirectional, and underlying parental mental health issues can affect family income, as well as parent-child interactions. Changes in family income are associated with changes in the quality of the home learning environment, which is associated with children's cognitive and language skills (Dearing, McCartney, and Taylor 2001). Low-income children are more likely than their advantaged peers to be exposed to harmful lead paint toxins in poor quality home and care environments (Bellinger et al. 1987), which are associated with negative physical health and cognitive outcomes. Living in a poor neighborhood with crime, safety hazards, and fewer community resources, including high-quality child care centers, negatively impacts children's experiences and, in turn, their development. However, developmental outcomes have shown to be more strongly associated with family income than neighborhood income (Klebanov et al. 1998).

In summary, fluctuations in family income are common, and economic instability is most prevalent among low-income families. Families that lack a safety net of liquid assets experience greater material hardship than those that maintain sufficient savings. Economic instability is largely affected by involuntary job loss and the dissolution of parental unions. Many families have

difficulties recovering from instability. Long-term unemployment increases the likelihood of falling into poverty, which has detrimental effects on child development and later adult outcomes. Family income is most strongly related to cognitive development and academic achievement, among other child outcomes. Having a low family income during early childhood is more strongly predictive of poor cognitive outcomes than is low income later in middle childhood or adolescence. These findings provide evidence that economic instability may begin to influence children's development very early in life.

## Employment Instability

### Summary of Key Findings

- Parental employment instability is linked to negative academic outcomes, such as grade retention, lower educational attainment, and internalizing and externalizing behaviors.
- The effect on grade retention is strongest for children with parents with a high school education or less, whereas the effect on educational attainment is stronger for blacks than whites, males, and first-born children.
- In dual-income households, a father's job loss may be more strongly related to children's academic outcomes than a mother's job loss, even when the mother earns more than the father.
- Involuntary job instability leads to worse child behavioral outcomes than when parents voluntarily change jobs, work low-wage jobs full-time, or having fluctuating work hours.

A family's economic security is most directly affected by the stability of parental employment. When parents experience job loss, their families are more likely to experience material hardship and have fewer resources to support their children's development (McKernan, Ratcliffe, and Vinopal 2009). Factors such as the length of unemployment, whether the unemployed parent is the sole earner for the family, and whether the family has any savings, assets, or social safety net also affect the family's situation (Isaacs 2013; McKernan et al. 2009). For example, families facing long-term unemployment (six or more months) are three times as likely to fall into poverty (Zedlewski and Nichols 2012). Given the importance of parental employment, researchers have questioned how employment instability has affected not only family spending and economic security but also the outcomes of children within those families (Kalil 2009).

Research indicates that children whose parents experience a job loss are at an increased risk of negative academic outcomes, such as grade retention and lower educational attainment (Kalil and Wightman 2011; Kalil and Ziol-Guest 2008; Stevens and Schaller 2011). National survey data show that an involuntary parental job loss among children age 5 to 19 increases the probability of grade retention during the current or subsequent school year by nearly 1 percent, from roughly 6 to 7 percent of children (Stevens and Schaller 2011). The effect is strongest for children with parents with a high school education or less and stronger for boys than girls. Parental divorce and household moves are noted as potential mechanisms for children's academic difficulties, since these events are also significantly associated with parental job loss (Stevens and Schaller 2011). As explained in later sections, family stability and residential stability have both been linked to children's academic outcomes.

Some evidence suggests a father's job loss may be more strongly related to children's academic outcomes than a mother's job loss. Among dual-earner families in which mothers earn more than fathers, fathers' involuntary job loss is associated with a higher likelihood of grade repetition and school suspension and expulsion for school-age children compared to mothers' job loss (Kalil and Ziol-Guest 2008). Researchers conclude that the adverse effect of a father's job loss may relate more to changes in family dynamics and stress in the home, and perhaps less with material hardship resulting from loss of income.

Moreover, the experience of job loss followed by long-term parental unemployment predicts lower educational attainment for children. Children whose middle-income parents are unemployed six months or more at any point during their childhood are less likely to obtain any postsecondary education by age 21 compared to their peers with consistently employed parents (Kalil and Wightman 2011). The association is three times stronger for blacks than for whites and stronger for male and first-born children. One possible explanation for this association is that parents facing job instability lack the ability to finance their children's postsecondary education and so children are less likely to attend. Similarly, families may rely on older children to work and to help financially support the family.

Parental job loss can also lead to poor social-emotional outcomes for young children (Hill et al. 2011; Johnson, Kalil, and Dunifon 2012). One study found that low-income children between the age of 8 and 10 whose mothers experienced job loss within the 5 years prior demonstrated significantly more problem behaviors and lower social competence in their early elementary

classrooms than did their low-income peers whose mothers did not experience job loss (Hill et al. 2011). Each additional job loss was associated with a further small decrease in social competence. Long-term unemployment had particularly negative effects on children's classroom behavior.

Similarly, findings from the Women's Employment Survey (WES) conducted post 1996 welfare reform suggest a link between low-income mothers' employment patterns and their young children's behavior (Johnson, et al. 2012). The survey tracks women who received cash assistance and their children over a seven-year span, starting when children were an average of four years old. Children whose mothers experienced employment instability—characterized by involuntary job loss or quitting an unsatisfactory position followed by unemployment—exhibited more internalizing behaviors (e.g., sadness, anxiety, and depression) and externalizing behaviors (e.g., bullying, impulsiveness, and disobedience), and a greater likelihood of school absenteeism than children whose mothers held stable jobs or voluntarily changed jobs. The effect of employment instability on child behavior was stronger than the effect of mothers' working low-wage jobs full-time or having fluctuating work hours. This evidence suggests that job instability may be more harmful than stability in what might be considered less than favorable situations. Moreover, job change alone is not associated with poor outcomes for children, but rather the change must be unpredictable or forced and lead to a negative situation for families (i.e., unemployment).

The economic constraints resulting from an unstable employment context creates an environment that makes it more difficult to support children's developmental needs. Families who experience a substantial loss of income or reduction in work hours are more likely to cut back on household spending, move residences, and experience divorce or separation (Yeung and Hofferth 1998), thus demonstrating how these different domains of instability are interconnected. In addition to reducing the amount of money available to provide stable housing, food, and other basic needs, frequent and long-term unemployment can disrupt children's lives in other ways. Families' schedules and routines are likely not as predictable, parents are more stressed as they face the need to secure a new job and while providing for their families without a reliable paycheck, parental relationships become strained, and caregivers often change or become less stable (as will be discussed in more detail in subsequent sections). For some children, parental employment instability can be a motivation to get a good education and achieve upward mobility, but such movement depends on factors such as household wealth and duration of unemployment (Kalil and Wightman 2011).

In sum, most research to date on the effects of employment instability has been conducted by economists examining the future educational attainment and prosperity of children experiencing parental joblessness. A more limited number of studies have considered behavioral outcomes, particularly social competence and problem behaviors during the early elementary years. Together, these findings highlight the importance of stable parental employment for children's success.

## Family Instability

### Summary of Key Findings

- Family instability is linked to problem behaviors and some academic difficulties, even at early ages.
- Children's problem behaviors further increase with multiple changes in family structure.
- Family transitions that occur early in children's development, prior to age 6, and in adolescence appear to have the strongest effects. While young children need constant caregivers with whom they can form secure attachments, adolescents need parental support, role models, and continuity of residence and schools to succeed.
- Children demonstrate more negative behaviors when they lack the emotional and material support at home that they need to smoothly handle a family transition.

The structure of the family plays a large role in children's experiences and the support they receive in the home. According to 2012 U.S. Census data, 68 percent of children under age 18 live in a two-parent household, whereas 28 percent live in a single-parent household, mostly headed by mothers.<sup>2</sup> Family structures are diverse even within two-parent households, including married and unmarried parents, biological parents, adopted parents, step parents, and cohabiting partners. These structures are not static as families often change over time. A recent study estimates that more than one-third of children experience a family structure change—a (re)marriage, separation, or a start or end of a cohabiting union—between birth and the end of 4th grade (Cavanagh and Huston 2008). Children born into cohabiting parent families experience the most family instability, followed by single-mother families (Cavanagh and Huston 2006). This high rate of family instability combined with the increase in the number of births outside marriage means that about one half of children will reside at least temporarily in single-parent households (Amato 2000).

While there has been considerable debate about the effects of divorce or a new marriage on children, and whether it is the change in parental unions or the underlying characteristics and

behaviors of parents that impact children the most, increasing evidence has increasingly documented the negative effects of family instability on children. Studies show that parental divorce has the potential to cause short-term family crisis and long-term, chronic strain on the family (Amato 2000). Also, the temporary nature of some cohabiting relationships leads to changes in children's primary caregivers and instability in household resources. For children, family instability may mean loss of contact with one parent, changes in the home and care environments resulting from constrained financial resources, an increase in parental stress and depression from a lack of social support, and a decline in parenting quality (Craigie, Brooks-Gunn, and Waldfogel 2012). Some changes in family structure can be positive for the child if such changes are in the context of strengthening the family's support system or reducing parental conflict in the home, in the case of a separation. Experts posit, however, that most changes in family structure, depending on the context, introduce stress and emotional and financial insecurity in children's lives. Therefore, family instability is associated with negative outcomes for children who are at the center of parental relationships (Amato and Keith 1991; Craigie et al. 2012).

A number of studies identify a link between parental divorce and lower academic achievement and poor behavioral outcomes, even at early ages (Amato 2000; Amato and Keith 1991; Craigie, et al. 2012). According to the Fragile Families and Child Wellbeing Study, children born to married parents who divorce by the time children are 5 years old have lower vocabulary and pre-reading skills and more aggressive behaviors at age 5 than children in stably married families (Craigie, et al. 2012). Similar findings are seen in children born to cohabiting parents; children whose unmarried parents live together at birth, but subsequently separate, demonstrate more aggressive behaviors and higher rates of obesity and asthma at age 5 than children in stable cohabiting or stable cohabiting-to-married families (Craigie et al. 2012). In addition to parental separations, the formation of potentially unstable parental unions may have negative associations with child well-being. One study found that adolescents who transitioned from a single-mother family into an unmarried, cohabiting family (i.e., living with a mother's boyfriend) demonstrated more delinquent behaviors and lower school engagement than their peers who moved into a married stepfamily and their peers who remained in stable single-mother families (Brown 2006).

The number of changes in family structure experienced from birth through kindergarten is also related to children's problem behaviors during the transition to 1st grade (Cavanagh and Huston 2006). Among children born to married parents, those with more family transitions are rated

by their teachers as having more externalizing behaviors than their peers with fewer transitions. Similarly, among children born to single parents, those who experience more instability display more negative behaviors than their peers. Together these findings reveal that even one change in family structure has the potential to be disruptive to child well-being, but each additional change that contributes to family instability predicts worse outcomes.

An examination of potential mediators suggests that the link between family instability and weak vocabulary is a result of a loss of family income and parenting stress, but not parental depression or level of father involvement. Specifically, the absence of a spouse or partner in the home leads to lower economic resources in the home and poor quality parenting, both of which impede children's language development (Craigie et al. 2012). Family instability, partly due to parental depression and aggravation, increases children's anxiety and depressive behaviors (Craigie et al. 2012). Children's behavior during the transition to 1st grade is moderated by their mothers' sensitivity (i.e., supportiveness, respect for autonomy and lack of hostility) and the quality of the home environment (Cavanagh and Huston 2006). Having a mother with low sensitivity or living in a home with low levels of support and stimulation during this transition worsens the problem behaviors of children experiencing family instability. When young children lack the support at home that they need to smoothly handle the transition, they demonstrate more negative behaviors.

These associations may be exacerbated by low family income. Low-income children experiencing family instability during the first five years of life demonstrate more aggression and other negative behaviors toward their peers in 1st grade than do their low-income peers from more stable families (Cavanagh and Huston 2006). Yet in higher-income families, these behaviors are observed at similar levels regardless of family instability. Financial resources might facilitate continuity in children's lives and buffer some of the negative effects of instability. Meanwhile, children from families facing material hardship and other poor psychological factors on top of family instability are the worst off (Cavanagh and Huston 2006).

The effects of family instability on child outcomes may also vary by race. Among white children, the number of changes in family structure since birth positively predicts white children's externalizing behaviors at ages 5 to 14, as well as delinquent behavior when children are ages 10 to 14. Among black children, family instability has shown to have little effect on children's behavior, whereas current family structure matters more—with children of single mothers having more problems than children of married mothers (Fomby and Cherlin 2007). Fomby and Cherlin

(2007) controlled for other adults in the household since, as Cherlin and Furstenberg pointed out (1992), grandparents and other kin are more likely to play a key caregiving role in black families than in white families.

The timing of family instability during childhood may influence the effect on child outcomes. Transitions that occur early in children's development and in adolescence appear to have strong effects (Adam and Chase-Lansdale 2002; Brown 2006; Cavanagh and Huston 2008); however, more studies exploring family instability across childhood are needed to support this evidence. Cavanagh and Huston (2008) describe how the experience of family instability between birth and the end of kindergarten predicts children's behavior, social competence, popularity with peers, and loneliness in 5th grade, even when controlling for children's behaviors in 1st grade. However, family instability that occurs between 1st and end of 4th grade is not significantly related to 5th grade outcomes. The authors also find that the effects of family instability are stronger for boys than girls. Similarly, in a study among low-income, African American females, high levels of family instability prior to age 6, marked by more frequent separations from parental caregivers, predicted academic performance in adolescence (Adam and Chase-Lansdale 2002). These findings suggest that very young children are sensitive to early experiences of family instability, with some " sleeper effects " not appearing until later in childhood (Cavanagh and Huston 2008). This evidence supports what we know about young children's need to build secure relationships with their adult caregivers.

Several studies of adolescents have identified a significant link between family transitions and child well-being (Adam 2004; Adam and Chase-Lansdale 2002; Brown 2006). According to a national longitudinal study, adolescents experiencing family instability demonstrate more delinquent behaviors and lower school engagement than peers in stable, two-biological-parent families (Brown 2006). In examining the types of family structures, moving out of a single-mother family into a cohabiting stepfamily decreased adolescent well-being, more so than moving into a married stepfamily. Whereas moving out of a cohabiting stepfamily into a single-mother family was associated with improvements in school engagement (Brown 2006). Moreover, family instability is often linked to residential and school mobility. In a study exploring the effects of both housing moves and parental separations on African American females, family instability across child development was related to academic and social adjustment problems in adolescence (Adam and Chase-Lansdale 2002). Family instability at any age predicted externalizing behaviors in adolescence,

but more recent family instability, experienced after age 12, had the strongest effects on behavior. When we consider the developmental needs of adolescents—having close peer relationships, a strong parental role model, and consistent but sensitive discipline—the effects of family instability on adolescents appear disruptive to normal development.

In sum, the evidence is strong that family instability negatively influences children’s social-emotional development and behavior. There is some indication that children’s academic achievement is affected by divorce, as children have difficulty adjusting to change and concentrating in school (Amato 2000). However, there is less supporting evidence of a connection between family instability more broadly defined and children’s cognitive development or academic achievement. In several studies, the relationship between family instability and academic outcomes is not significant when controlling for demographic characteristics, such as mother’s age and education level (Fomby and Cherlin 2007; Schoon et al. 2011). A few studies examining family instability take into account the presence of other adults in the household, such as grandparents who play a key caregiving role or provide financial or social support to parents. Additional research on this topic is needed to distinguish the effect of having a single adult in the household and having a single parent. Overall, the research highlights the need to provide support to children undergoing changes in parental figures in the home.

## Residential Instability

### Summary of Key Findings

- Children experiencing residential instability demonstrate worse academic and social outcomes, such as weaker vocabulary skills, problem behaviors, grade retention, higher high school drop-out rates, and lower adult educational attainment, than their residentially-stable peers.
- Academically, elementary school children appear to be the most sensitive to residential change as compared to younger, non-school-age children and adolescents, but residential instability is related to poor social development across age groups.
- Home and neighborhood quality may mediate the effect of residential instability on children as housing moves lead to changes in children’s environments.

In general, the United States population is highly mobile. In 2012, 36.5 million people 1 year and older (12 percent of the population) changed residences in the U.S. within the prior year.<sup>3</sup> Although

moves may be common, the experience of abrupt or frequent residential moves can be stressful for children since it requires them to detach themselves from what they know and adapt to new surroundings. Especially when the move is not voluntary for the family, children pick up on negative social cues and parental stress, which can weaken their level of security, elevate their own stress levels, and potentially harm their development. For young children who lack the language and reasoning skills to fully grasp the situation at hand and communicate their thoughts, residential moves can be extremely confusing and stressful events (Rumbold et al. 2012).

Past research has consistently highlighted the importance of the home environment for children at various stages of development (Bradley and Caldwell 1984; Bradley et al. 1994; Dearing and Taylor 2007; Foster et al. 2005; Garrett, Ng'andu, and Ferron 1994; Gershoff et al. 2007; Pungello et al. 2010; Sarsour et al. 2010). Accordingly, researchers have questioned how residential instability affects children's outcomes.

Research suggests the importance of organization and routines within the home environment, without which children experience "chaos" or "environmental confusion" in the home (Matheny Jr. et al. 1995). Housing instability may indirectly affect children by causing household chaos, which hinders parents' ability to be actively involved with their children and maintain consistent parenting strategies such as bedtimes, mealtimes, and homework schedules (Cunningham and MacDonald 2012; Dworsky 2008; Waters, Boots, Macomber, and Danziger 2008). Caregivers in chaotic environments are more likely to exhibit behaviors that negatively affect children's development rather than stimulate and support children's needs, because of the stressors in their own lives (Matheny Jr. et al. 1995).

Linking to what we know about toxic stress (National Scientific Council on the Developing Child 2007), chaotic environments that continuously produce high levels of stress for children can overstimulate their stress response systems and be detrimental to their developing cognitive abilities. Over the past decade, household chaos has been found to be a predictor of poor attention skills and learning problems (Shamama-tus-Sabah and Gilani 2011), conduct problems (Coldwell, Pike, and Dunn 2006; Deater-Deckard et al. 2009), delayed gratification, receptive vocabulary (Martin, Razza, and Brooks-Gunn 2012), lower IQ (Deater-Deckard et al. 2009), and the ability to process social cues (Dumas et al. 2005).

Residential instability due to negative factors, such as foreclosure, may also affect parents' relationships with their children. Bowdler, Quercia, and Smith (2010) conducted interviews with 25

Latino families who had recently experienced foreclosure in Texas, Michigan, Florida, Georgia and California and found that several parents reported disconcerting changes in their relationships with their children across all ages, specifically noting more arguments between the parents and their children.

A housing move might also involve changing neighborhoods, schools, peer groups, household residents, and caregivers. For older children, these changes come during a period when friendships are central to children's social development (Coulton, Theodos, and Turner 2009; Kingsley, Smith, and Price 2009; National Research Council and Institute of Medicine 2010). Frequent moves may negatively impact family and friend relationships and the support networks families turn to, particularly during times of need. Therefore, children experiencing residential instability may not have the necessary resources and support that they need to adjust and achieve positive development.

A growing body of literature establishes a connection between residential instability—typically measured by number of moves—and adverse outcomes for children (Adam and Chase-Lansdale 2002; Anderson and Leventhal 2013; Coulton, Theodos, and Turner 2009; Cunningham and MacDonald 2012; Da Costa Nuñez, DeLeone, and Sarnak 2012; Kingsley et al. 2009; Lynch, Coley, and Kull 2013; McCoy-Roth, Mackintosh, and Murphey 2012; National Research Council and Institute of Medicine 2010; Pettit 2012; Rumbold et al. 2012; Sell et al. 2010; Taylor and Edwards 2012; Ziol-Guest and Kalil 2013). Some of this literature is correlational, but most of the studies described in further detail control for characteristics (such as low family income and parental education level) that are associated with both residential mobility and poor child outcomes.

A longitudinal study of children from birth through age 9 showed that moving two or more times during the first two years of the child's life led to increased internalizing behaviors at age 9, such as anxiety, sadness, and withdrawal (Rumbold et al. 2012). The effect remained significant even when controlling for relevant demographic characteristics, such as maternal education and income, whether the move was upward (e.g., from renting to owning) or downward (e.g., from owning to renting), as well as other changes in the child's life (i.e., change in elementary schools prior to age 9, parental unions, and number of children in the home). Moves between ages 2 and 4 or 5 and 9, or cumulative moves from birth to 9, did not have the same effect on these behaviors. Similarly, in another longitudinal study, one residential move prior to age 4 led to more problem behaviors at age 4, and each additional move exacerbated the effect, when controlling for child and family

characteristics. However, moves between ages 5 and 8 did not produce the same effects (Taylor and Edwards 2012). Together these findings suggest that residential instability during the first few years of a child's life may have lasting impressions on children's mental health.

In a study of low-income, African American females, the number of residential moves during adolescence predicted externalizing behaviors and the onset of sexual activity (Adam and Chase-Lansdale 2002). This study controlled for family stability and various other demographic characteristics but not school changes. The findings suggest that residential instability may also lead to poor social development among adolescents, particularly those who are most vulnerable. In addition to negative social-emotional outcomes, residential instability has also been linked to adverse cognitive and academic outcomes (Anderson and Leventhal 2013; Moore et al. 2000; Lynch et al. 2013; Taylor and Edwards 2012). Five-year-olds who have experienced chronic residential instability, with five or more moves since birth (about one move per year), have receptive vocabulary scores 41 percent of a standard deviation below average (Taylor and Edwards 2012). Children experiencing residential instability demonstrate more difficulties in school than their residentially-stable peers, as evidenced by lower grades (Adam and Chase-Lansdale 2002), grade retention (Pettit 2012), a decreased likelihood of graduating high school (Coulton et al. 2009; Pettit 2012; Sell et al. 2010), and lower adult educational attainment (Ziol-Guest and Kalil 2013).

According to one national longitudinal study, residential moves during elementary school have an indirect effect on children's outcomes by influencing the quality of the home and neighborhood (Anderson and Leventhal 2013). Having one residential move during elementary school was associated with lower neighborhood quality and reduced parental involvement, after controlling for various demographic and school characteristics, which predicted more internalizing behaviors in 5th grade. Further, multiple moves were associated with lower home quality, which predicted lower 5th grade reading and math skills, more risk-taking, and externalizing behaviors such as arguing and disobeying. Multiple moves during adolescence also related to lower home quality which predicted poor social outcomes, such as internalizing and externalizing behaviors and risk-taking, but not academic achievement. In that study, residential moves occurring between birth and age 5 had no direct or indirect effects on measured early academic or social outcomes (Anderson and Leventhal 2013). Elementary school children appeared to be the most sensitive to residential change across a range of outcomes, likely because the skills children learned at this age laid the

foundation for later schooling, whereas adolescents' social behaviors changed as a result of residential instability.

Because a residential move often involves a school change, some researchers have attempted to control for school changes when examining residential instability; however, these data are not always available from large national surveys or have not been consistently reported. Since home and school are the two most important developmental contexts for children, more research is required to examine the effects of changes within these contexts, especially when they co-occur, and to identify which matters more and at what points in development.

In sum, residential moves can be very stressful for children across different ages. Chronic residential instability early in life has negative impacts on children's mental health and vocabulary development. Instability during the elementary school years can lead to lower quality homes and neighborhoods and less parent involvement. Children's academic and social outcomes may be indirectly affected by these changes. Adolescents experiencing multiple moves show difficulty adapting as expressed by more negative social behaviors. These adolescents are also more likely to receive poor grades and drop out of high school. These findings stress the need to implement policies and programs that assist families experiencing residential instability, including increased access to more sustainable housing options, expanded efforts to promote school continuity for movers, and additional supports or resources in schools that have a disproportionate numbers of movers. We further discuss school mobility in the next section to better understand the potential differences in instability by child age.

## **Instability in Out-of-Home Contexts: School and Child Care**

### **Summary of Key Findings**

- Changes in schools and child care arrangements are common, particularly as families move or change jobs, but school mobility and child care instability are most prevalent among low-income families.
- For infants, changes in child care arrangements can lead to poor attachment with providers and problem behaviors. For preschoolers, early care and education settings support children's development of foundational school readiness skills and changes in care settings can disrupt the continuity of learning. For school-age children, changes in schools impede children's academic progress and decrease their social competence.
- School mobility has the strongest effect during early elementary and high school, with multiple school transfers leading to worse effects.

Children are not only affected by stability in their home environments, but also in out-of-home settings where they spend considerable time, particularly school and child care settings. In this section, we review the research literature on school mobility and child care instability to broaden our understanding of how changes in these settings have the potential to negatively influence children's developmental outcomes.

## **School Mobility**

School mobility has been linked to a decrease in children's academic performance, particularly when it occurs in the middle of the school year (Alexander, Entwisle, and Dauber 1996; GAO 1994; Haveman, Wolfe, and Spaulding 1991; Kingsley et al. 2009; Pettit 2012; Pribesh and Downey 1999; Temple and Reynolds 1999). Two studies, one in Baltimore and another in Chicago, show a reduction in achievement scores of approximately one-tenth of a standard deviation for every school transfer a student makes, which equals a delay of about one month of school, even after controlling for the effects of other risk factors (Alexander et al. 1996; Temple and Reynolds 1999).

A meta-analysis of research conducted since 1990 looked at the academic consequences of school mobility during K-12 (Reynolds, Chen, and Herbers 2009). Reynolds and colleagues find that mobility is strongly related to both reading and mathematics achievement and high school drop-out rates, controlling for demographic characteristics and other family factors (Reynolds et al. 2009, as cited in National Research Council and Institute of Medicine 2010). The negative effect of moves increases with each additional move. Moves that occur during the early elementary school years or high school (but not in between) having the greatest impact. For example, in 4th grade, 66 percent of non-movers demonstrate at-level reading proficiency compared to only 36 percent of children who had experienced three or more changes in schools (Reynolds et al. 2009). During the early elementary school years, children are adapting to school norms, building peer relationships, and developing foundational reading skills. When changing schools, they must form new relationships and adjust to new school procedures, which can be difficult and lead to problem behaviors. Children also need time to adjust to new curricula, classroom assignments, and instructional practices when changing schools and, as a result, they often fall behind their peers.

Low-income children and minorities transfer schools more often than their higher income and non-minority peers, and some evidence suggests that they experience more negative consequences of school mobility than other children (National Research Council and Institute of Medicine 2010). This evidence is important to consider given that low-income children living in

poor quality neighborhoods often attend lower quality schools and are more likely to encounter drug and gang violence within these neighborhoods, which also negatively affects their development (Knapp and Associates 1995; Orfield and Lee 2005; Rothstein 2004). Changes from one poor quality school to another could exacerbate the effects of transferring.

School mobility affects both the children who move and other students because teachers must accommodate incoming students, which often causes a disruption in instruction and the classroom environment (GAO 2011; Hanushek, Kain, and Rivkin 2004; Isaacs 2012). Additionally, the jurisdictional costs from foreclosed properties, such as the administrative process costs and the maintenance of the foreclosed properties, are often followed by a decrease in budgets for schools and other social services for children,<sup>4</sup> which ultimately reduces the educational and social resources available to promote academic success.

## **Child Care Instability**

Child care is a critical support for employed parents as well as an important context for children's learning and development. Among families with employed mothers, approximately 88 percent of children under age 6 and 64 percent of children 6 to 14 are in some type of regular child care arrangement (Laughlin 2013). When high quality, these arrangements can have positive effects on children's cognitive, language, and social-emotional development (NICHD ECCRN 2001). The relationships or attachments young children build with their caregivers are the building blocks of healthy development (Shonkoff and Phillips 2000). The security and stability of these relationships are particularly essential for infants and toddlers who, developmentally, are establishing trust in their caregivers and using trustworthy caregivers as secure bases for exploring their environment and developing their identity (Thompson 2000). Young children thrive in predictable settings with nurturing, responsive, and individualized care (Raikes 1996). For children who face significant instability in other aspects of their lives, stable caregiver relationships provide the safety and security that children need.

Research shows that young children commonly experience changes in child care arrangements (Chaudry 2004; Krafft et al. 2013; Meyers et al., 2002; Tran and Weinraub 2006). The NICHD Study of Early Child Care and Youth Development found that of children who start child care in their first year of life, nearly 40 percent experience at least one arrangement change in their first 15 months (Tran and Weinraub 2006). Previous national longitudinal surveys report the average arrangement or provider "spell" lasts 12 months (Blau and Robins 1998; Hofferth 1996), although

more recent studies of low-income working families (Chaudry 2004) and families receiving child care subsidies (Davis et al. 2013; Meyers et al. 2002; Weber 2005) report much shorter child care spells.

Several studies highlight the negative effects of child care instability (Cryer et al. 2005; Howes and Hamilton 1993; Loeb et al. 2004; NICHD ECCRN 1998; Youngblade 2003), but across a large body of child care research the evidence is unclear. As described by Adams and Rohacek (2010), child care instability has been defined in various ways, which challenges our interpretations of the findings. Some researchers define instability as an end to a primary care arrangement, sometimes measured by the length of time with that provider (Loeb et al. 2004); others measure instability by the number of different arrangements a child has experienced in a given period of time, such as over the course of a year (NICHD ECCRN 1998; Youngblade 2003); and still others examine arrangement multiplicity, or transitions among concurrent multiple providers, which may be stable over time but lead to daily change as a child moves from setting to setting (e.g., De Schipper et al. 2003; Morrissey 2009; Tran and Weinraub 2006). In this paper, the primary concern is changes in primary care arrangements, in which a child experiences a break in his or her relationship with a care provider, and not the use of multiple, concurrent arrangements, which each occur for different reasons and reflect different experiences for the child.

Further complicating the results, in many studies, causality or the motive for change in child care providers is unclear, particularly in survey research or analysis of program administrative data. The ability to differentiate the effects of planned changes from sudden, unexpected changes is limited. Evidence from qualitative studies provides a deeper understanding of child care choices and underlying reasons for change (e.g., Chaudry 2004; Henly and Lyons 2000; Lowe and Weisner 2004; Scott, London, and Hurst 2005). These studies show that some provider changes are intentional and necessary, and even positive for the child. As children age, parents often seek developmentally appropriate care outside the home where children can socialize with peers and begin to learn school norms and basic academic skills. Unsatisfactory experiences with a particular provider can cause parents to change to a potentially better arrangement. Such changes may be anticipated and so parents can plan in advance and prepare their children for the transition to a new child care arrangement.

Some children—particularly low-income children—move in and out of different child care arrangements or experience frequent breakdowns in arrangements for unplanned or uncontrollable reasons (Chaudry 2004; Weber 2005). The sudden and unpredictable ending of care arrangements

and relationships with providers can be extremely stressful for families and detrimental to children's sense of safety in the world. Families experiencing child care instability often select less desirable and lower quality child care providers or patch together multiple part-time arrangements, especially among relatives and other informal providers, to cover their care needs (Morrisey 2009; Scott et al. 2005).

Various events may trigger child care instability, for example, disruptions in parental employment, housing arrangements or family structure. A job loss or a shifted job schedule may cause parents to rearrange care to better fit their work. Besides cost, location is one of the key determinants of parents' child care choices (Henly and Lyons 2000; Hofferth et al. 1991; King et al. 2002; Leach et al. 2006; Sandstrom and Chaudry 2012). Families lacking reliable transportation have difficulties accessing and maintaining stable care (Henly and Lyons 2000; Sandstrom and Chaudry 2012). A residential move to a different area may force a family to search for a new provider. As household members change following a move or parental separation, alternative adult caregivers may no longer be available. Parents who receive a child care subsidy from the government to lower their child care payments are required by law to participate in an approved work or educational activity; therefore, when subsidy participants lose their jobs or are no longer participating in an approved activity, they often experience a break in their subsidy receipt, and can no longer afford to keep their care arrangements (Forry et al. 2012).

The associations between child care and employment are bi-directional. Child care instability can provoke employment instability, particularly among low-income workers whose jobs do not provide the benefit of paid sick leave or personal days, or lack flexible schedules (Boushey 2003; Hofferth and Collins 2000; Kimmel 2006; Kirby 1998). When children become ill or child care providers are unavailable or closed for business, parents must either rely on back-up care arrangements, if they have one, or must miss work to care for their children (Usdansky and Wolf 2008). Child care disruptions are most likely to occur among low-income mothers who work shifting schedules, have multiple providers, and who have little social support (Usdansky and Wolf 2008).

Child care instability has been linked to negative behavioral outcomes among young children (Cryer et al. 2005; Howes and Hamilton 1993; NICHD ECCRN 1998; Youngblade 2003). According to the NICHD Study of Early Child Care, the number of different care arrangements a child experiences between the ages of 12 and 24 months has shown to predict the level of mother-reported problem behaviors and observed non-compliance in the child care setting when children

are 24 months old (NICHD ECCRN 1998). Yet the number of arrangements experienced during the subsequent year of life (at age 2) has no significant effect on 36-month outcomes. This research suggests while infants may be more sensitive to provider changes than toddlers, because of their developmental needs, the effects overall are small (NICHD ECCRN 1998).

In a smaller study of 3rd and 4th graders in two-parent families, children whose mothers worked during their infancy and who experienced child care instability (as measured by the total number of care arrangements up to 12 months of age) were nominated more often by their peers for engaging in bullying behaviors and were rated by their teachers as having lower frustration tolerance and more issues acting out in class. Boys were particularly sensitive to child care instability (Youngblade 2003).

Children's poor social-emotional outcomes may be the result of an inability to develop secure relationships with their caregivers. Howes and Hamilton (1992) found that the security of the caregiver-child attachment relationship among infants and toddlers in child care was affected when children experienced changes in their caregivers. When caregivers were consistent over time, there was no change in the security of the relationship; when the caregiver changed, the relationship quality was generally unstable until 30 months of age, after which changes in caregivers had less of an effect on the relationship quality. Similarly, Cryer et al. (2005) observed how infants and toddlers transitioning to a new caregiver expressed increased levels of distress that persisted for an average of three weeks and were stronger for the youngest children.

In addition to social-emotional outcomes, some evidence suggests that children's language and cognitive development may also be compromised by child care instability (Loeb et al. 2004; Tran and Weinraub 2006). Among young infants, certain forms of unstable child care are associated with poorer language development at 15 months, including changes from a relative to a non-relative, changes between two non-relatives, and within-home care to out-of-home care, whereas changes between relatives was not significant (Tran and Weinraub 2006). Among a sample of low-income preschoolers in various child care arrangements (i.e., child care centers, family child care programs, informal relative care), the length of child care spells was positively associated with language, literacy, and cognitive skills (Loeb et al. 2004). Preschoolers who had the same provider over an extended period of time demonstrated greater school readiness skills than their peers who spent a shorter amount of time with their provider.

In sum, although much of the extant literature confounds long-term child care instability with daily child care instability and multiplicity, the findings do highlight that having consistent relationships with providers, especially non-relative providers, is critical for young children's positive development across domains. There is less evidence of an impact of child care instability at later ages, and limited research explores instability among older school-age children. These findings highlight the urgency of identifying effective strategies for promoting the stability and continuity of care for young children.

## The Role of Parenting and Parental Mental Health among Unstable Families

### Summary of Key Findings

- Instability often indirectly affects children by first affecting the well-being of their parents. Instability can lead to poor maternal mental health, negative parenting, and lower quality home environments.
- Unstable homes frequently lack the emotional and material resources that children need for healthy development.
- For parents who effectively cope with difficult transitions, positive parenting can buffer children from the negative effects of instability.

Research shows that the role of parents in shaping children's experiences has a major impact on the effects of instability on children. Decades of child development research underscore the dramatic effect of a child's environment and experience on his or her growth and learning. A stimulating and nurturing environment fosters a child's potential achievement while environmental stressors and deprivation inhibit normal development, and even result in negative outcomes. Healthy development requires protection and enrichment from involved adult caregivers (Shonkoff 2013). Parents provide their children with the external stimulation and support they need to develop and largely determine their ability to cope and adjust during stressful experiences.

Across the domains discussed in this paper, studies show that the experience of instability predicts children's outcomes, but oftentimes the relationship between instability and children's outcomes is indirect. Some significant life changes affect children by first affecting their parents. Or in other cases, the effect may be direct but is worsened or weakened depending on how parents behave. Researchers describe ways in which parenting factors may *mediate* effects—or act as the

intermediary—or *moderate* effects—act as a buffer or facilitator. This pattern makes sense as we think about the domains of instability, which involve significant and stressful changes in parents' lives, such as a job loss or parental separation. Also, parents work hard to provide for their families so when those necessary provisions—housing, child care, and food for their children—become insecure, parents may experience an overload of stress and have difficulty coping and, thus difficulty parenting.

For example, one study of family instability showed that maternal depression was higher and increased over time at a higher rate in unstable families. Children in unstable families with highly depressed mothers exhibited more disruptive behaviors with peers and slightly more externalizing behaviors during their transition to first grade than their peers in stable families (Cavanagh and Huston 2006). Unstable families also displayed lower maternal sensitivity and poorer quality home environments, which related to disruptive classroom behavior. Yet unstable families that did have higher levels of emotional and material resources buffered the negative effects of family instability on children's problem behaviors (Cavanagh and Huston 2006).

Anderson and Leventhal (2013) found that a residential move during elementary school was associated with reduced parental involvement, which predicted more internalizing behaviors, such as depression and anxiety, in 5th grade. In a study of child care instability, infants were at an increased risk of insecure attachment with their mothers when they experienced the “dual-risk” of maternal insensitivity and changes in child care arrangements. Several studies show that the relationship between family economic resources and children's cognitive skills is mediated by parenting factors, such as parenting stress (Gershoff et al. 2007; Whittaker et al. 2010), maternal sensitivity (Whittaker et al. 2010), maternal responsiveness (Sarsour et al. 2010), parental involvement (Sarsour et al. 2010), and home enrichment (Sarsour et al. 2010; Gershoff et al. 2007).

Positive parenting may also buffer children from instability. When parents successfully cope and adapt to stressful life changes, and support their children through these changes, the impact of adverse experiences on children may be lessened, and potentially insignificant. However, additional research is needed to fully understand how parents can alleviate the stress children experience during times of difficult transitions.

## Conclusions

Children today face a dual set of obstacles to their healthy development. Many parents struggle to make ends meet as they work unstable jobs, live in unstable housing, have unstable relationships, and deal with unstable child care arrangements. Sudden changes in families' lives often result in inconsistencies both in the home and out-of-home settings. Meanwhile, public programs that can support children and families during times of need are insufficiently funded to meet the demand. The instability so many children face raises questions about how instability impacts their development and how effects of instability can be avoided or mitigated. This investigation is critical to the nation's future economic well-being.

The research reviewed in this paper indicates that instability across a host of areas is associated with a range of child outcomes, from cognitive skills, academic achievement, social competence and behavior. Some forms of instability have long-term negative effects, even relating to adult achievement, such as educational attainment. In some cases, a single change alone can make an impact, but the research shows that repeated changes—or chronic instability—lead to more negative outcomes for children.

Additionally, children experiencing instability have outcomes that are as poor as, and sometimes worse than, outcomes for children in stable but adverse situations. For example, findings in the literature consistently reflect the disparity between children of two-parent and single-parent households, but there is some evidence that children of parents that move into and out of unstable relationships may be worse off than children in stable, single-parent families (Craigie et al. 2012). Similar patterns are seen for parental employment among low-income families, in which the effect of job instability on child behavior may be stronger than the effect of stable, full-time employment in low-wage jobs (Johnson et al. 2012).

These disruptions or difficult transitions can be stressful for children. Recent research on chronic or toxic forms of stress reveals the physiological damage caused by stress that can impinge brain development and cognitive and social functioning. Although most changes in children's lives do not result in this level of stress, this growing body of research explains the underlying biological explanations for differences in outcomes for children exposed to adverse life experiences.

Instability may have differential effects depending on the child's age. There is some evidence that residential instability, which is often linked to school mobility, has worse consequences for

young school-age children than for children under age 5 in terms of academic achievement and social adjustment, whereas residentially unstable adolescents may express more problem behaviors. Conversely, family transitions that occur early in children's development, prior to age 6, and in adolescence appear to have stronger effects on behavior and social outcomes than family instability experienced during elementary school. Research on child care instability focuses primarily on non-school-age children. Within the birth to 5 age range, the youngest of children appear to be the most affected. Disruptions in the continuity of care and breaks in the provider-child relationship are linked to poorer infant attachment. More studies looking across developmental periods are needed to fully understand how various types of instability affect children at different ages.

Instability is measured in multiple ways but generally captures a change in a supportive structure in a child's life: a change in parental unions, housing, parental employment and income, and child care providers. A challenging issue with this research is that the reason for change and whether a change is voluntary or involuntary is often unclear. Because studies do not consistently isolate changes of the unpredictable and unplanned nature that characterize instability, as opposed to planned and intentional changes, the measured effects cited in these studies may be conservative estimates of true instability. There is a strong need for further research that clearly distinguishes the effects of voluntary and involuntary changes across various family domains. Moreover, the research reviewed measured associations between instability and child outcomes using a range of different analytic methods and covariates, but we caution readers' interpretations of causation given the non-experimental nature of most of this research.

The research also suggests the importance of interconnections between domains, such as family structure, employment, housing, and child care. Changes in one domain often lead to changes in another. However, few studies to date include a broader view of instability to understand patterns of multiple changes and the combined effects on children (e.g., Moore et al. 2000; Stevens and Schaller 2011). The challenge with studying instability is identifying the initial trigger for the instability. Studies often measure the occurrence of a change, such as a job loss or residential move, and attribute children's outcomes to the measured event without taking into account that the estimated effects may have been triggered by a different but related event. Survey research is limited in its capacity to understand specific timing of multiple events and reasons for change. Mixed-methods studies combining survey data with qualitative fieldwork can create a greater understanding of individual circumstances and how instability occurs across domains. Additional research is needed

that explores instability in multiple domains, how simultaneous events interact, and how instability affects children and families over time.

## **Implications for Policy and Practice**

This research has important policy implications for programs that serve and support families with children. Although parents are primary in assuring their children's well-being and healthy development, a broad range of government programs also play an important role, especially for children in low-income families. Safety net programs provide financial assistance to families in the form of cash payments or subsidized housing, child care, or food, all of which help to alleviate the immediate effects of instability. But these programs might be able to do more to stabilize the situation for children, by considering whether any administrative practices inadvertently increase instability. Given the central role parents play in how children are affected by instability, additional efforts could be made to target parental mental health and skill-building of parents. Well-designed, two-generational intervention programs aimed at supporting positive parenting, reducing parental and childhood stress, and strengthening family coping strategies can ease the impact of instability on children. Additionally, the body of research highlights that changes in employment and housing domains have strong associations with child well-being, which may better inform some of the efforts within these sectors that have not traditionally focused on child development.

Given the prevalence of various forms of instability, it is important to consider how instability can create challenges for the systems that are trying to support children and families. For example, for families participating in social safety net programs, rapid changes in a number of domains (e.g., job loss, housing move, changes in household members and income) can make it difficult for families to maintain eligibility, and for programs to monitor eligibility criteria. For programs that have tight requirements for parents to report changes, it can mean that parents have to report often or risk being out of compliance. Families that fail to provide sufficient documentation during spells of instability risk losing their assistance, which can promote further instability. For example, when a parent loses employment and is no longer eligible for child care assistance, they may lose their child care—which causes instability in providers for the child and also continued employment instability, since the parent may not be able to secure new employment without stable and subsidized care already in place. Moreover, economically unstable families may have reported earnings one month that make them eligible but a temporary increase in earnings the next month may make them ineligible.

This research suggests the need for programs to look at the extent to which they can redesign policies and practices to support access and retention to stabilize families (Golden 2013). The stress that these issues create for families can make it more difficult for them to deal with services that have strict or onerous requirements. The more hoops there are to jump through, the less likely families experiencing instability will be able to handle the process. This means that the families who face the most instability, thus increasing their need for the benefit of these programs, may also face the most challenges around accessing and retaining available services. More simplified reporting procedures that are sensitive to the needs of unstable families and require clients to report only significant changes (such as change from full-time to part-time but not specific work hours) may be one way to reduce families' loss of benefits during periods when they are still eligible. Additionally, graduated income limits for continuous recipients may help maintain stability among families reporting income close to the eligibility threshold. Among unemployed parents, extended job search periods for both new and continuous child care subsidy recipients might reduce child care instability.

Changes in residence can make it hard for programs to locate families to maintain stability of services. Families that fail to receive paperwork to recertify for public benefits, for example, risk losing their assistance. Some programs are administered at the county or local level, and when families move to a different county where eligibility rules may differ, their case may not transfer. Identifying ways to reduce client burden to report eligibility is important for family stability.

Since services are available across health, human services, and educational sectors, unstable families may have difficulty navigating and learning about the programs for which they could be eligible. Streamlining access to services and implementing a "one door" policy would allow families seeking housing assistance, for example, to also be connected to job training programs, health and nutrition programs such as Medicaid, SNAP and WIC, and early care and education services for children. Breaking barriers across these siloes is challenging, but some states and local counties are experimenting with strategies to bridge access to multiple work support programs in efforts to strengthen families and increase their stability (Golden 2013).

Having systems and policies in place to identify families who are experiencing lots of changes is one method to target extra services and case management. For example, in Head Start, home visiting or other early intervention programs, family services coordinators can help to identify

children exposed to instability in the home and refer families to more intensive case management services to connect parents and children to needed services. Ongoing communication with parents and staff, documentation of families' experiences and child well-being, and data analysis can facilitate the tracking of children experiencing instability. Expanding partnerships with local community programs and services can also build the capacity of early childhood programs to support families facing multiple forms of instability.

Under the McKinney Vento Act, public schools are required to have a homelessness liaison who can support families with transportation to their home and school, and with other needs. However, residentially unstable children who are not homeless may also have special needs that are not brought to the attention of officials. It may be useful for districts to provide targeted services and resources to schools that have a disproportionate number of movers.

Unfortunately, the burden of targeted case management is challenging in programs already faced with multiple demands and few resources. Learning innovative strategies or methods from programs serving children and families facing instability is an important next step. For example, lessons from programs that serve special populations of unstable families, such as migrant workers or military families experiencing chronic mobility and family separation, might help us understand some of the unique experiences and needs of families experiencing instability and effective approaches to help them cope.

Lastly, the prevalence of instability is important to consider in the context of educational and intervention programs serving children and families. Programs cannot be effective or achieve the intended outcomes without proper implementation. Research demonstrates that regular school attendance matters for student achievement and that chronic absenteeism can lead to lower standardized test scores and greater retention and high school drop-out rates (Balfanz and Byrnes 2012). For child and family interventions, failure to reach unstable families and deliver the specified services or treatment can weaken the impact of the intervention. Moreover, children and parents experiencing high levels of stress from instability may be less receptive to information when participating in such programs. Although extremely challenging, programs must first recognize and address these more salient issues of instability before targeting the program's primary goals. For example, achieving school readiness among children enrolled in a prekindergarten program is difficult without first ensuring children have safe and secure housing, proper nutrition and medical

care, and stable and supportive parents who can foster regular school attendance. Failure to consider these issues means that programs are not having the intended effect on their target populations, and are likely having the least impact on the children and families that need the most support.

## Notes

1. Although some research has explored the stability of access to health care and a consistent medical home, which is undoubtedly important for children's physical health and development, this literature is not included in this synthesis. The scope was limited to changes in supportive structures in children's lives that have the potential to cause stress and physiological risk. Even though lack of health insurance and preventive medical care can be damaging to children's health, the effects of sharp changes in coverage and in medical homes were considered different from the other domains.
2. "Table C2. Household Relationship and Living Arrangements of Children under 18 Years, by Age and Sex: 2012," US Census Bureau, <http://www.census.gov/hhes/families/data/cps2012.html>, accessed July 29, 2012.
3. US Census Bureau, "Census Bureau Reports National Mover Rate Increases after a Record Low in 2011," newsroom release CB12-240, December 12, 2012.
4. "Understand Why Foreclosures Matter: Effects on Children," Foreclosure-Response, [http://www.foreclosure-response.org/policy\\_guide/why\\_foreclosures\\_matter.html?tierid=327](http://www.foreclosure-response.org/policy_guide/why_foreclosures_matter.html?tierid=327), accessed July 29, 2012.

## References

- Acs, Gregory, and Austin Nichols. 2010. "America Insecure: Changes in the Economic Security of American Families." Washington, DC: The Urban Institute.
- Acs, Gregory, Pamela J. Loprest and Austin Nichols. 2009. "Risk and Recovery: Documenting the Changing Risks to Family Incomes." Washington, DC: The Urban Institute.
- Adam, Emma K. 2004. "Beyond Quality: Parental and Residential Stability and Children's Adjustment." *American Psychological Society* 13(5): 210–13.
- Adam, Emma K., and P. Lindsay Chase-Lansdale. 2002. "Home Sweet Home(s): Parental Separations, Residential Moves, and Adjustment in Low-Income Adolescent Girls." *Developmental Psychology* 38:792–805.
- Adams, Gina, and Monica Rohacek. 2010. "Child Care Instability: Definitions, Context, and Policy Implications." Washington, DC: The Urban Institute.
- Alaimo, Katherine, Christina M. Olson, and Edward A. Frongillo Jr. 2001. "Food Insufficiency and American School-Aged Children's Cognitive, Academic, and Psychosocial Development." *Pediatrics* 108(1): 44–53.
- Alexander, Karl L., Doris R. Entwisle, and Susan L. Dauber. 1996. "Children in Motion: School Transfers and Elementary School Performance." *Journal of Educational Research* 90(1): 3–12.
- Amato, Paul R. 2000. "The Consequences of Divorce for Adults and Children." *Journal of Marriage and the Family* 62(4): 1269–87.
- Amato, Paul R., and Bruce Keith. 1991. "Parental Divorce and the Well-Being of Children: A Meta-Analysis." *Psychological Bulletin* 110(1): 26–46.
- Anderson, Sara, and Tama Leventhal. 2013. "When Moving May Matter: The Role of Time and Context in Residential Mobility among Children." Paper presented at the biennial meeting for the Society for Research in Child Development, Seattle, April 20.
- Balfanz, Robert, and Vaughan Byrnes. 2012. "Chronic Absenteeism: Summarizing What We Know from Nationally Available Data." Baltimore, MD: Center for Social Organization of Schools, Johns Hopkins University.
- Bassuk, Ellen, L., Christina Murphey, Natalie T. Coupe, Rachael R. Kenney, and Corey A. Beach. 2011. "America's Youngest Outcasts 2010." Needham, MA: National Center on Family Homelessness.
- Been, Vicki, Ingrid G. Ellen, Amy E. Schwartz, Leanna Stiefel, and Meryle Weinstein. 2011. "Does Losing Your Home Mean Losing Your School? Effects of Foreclosures on the School Mobility of Children." *Regional Science and Urban Economics* 41(4): 407–14.
- Bellinger, David, Alan Leviton, Christine Waternaux, Herbert Needleman, and Michael Rabinowitz. 1987. "Longitudinal Analyses of Prenatal and Postnatal Lead Exposure and Early Cognitive Development." *New England Journal of Medicine* 316(17): 1037–43.
- Blau, David M., and Philip K. Robins. 1998. "A Dynamic Analysis of Turnover in Employment and Child Care." *Demography* 35(1): 83–96.

- Boushey, Heather. 2003. "Staying Employed after Welfare: Work Supports and Job Quality Vital to Employment Tenure and Wage Growth." Briefing Paper 128. Washington, DC: Economic Policy Institute.
- Bowdler, Janis, Roberto Quercia, and David Andrew Smith. 2010. "The Foreclosure Generation: The Long-Term Impact of the Housing Crisis on Latino Children and Families." Washington, DC: National Council of La Raza.
- Bradley, Robert H., and Bettye M. Caldwell. 1984. "The Relation of Infants' Home Environment to Achievement Test Performance in First Grade: A Follow-Up Study." *Child Development* 55: 803–809.
- Bradley, Robert H., Leanne Whiteside, Daniel J. Mundfrom, Patrick H. Casey, Kelly J. Kelleher, and Sandra K. Pope. 1994. "Early Indications of Resilience and Their Relation to Experiences in the Home Environments of Low Birth Weight, Premature Children Living in Poverty." *Child Development* 65: 346–60.
- Bronfenbrenner, U. 1979. *The Ecology of Human Development*. Cambridge, MA: Harvard University Press.
- . 1986. "Ecology of the Family as a Context for Human Development: Research Perspectives." *Developmental Psychology* 22(6): 723–42.
- Bronfenbrenner, U., and Stephen J. Ceci. 1994. "Nature-Nurture Reconceptualized in Developmental Perspective: A Bioecological Model." *Psychological Review* 101(4): 568–86.
- Brooks-Gunn, Jeanne, and Greg J. Duncan. 1997. "The Effects of Poverty on Children." *The Future of Children* 7:55–71.
- . 2000. "Family Poverty, Welfare Reform and Child Development." *Child Development* 71(1): 188–96.
- Brooks-Gunn, Jeanne, Greg J. Duncan, and Nancy Maritato. 1997. "Poor Families, Poor Outcomes: The Well-Being of Children and Youth." In *Consequences of Growing up Poor*, edited by Greg J. Duncan and Jeanne Brooks-Gunn (1–17). New York: Russell Sage Foundation.
- Brooks-Gunn, Jeanne, Pamela K. Klebanov, and Fong-Ruey Liaw. 1995. "The Learning, Physical, and Emotional Environment of the Home in the Context of Poverty: The Infant Health and Development Program." *Child and Youth Services Review* 17(1–2): 251–76.
- Brown, Susan L. 2006. "Family Structure Transitions and Adolescent Well-Being." *Demography* 43(3): 447–61.
- Cavanagh, Shannon E., and Aletha C. Huston. 2006. "Family Instability and Children's Early Problem Behavior." *Social Forces* 85(1): 551–81.
- . 2008. "The Timing of Family Instability and Children's Social Development." *Journal of Marriage and Family* 70:1258–69.
- Chaudry, Ajay. 2004. *Putting Children First: How Low-Wage Working Mothers Manage Child Care*. New York: Russell Sage Foundation.
- Cherlin, Andrew, and Frank F. Furstenberg Jr. 1992. *The New American Grandparent: A Place in the Family, A Life Apart*. Cambridge, MA: Harvard University Press.
- Children's Defense Fund. 2011. *The State of America's Children 2011*. Washington, DC: Children's Defense Fund. <http://www.childrensdefense.org/child-research-data-publications/state-of-americas-children-2011/pdfs/soac-2011.pdf>.

- Cohen, Philip N. 2012. "Recession and Divorce in the United States: Economic Conditions and the Odds of Divorce, 2008–2010." College Park: Maryland Population Research Center.
- Coldwell, Joanne, Alison Pike, and Judy Dunn. 2006. "Household Chaos—Links with Parenting and Child Behavior." *Journal of Child Psychology and Psychiatry* 47(11): 1116–22.
- Coleman-Jensen, Alisha, Mark Nord, Margaret Andrews, and Steven Carlson. 2012. "Household Food Security in the United States." Economic Research Report ERR-141 37. Washington, DC: US Department of Agriculture.
- Comey, Jennifer, and Michel Grosz. 2011. "Where Kids Go: The Foreclosure Crisis and Mobility in Washington, DC." NeighborhoodInfo DC brief. Washington, DC: The Urban Institute.
- Conger, Rand D. 2005. "The Effects of Poverty and Economic Hardship across Generations." Davis: Center for Public Policy Research, University of California, Davis.
- Cook, John T., and Deborah A. Frank. 2008. "Food Security, Poverty, and Human Development in the United States." *Annals of the New York Academy of Sciences*: 1136(1): 193–209.
- Coulton, Claudia, Brett Theodos, and Margery A. Turner. 2009. *Family Mobility and Neighborhood Change: New Evidence and Implications for Community Initiatives*. Washington, DC: The Urban Institute.
- Craigie, Terry-Ann L., Jeanne Brooks-Gunn, and Jane Waldfogel. 2012. "Family Structure, Family Stability and Outcomes of Five-Year-Old Children." *Families, Relationships, and Societies* 1(1): 43–61.
- Cramer, Reid, Rourke O'Brien, Daniel Cooper, and Maria Luengo-Prado. 2009. *A Penny Saved Is Mobility Earned: Advancing Economic Mobility through Savings*. Washington, DC: Economic Mobility Project, Pew Charitable Trusts.
- Cryer, Debby, Laura Wagner-Moore, Margaret Burchinal, Noreen Yazejian, Sarah Hurwitz, and Mark Wolery. 2005. "Effects of Transitions to New Child Care Classes on Infant/Toddler Distress and Behavior." *Early Childhood Research Quarterly* 20:37–56.
- Cunningham, Mary, and Graham MacDonald. 2012. *Housing as a Platform for Improving Education among Low-Income Children*. Washington, DC: The Urban Institute.
- Da Costa Nunez, Ralph, Felicia Yang DeLeone, and Dana Sarnak. 2012. "Profiles of Risk: Child Health." Research Brief 9. New York: Institute for Children, Poverty and Homelessness.
- Davis, Elizabeth, Caroline Krafft, Amy Blasberg, Caroline Carlin, Nicole Forry, Tabitha Isner, and Kathryn Tout. 2013. "Minnesota Child Care Choices: Continuity of Care and Participation in the Child Care Assistance Program." Publication 2013-13. Washington, DC: Child Trends, University of Minnesota, and Amherst H. Wilder Foundation.
- De Schipper, J. Clasiën, Louis W. C. Tavecchio, Marinus H. Van Ijzendoorn, and Mariëlle Linting. 2003. "The Relation of Flexible Child Care to Quality of Center Day Care and Children's Socio-Emotional Functioning: A Survey and Observational Study." *Infant Behavior & Development* 26(3): 300–26.
- Dearing, Eric, and Beck A. Taylor. 2007. "Home Improvements: Within-Family Associations between Income and the Quality of Children's Home Environments." *Journal of Applied Developmental Psychology* 28:427–44.

- Dearing, Eric, Kathleen McCartney, and Beck A Taylor. 2001. "Changes in Family Income-to-Needs Matter More for Children with Less." *Child Development* 72(6): 1779–93.
- Deater-Deckard, Kirby, Paula Y. Mullineaux, Charles Beekman, Stephen A. Petrill, Chris Schatschneider, and Lee A. Thompson. 2009. "Conduct Problems, IQ, and Household Chaos: A Longitudinal Multi-Informant Study." *Journal of Child Psychology and Psychiatry* 50(10): 1301–1308.
- Dumas, Jean E., Jenelle Nissley, Alicia Nordstrom, Emilie Phillips Smith, Ronal J. Prinz, and Douglas W. Levine. 2005. "Home Chaos: Sociodemographic, Parenting Interactional, and Child Correlates." *Journal of Clinical Child and Adolescent Psychology* 34(1): 93–104.
- Duncan, Greg J., Kathleen M. Ziol-Guest, and Ariel Kalil. 2010. "Early-Childhood Poverty and Adult Attainment, Behavior, and Health." *Child Development* 81(1): 306–25.
- Duncan, Greg J., W. Jean Yeung, Jeanne Brooks-Gunn, and Judith R. Smith. 1998. "How Much Does Childhood Poverty Affect the Life Chances of Children?" *American Sociological Review* 63(3): 406–23.
- Dworsky, Amy. 2008. *Educating Homeless Children in Chicago: A Case Study of Children in the Family Regeneration Program*. Chicago, IL: Chapin Hall at the University of Chicago.
- Evans, Gary W., and Michelle A. Schamberg. 2009. "Childhood Poverty, Chronic Stress, and Adult Working Memory." *Proceedings of the National Academy of Sciences* 106(16): 6545–49.
- Evans, Gary W., Jeanne Brooks-Gunn, and Pamela Kato Klebanov. 2011. "Stressing Out the Poor: Chronic Physiological Stress and the Income-Achievement Gap." *Community Investments* 23(2): 22–27.
- Farah, Martha J., David M. Shera, Jessica H. Savage, Laura Betancourt, Joan M. Giannetta, Nancy L. Brodsky, Elsa K. Malmud, and Hallam Hurt. 2006. "Childhood Poverty: Specific Associations with Neurocognitive Development." *Brain Research* 1110(1): 166–74.
- Figlio, David, Ashlyn A. Nelson, and Stephen L. Ross. 2010. "Do Children Lose More than a Home? The Effects of Foreclosure on Children's Education Outcomes." Washington, DC: The Urban Institute.
- First Focus. 2009. "Turning Point: The Long Term Effects of Recession-Induced Child Poverty." Washington, DC: First Focus.
- Fomby, Paula, and Andrew J. Cherlin. 2007. "Family Instability and Child Well-Being." *American Sociological Review* 72:181–204.
- Forry, Nicole, Katie Welti, Liz Davis, Caroline Krafft, and Paula Daneri. 2012. "Subsidy Continuity in Maryland." Washington, DC: Child Trends, University of Minnesota, Towson University, Regional Economic Studies Institute, and Maryland State Department of Education.
- Foster, Martha A., Richard Lambert, Martha Abbot-Shim, Frances McCarty, and Sarah Franze. 2005. "A Model of Home Learning Environment and Social Risk Factors in Relation to Children's Emergent Literacy and Social Outcomes." *Early Childhood Research Quarterly* 20: 13–36.
- General Accounting Office (GAO). 1994. "Elementary School Children: Many Change Schools Frequently, Harming their Education." Washington, DC: GAO.

- Garrett, Patricia, Nicholas Ng'andu, and John Ferron. 1994. "Poverty Experiences of Young Children and the Quality of Their Home Environments." *Child Development* 65: 331–45.
- Gershoff, Elizabeth T., C. Cybele Raver, J. Lawrence Aber, and Mary Clare Lennon. 2007. "Income Is Not Enough: Incorporating Material Hardship into Models of Income Associations with Parenting and Child Development." *Child Development* 78(1): 70–95.
- Golden, Olivia. 2013. "Early Lessons from the Work Supports Strategies Initiative: Planning and Piloting Health and Human Services Integration in Nine States." Washington, DC: The Urban Institute.
- Guo, Guang. 1998. "The Timing of the Influences of Cumulative Poverty on Children's Cognitive Ability and Achievement." *Social Forces* 77(1): 257–88.
- Hanushek, Eric A., John F. Kain, Steven G. Rivkin. 2004. "Disruption versus Tiebout Improvement: The Costs and Benefits of Switching Schools." *Journal of Public Economics* 88(9–10): 1721–46.
- Haveman, Robert, Barbara Wolfe, and James Spaulding. 1991. "Childhood Events and Circumstances Influencing High School Completion." *Demography* 28(1): 133–57.
- Henly, Julia R., and Sandra Lyons. 2000. "The Negotiation of Child Care and Employment Demands Among Low-Income Parents." *Journal of Social Issues* 56:683–706.
- Hill, Heather D., Pamela A. Morris, Nina Castells, and Jessica Thornton Walker. 2011. "Getting a Job Is Only Half the Battle: Maternal Job Loss and Child Classroom Behavior in Low-Income Families." *Journal of Policy Analysis and Management* 30(2): 310–33.
- Hofferth, Sandra L. 1996. "Child Care in the United States Today." *The Future of Children* 6(2): 41–61.
- Hofferth, Sandra L., and Nancy Collins. 2000. "Child Care and Employment Turnover." *Population Research and Policy Review* 19(4): 357–95.
- Hofferth, Sandra L., Ellen E. Kisker, Deborah Phillips, and Elizabeth Farquhar. 1991. "A Profile of Child Care Settings: Early Education and Care in 1990 (Vol. 1)." Princeton, NJ: Mathematica Policy Research.
- Howes, Carollee, and Claire E. Hamilton. 1992. "Children's Relationships with Child Care Teachers: Stability and Concordance with Parental Attachment." *Child Development* 63(4): 867–78.
- . 1993. "The Changing Experience of Child Care: Changes in Teachers and in Teacher-Child Relationships and Children's Social Competence with Peers." *Early Childhood Research Quarterly* 8(1): 15–32.
- Isaacs, Julia B. 2012. "The Ongoing Impact of Foreclosures on Children." Washington, DC: First Focus and the Brookings Institution.
- . 2013. "Unemployment from a Child's Perspective." Washington, DC: First Focus and the Urban Institute.
- Jencks, Christopher, and Susan Mayer. 1990. "The Social Consequences of Growing up in a Poor Neighborhood." In *Inner-City Poverty in the United States*, edited by Laurence E. Lynn Jr. and Michael G. H. McGeary (111–86). Washington, DC: National Academy Press.
- Johnson, Rucker C., Ariel Kalil, and Rachel E. Dunifon. 2012. "Employment Patterns of Less-Skilled Workers: Links to Children's Behavior and Academic Progress." *Demography* 49:747–72.

- Jyoti, Diana F., Edward A. Frongillo, and Sonya J. Jones. 2005. "Food Insecurity Affects School Children's Academic Performance, Weight Gain, and Social Skills." *American Society for Nutrition* 135(12): 2831–39.
- Kalil, Ariel. 2009. "Joblessness, Family Relations, and Children's Development." *Family Matters* 83:15-22.
- Kalil, Ariel, and Patrick Wightman. 2011. "Parental Job Loss and Children's Educational Attainment in Black and White Middle-Class Families." *Social Science Quarterly* 92(1): 57–78.
- Kalil, Ariel, and Kathleen M. Ziol-Guest. 2008. "Parental Employment Circumstances and Children's Academic Progress." *Social Science Research* 37(2): 500–15.
- Kimmel, Jean. 2006. "Child Care, Female Employment, and Economic Growth." *Community Development* 37(2): 71–85.
- King, Carlise, Shelly Waters Boots, Coreena Chen and Nicola Dones. 2002. *Child Care Choices for Working Families: Examining Child Care Choices of Hotel Employees and Restaurant Employees Union Local 2 Members Working in San Francisco Hospitality Industry*. San Francisco: California Child Care Resource and Referral Network.
- Kingsley, G. Thomas, Robin E. Smith, and David Price. 2009. "The Impacts of Foreclosures on Families and Communities: A Primer." Washington, DC: The Urban Institute.
- Kirby, Jacqueline J. 1998. "Who Cares for the Sick Child? Implications for Child Care Providers." *Child Care Center Connections* 7(3). Storrs: National Network for Child Care, University of Connecticut Cooperative Extension System.
- Klebanov, Pamela K., Jeanne Brooks-Gunn, Cecelia McCarton, and Marie C. McCormick. 1998. "The Contribution of Neighborhood and Family Income to Developmental Test Scores Over the First Three Years of Life." *Child Development* 69(5): 1420–36.
- Knapp, Michael S., and Associates. 1995. *Teaching for Meaning in High-Poverty Classrooms*. New York: Teachers College Press.
- Krafft, Caroline, Elizabeth E. Davis, Kathryn Tout, and Nicole Forry. 2013. "Changes in Child Care Arrangements in Minnesota." Publication 2013-13. Washington, DC: Child Trends, University of Minnesota, and Amherst H. Wilder Foundation.
- Laird, Jennifer, Stephen Lew, Matthew Debell, and Chris Chapman. 2006. *Dropout Rates in the United States: 2002, 2003*. NCES 2006-062. Washington, DC: US Department of Education, National Center for Education Statistics.
- Laughlin, Lynda. 2013. "Who's Minding the Kids? Child Care Arrangements: Spring 2011." Current Population Report P70-135. Washington, DC: US Census Bureau.
- Leach, Penelope, Jacqueline Barnes, Michelle Nichols, Jon Goldin, Alan Stein, Kathy Sylva, and Lars-Erik Malmberg. 2006. "Child Care before 6 Months of Age: A Qualitative Study of Mothers' Decisions and Feelings about Employment and Non-maternal Care." *Infant and Child Development* 15(5): 471–502.
- Loeb, Susana, Bruce Fuller, Sharon L. Kagan, and Bidemi Carrol. 2004. "Child Care in Poor Communities: Early Learning Effects by Type, Quality, and Stability." *Child Development* 75(1): 47–65.

- Loprest, Pamela J., and Josh Mitchell. 2012. "Labor Market and Demographic Analysis: A National Picture of Short-Term Employment Growth by Skill." Washington, DC: The Urban Institute.
- Lowe, Edward D., and Thomas S. Weisner. 2004. "'You Have to Push It—Who's Gonna Raise Your Kids?': Situating Child Care and Child Care Subsidy Use in the Daily Routines of Lower Income Families." *Children and Youth Services Review* 26(2): 143–71.
- Lynch, Alicia D., Rebekah L. Coley, and Melissa Kull. 2013. "Housing Contexts during Infancy and Early Childhood and Long-term Cognitive, Behavioral, Emotional and Physical Health." Paper presented at the biennial meeting for the Society for Research in Child Development, Seattle, April 20.
- Martin, Anne, Rachel A. Razza, and Jeanne Brooks-Gunn. 2012. "Specifying the Links between Household Chaos and Preschool Children's Development." *Early Child Development and Care* 182(10): 1247–63.
- Matheny Jr., Adam P., Theodore D. Wachs, Jennifer L. Ludwig, and Kay Phillips. 1995. "Bringing Order Out of Chaos: Psychometric Characteristics of the Confusion, Hubbub, and Order Scale." *Journal of Applied Developmental Psychology* 16: 429–44.
- Mattingly, Marybeth J., and Kristin E. Smith. 2010. "Changes in Wives' Employment When Husbands Stop Working: A Recession-Prosperity Comparison." *Family Relations* 59: 343–57.
- Mayer, Susan E. 1997. *What Money Can't Buy: Family Income and Children's Life Chances*. Cambridge, MA: Harvard University Press.
- McCoy-Roth, Marci, Bonnie B. Mackintosh, and David Murphey. 2012. "When the Bough Breaks: The Effects of Homelessness on Young Children." *Child Trends: Early Childhood Highlights* 3(1): 1–11.
- McCubbin, Hamilton I., and Joan M. Patterson. 1983. "The Family Stress Process: The Double ABCX Model of Family Adjustment and Adaptation." *Marriage and Family Review* 6(1–2): 7–37.
- McKernan, Signe-Mary, Caroline Ratcliffe, and Katie Vinopal. 2009. "Do Assets Help Families Cope with Adverse Events?" Washington, DC: The Urban Institute.
- Meyers, Marcia K., Laura R. Peck, Elizabeth E. Davis, Ann Collins, Lee Kreader, Annie Georges, Roberta Weber, Deanna T. Schexnayder, Daniel G. Schroeder, and Jerry A. Olson. 2002. *The Dynamics of Child Care Subsidy Use: A Collaborative Study of Five States*. New York: National Center for Children in Poverty.
- Mills, Gregory B., and Joe Amick. 2010. "Can Savings Help Overcome Income Instability?" Washington, DC: The Urban Institute.
- Moore, Kristin Anderson, Sharon Vandivere, and Jennifer Ehrle. 2000. "Turbulence and Child Well-Being." Assessing the New Federalism Brief B-16. Washington, DC: The Urban Institute.
- Morrissey, Taryn W. 2009. "Multiple Child-Care Arrangements and Young Children's Behavioral Outcomes." *Child Development* 80(1): 59–76.
- Mossaad, Nadwa, Mark Mather, and William O'Hare. 2011. "Children with Unemployed Parents: Trends during the U.S. Recession." Paper presented at the Population Association of America annual meeting, Washington, DC, April 1.

- National Institute of Child Health and Human Development Early Child Care Research Network (NICHD ECCRN). 1998. "Early Childcare and Self-Control, Compliance, and Problem Behavior at 24 and 36 Months." *Child Development* 69: 1145–70.
- . 2001. "Nonmaternal Care and Family Factors in Early Development: An Overview of the NICHD Study of Early Child Care." *Applied Developmental Psychology* 22: 457–92.
- . 2005. "Duration and Developmental Timing of Poverty and Children's Cognitive and Social Development from Birth through Third Grade." *Child Development* 76(4): 795–810.
- National Research Council and Institute of Medicine. 2010. "Student Mobility: Exploring the Impact of Frequent Moves on Achievement: Summary of a Workshop." Committee on the Impact of Mobility and Change on the Lives of Young Children, Schools, and Neighborhoods. Board on Children, Youth, and Families, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academies Press.
- National Scientific Council on the Developing Child. 2007. "Excessive Stress Disrupts the Architecture of the Developing Brain." Working Paper 3. Cambridge, MA: Center on the Developing Child, Harvard University. [http://developingchild.harvard.edu/index.php/resources/reports\\_and\\_working\\_papers/working\\_papers/wp3/](http://developingchild.harvard.edu/index.php/resources/reports_and_working_papers/working_papers/wp3/)
- Orfield, Gary, and Chungmei Lee. 2005. "Why Segregation Matters: Poverty and Educational Inequality." Cambridge, MA: The Civil Rights Project, Harvard University.
- Patterson, Joan M. 2002. "Integrating Family Resilience and Family Stress Theory." *Journal of Marriage and Family* 64(2): 349–60.
- Peters, Elizabeth, and Stephan Lindner. Forthcoming. "How Does Unemployment Affect Family Arrangements for Children?" Washington, DC: The Urban Institute.
- Pettit, Kathryn L.S. 2012. "The Foreclosure Crisis and Children: A Three-City Study." Washington, DC: The Urban Institute.
- Pribesh, Shana, and Douglas B. Downey. 1999. "Why Are Residential and School Moves Associated with Poor School Performance?" *Demography* 36(4): 521–34.
- Pungello, Elizabeth P., Kristen Kainz, Margaret Burchinal, Barbara H. Wasik, Joseph J. Sparling, Craig T. Ramey, and Frances A. Campbell. 2010. "Early Education Intervention, Early Cumulative Risk, and the Early Home Environment as Predictors of Young Adult Outcomes within a High-Risk Sample." *Child Development* 81(1): 410–26.
- Raikes, Helen. 1996. "A Secure Base for Babies: Applying Attachment Theory Concepts to the Infant Care Setting." *Young Children* 51(5): 59–67.
- Ramsey, Rebecca, Katrina Giskes, Gavin Turrell, and Danielle Gallegos. 2011. "Food Insecurity among Australian Children: Potential Determinants, Health and Developmental Consequences." *Journal of Child Health Care* 15(4): 401–16.
- Reynolds, Arthur J., Chin-Chih Chen, and Janette E. Herbers. 2009. "Evidence on Prevention." Presentation for the workshop on the Impact of Mobility and Change on the Lives of Young Children, Schools, and Neighborhoods, The National Academies, Washington, DC, June 29–30.

- Rothstein, Richard. 2004. *Class and schools: Using Social, Economic, and Educational Reform to Close the Black-White Achievement Gap*. Washington, DC: Economic Policy Institute
- Rothwell, David W., and Chang-Keun Han. 2010. "Exploring the Relationship between Assets and Family Stress among Low-Income Families." *Family Relations* 59: 396–407.
- Rumbold, Alice R., Lynne C. Giles, Melissa J. Whitrow, Emily J. Steele, Christopher E. Davies, Michael J. Davies, and Vivienne M. Moore. 2012. "The Effects of House Moves during Early Childhood on Child Mental Health at Age 9 Years." *BMC Public Health* 12(583).
- Sandstrom, Heather, and Ajay Chaudry. 2012. "‘You Have to Choose Your Childcare to Fit Your Work’: Childcare Decision-Making among Low-Income Working Families." *Journal of Children and Poverty* 18(2): 89–119.
- Sarsour, Khaled, Margaret Sheridan, Douglas Jutte, Amani Nuru-Jeter, Stephen Hinshaw, and W. Thomas Boyce. 2010. "Family Socioeconomic Status and Child Executive Functions: The Roles of Language, Home Environment and Single Parenthood." *Journal of International Neuropsychological Society* 17: 120–32.
- Schoon, Ingrid, Elizabeth Jones, Helen Chang, and Barbara Maughan. 2011. "Family Hardship, Family Instability and Children’s Cognitive Development." *Journal of Epidemiology and Community Health* 66(8): 716–22.
- Scott, Ellen K., Andrew S. London, and Allison Hurst. 2005. "Instability in Patchworks of Child Care when Moving from Welfare to Work." *Journal of Marriage and Family* 67(2): 370–86.
- Sell, Katherine, Sarah Zlotnik, Kathleen Noonan, and David Rubin. 2010. "The Recession and Housing Stability." Washington, DC: First Focus.
- Shamama-tus-Sabah, Syeda, and Nighat Gilani. 2011. "Household Chaos, Attention, and School Problems in Primary School Children." *Journal of Behavioral Sciences* 21(1): 68–79.
- Shonkoff, Jack P. 2013. "Driving Science-Based Innovation to Reduce Intergenerational Poverty." Keynote address at the Welfare Research and Evaluation Conference, Washington, DC, May 29.
- Shonkoff, Jack P., and Andrew S. Garner. 2011. "The Lifelong Effects of Early Childhood Adversity and Toxic Stress." *Pediatrics* 129: 232–46.
- Shonkoff, Jack P., and Deborah Phillips, eds. 2000. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Committee on Integrating the Science of Early Childhood Development. Washington DC: National Academy Press.
- Stevens, Ann Huff, and Jessamyn Schaller. 2011. "Short-Run Effects of Parental Job Loss on Children’s Academic Achievement." *Economics of Education Review* 30(2): 289–99.
- Tanner, Emily M., and Matia Finn-Stevenson. 2002. "Nutrition and Brain Development: Social Policy Implications." *American Journal of Orthopsychiatry* 72(2): 182–93.
- Taylor, Matthew, and Ben Edwards. 2012. "Housing and Children’s Wellbeing and Development: Evidence from a National Longitudinal Study." *Family Matters*, No. 91.
- Temple, Judy A., and Arthur J. Reynolds. 1999. "School Mobility and Achievement: Longitudinal Findings from an Urban Cohort." *Journal of School Psychology* 37(4): 355–77.
- Thompson, Ross A. 2000. "The Legacy of Early Attachments." *Child Development* 71(1): 145–52.

- Tran, Henry, and Marsha Weinraub. 2006. "Child Care Effects in Context: Quality, Stability, and Multiplicity in Nonmaternal Child Care Arrangements during the First 15 Months of Life." *Developmental Psychology* 42(3): 566–82.
- US Governmental Accountability Office (GAO). 2011. "Many Challenges Arise in Educating Students Who Change Schools Frequently." GAO 11-40. Washington, DC: GAO.
- Udansky, Margaret L., and Douglas A. Wolf. 2008. "When Child Care Breaks Down: Mothers' Experiences with Child Care Problems and Resulting Missed Work." *Journal of Family Issues* 29:1185–1211.
- Waters Boots, Shelly, Jennifer Macomber, and Anna Danziger. 2008. "Family Security: Supporting Parents' Employment and Children's Development." Washington, DC: The Urban Institute.
- Weber, Roberta B. 2005. *Measurement of Child Care Arrangement Stability: A Review and Case Study Using Oregon Child Care Subsidy Data*. Ph.D. dissertation, Oregon State University.
- Whittaker, Jessica E. V., Brenda Jones Harden, Heather M. See, Allison D. Meisch, and T'Pring R. Westbrook. 2011. "Family Risks and Protective Factors: Pathways to Early Head Start Toddlers' Social-Emotional Functioning." *Early Childhood Research Quarterly* 26: 74–86.
- Yeung, W. Jean, and Sandra Hofferth. 1998. "Family Adaptations to Income and Job Loss in the U.S." *Journal of Family and Economic Issues* 19(3): 255–83.
- Youngblade, Lise M. 2003. "Peer and Teacher Ratings of Third- and Fourth-Grade Children's Social Behavior as a Function of Early Maternal Employment." *Journal of Child Psychology and Psychiatry* 44(4): 477–88.
- Zedlewski, Sheila, and Austin Nichols. 2012. "What Happens to Families' Income and Poverty after Unemployment?" Washington, DC: The Urban Institute.
- Ziol-Guest, Kathleen M., and Ariel Kalil. 2013. "Long-Run Impact of Childhood Housing Instability on Adult Achievement." Paper presented at the biennial meeting for the Society for Research in Child Development, Seattle, April 20.

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