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# Beyond residential mobility: A broader conceptualization of instability and its impact on victimization risk among children\*

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#### Abstract

Predictability in a child's environment is a critical quality of safe, stable, nurturing relationships and environments, which promote wellbeing and protect against maltreatment. Research has focused on residential mobility's effect on this predictability. This study augments such research by analyzing the impact of an instability index—including the lifetime destabilization factors (LDFs) of natural disasters, homelessness, child home removal, multiple moves, parental incarceration, unemployment, deployment, and multiple marriages—on childhood victimizations. The cross-sectional, nationally representative sample of 12,935 cases (mean age = 8.6 years) was pooled from 2008, 2011, and 2014 National Surveys of Children's Exposure to Violence (NatSCEV). Logistic regression models controlling for demographics, socio-economic status, and family structure tested the association between excessive residential mobility, alone, and with LDFs, and past year childhood victimizations (sexual victimization, witnessing community or family violence, maltreatment, physical assault, property crime, and polyvictimization). Nearly 40% of the sample reported at least one LDF. Excessive residential mobility was significantly predictive of increased odds of all but two victimizations; almost all associations were no longer significant after other destabilizing factors were included. The LDF index without residential mobility was significantly predictive of increased odds of all victimizations (AOR's ranged from 1.36 to 1.69), and the adjusted odds ratio indicated a 69% increased odds of polyvictimization for each additional LDF a child experienced. The LDF index thus provides a useful alternative to using residential moves as the sole indicator of instability. These findings underscore the need for comprehensive supports and services to support stability for children and families.

None to declare.

<sup>\*</sup>The findings and conclusions in this paper are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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#### **Keywords**

Childhood victimization; Residential mobility; Stability; Instability; Polyvictimization

#### 1. Introduction

Children rely on their expectations of the world around them to feel safe and secure, and to form the trusting relationships that become the foundations of their health and wellbeing across their life course. The Center on the Developing Child (2018) highlights the importance of stable routines and environments for the development of strong executive function skills and the Centers for Disease Control and Prevention's (CDC) Essentials for Childhood framework asserts that the degree of predictability in a child's social, emotional, and physical environment is a critical quality of safe, stable, nurturing relationships and environments, which are imperative for preventing child maltreatment and assuring health and wellness (CDC, 2014). Although some transitions, such as the move from elementary to middle school, are expected and normative, pervasive and repetitive instability in multiple domains of life can greatly undermine predictability, which can introduce uncertainty, stress, and exposure to other risks for health problems like violence (Turner, Finkelhor, Hamby, & Shattuck, 2013). As such, stability is an important construct to examine for its potential protective impact on future violence and victimization. Prior research has established that lack of residential stability is a risk factor for child maltreatment (Desmond, Gershenson, & Kiviat, 2015; Herrenkohl, Herrenkohl, & Egolf, 2003), but existing research has been limited in its conceptualization of stability and in the number of outcomes explored. This paper presents nationally representative data using a new, expanded conceptualization of residential instability as a risk factor for a range of victimization outcomes.

#### 1.1. Residential mobility as instability

When measured as residential mobility alone, residential instability has a well-established link to problem, aggressive, criminal, and violent behaviors, with more moves increasing the risk of each (Derzon, 2010). Instability, often measured as an excessive number of moves since birth (Gilman, Kawachi, Fitzmaurice, & Buka, 2003), can be a common feature in the lives of maltreated children due in part to out of home placements or changes in caretakers (Herrenkohl et al., 2003). As Desmond et al. (2015) note, this type of residential instability can also act as a catalyst for other forms of instability in families, which can in turn increase the risk of children experiencing violence and victimization.

Residential mobility is common in low-income families, as financial uncertainty is often accompanied by frequent residential relocations. For example, from 2005 to 2010, residents below the poverty line had a 52.5% moving rate, compared to people at or above 150% of poverty with a moving rate of only 31.6% (Ihrke & Faber, 2012). Young children often have little say in these relocations but experience associated consequences (both positive and negative). For instance, attendance at a new school can leave some children struggling with new academic content and changes in peer groups can leave some children feeling socially isolated and vulnerable (Adam, 2004). Homeless children are a particularly vulnerable population due to high levels of residential mobility. As Kirkman, Keys, Bodzak, and Turner

(2010) elaborate, homelessness can leave children feeling a range of negative emotions, including confusion, anger, and sadness, and they may begin to see unsteadiness as the norm. Homeless children also exhibit mental health issues at high levels (Bassuk, Richard, & Tsertsvadze, 2015). In addition, interfamilial abuse, caregiver abuse, and peer rejection are all common environmental characteristics for homeless youth (Ferguson, 2009).

#### 1.2. Other forms of instability

Stability within the family structure can also be interrupted by parental separation, divorce, and remarriage. Fomby and Cherlin (2007) found a positive association between family structure variability and behavioral problems in childhood and adolescence. Several scholars have hypothesized that remarriage, at least in the short-term, can be more detrimental to a child's wellbeing than a single-parent household due to the uncertainty and unpredictability associated with remarriage and blended families (Apel & Kaukinen, 2008; Hetherington, Bridges, & Insabellla, 1998). Furthermore, divorce and remarriage are often accompanied by residential moves and new economic situations, which could introduce additional stressors to children's lives. Of course, it is important to note that changes in stability are complex, and do not always confer risk. For example, Barile, Edwards, Dhingra, and Thompson (2015) found that divorce was protective of later health-related quality of life for adults who had childhood histories of high levels of family conflict in childhood.

Parental incarceration and deployment can also hinder childhood stability, as both involve separations, relocations, changes in routine, and other changes in family structure. The Department of Defense (DoD) reported a 50% increase in outpatient mental health visits for children of active-duty service members between 2003 and 2008 (Hefling, 2009). While the increase could be due to multiple factors, Hefling (2009) suggests that one reason for this increase is stress due to deployment, which can affect the non-deploying/at-home parent, and, consequently, also the children in the home. Parental deployment has also been associated with maladjustment for children and adolescents during the middle school years (Card et al., 2011), as well as sadness and concentration problems (Orthner & Rose, 2005), heightened levels of anxiety (Lester et al., 2010), increased risk of sensation-seeking behavior (Dahl, 2004), post-traumatic stress, increased blood pressure, and heart rate (Barnes, Davis, & Treiber, 2007). The at-home parent also faces new stressors, less support, and increased responsibilities, all of which can make him/her more likely to perpetrate child maltreatment. Indeed, rates of child maltreatment are higher during the deployment of a parent relative to nondeployment, often due to increases in rates of child neglect (Gibbs, Martin, Kupper, & Johnson, 2007; McCarthy et al., 2015; Rentz et al., 2007).

Perhaps one of the most overlooked consequences of mass incarceration is the millions of children living with the many repercussions of being separated from a parent (Travis & Waul, 2003). Over half of the U.S. prisoner population consists of parents with children under age 18 years (Glaze & Maruschak, 2011). Children of incarcerated parents must adjust to this major shift in family structure and are exposed to a host of uncertainties. Boys who grow up with an incarcerated parent are more likely to have internalizing problems, such as sleep disturbance, bedwetting, concentration problems, sadness, and withdrawal, and engage in antisocial behavior during adolescence and adulthood (Murray & Farrington, 2008).

Murray, Farrington, Sekol, and Olsen (2009) reported a significant association between parental incarceration and children's mental health problems.

#### 1.3. The current study

This study is unique in two respects: first, it examines the effect of instability on multiple childhood victimization experiences, beyond child maltreatment alone. Second, it utilizes an expanded index to measure components of instability that incorporate familial relations, incarceration, deployment, homelessness, relocations, and other factors that can compromise the predictability of a child's life beyond number of moves alone. By examining these other lifetime destabilizing factors (LDFs) and their cumulative impact on various childhood victimization experiences in a normative sample, we can elucidate key prevention indicators.

#### 2. Methods

#### 2.1. Data

The analysis that follows utilizes data from the National Surveys of Children's Exposure to Violence (NatSCEV), three cross-sectional studies collected from nationally-representative samples of youth aged one month to seventeen years in 2008, 2011, and 2014. Interviews began with an adult caregiver in each household to collect family demographic information. One child was randomly selected from all eligible children living in a household by sampling the child with the most recent birthday. Interviews were conducted with children 10 years and older about their victimization experiences, family and community adversities, and other topics. For sampled children under age 10, the primary caregiver answered as a proxy for the child.

#### 2.2. Sample

The samples from each of the three surveys utilize a mix of random digit dialing (RDD) as well as targeted oversampling of households with children; cell phone only households; and/or underrepresented racial groups. Sample weights adjusted for differential probability resulting from both this complex study design as well as variations within household eligibility and non-response by demographic characteristics. The analysis here relies on pooled data from these three years for a total sample size of 12,935 cases with non-missing sociodemographic data. Note that for some tables sample sizes are slightly lower (as noted) because of question skip patterns due to sampled person's age and due to item nonresponse. A summary of weighted demographic characteristics can be found in Table 3. The average age of children was 8.6 years and the average socio-economic status (SES) value is standardized to have a mean of approximately zero (–0.07). In general, values below zero mean below average SES and above zero indicate SES is above average. The lowest score is –2.5 and the highest is 1.8.

#### 2.3. Measurement

The literature cited earlier in this paper summarizes the outcomes for children subjected to excessive residential mobility. We, too, examine this effect by considering the impact of the number of lifetime moves for children on six types of victimization experiences as well as the risk for being the victim of multiple types of victimizations. However, this analysis

expands upon prior research by incorporating several other aspects of home, family, and community in a more inclusive index of childhood residential instability, as described below.

**2.3.1. Dependent variables**—Our analysis focuses primarily on the effect of residential instability on the odds of childhood victimization. We examine the effect separately for six domains of victimization occurring in the last year: experiencing property crime, physical assault, child maltreatment, sexual victimization, being a witness to family violence, or being a witness to community violence. In addition, we examine the effect on polyvictimization, that is, the odds associated with experiencing three or more of these domains of victimization. Our data show that 16.8% of children meet this criterion for polyvictimization.

Aside from asking about property crimes only for children aged 2 and older, all other forms of victimization were measured for all sampled children using the Juvenile Victimization Questionnaire (JVQ), a standard instrument which asks about multiple forms of each type of abuse. Specific question wording is provided in Appendix A.

**2.3.2.** Independent variable—Our lifetime destabilizing factor index incorporates indicators for seven types of household instability. Specifically, these include whether any of the following destabilizing factors occurred during the child's life: having the family home damaged in a natural disaster; having to live on the street or in a shelter; child having been removed from the home; having a parent who experienced unemployment; having a parent who was sent to prison; having a parent who was deployed; and having a parent who has been married two or more times. Separately, we include a traditional measure of residential mobility by noting whether a child had moved an excessive number of times, or more than once every 3.33 years. Approximately 25% of the children in our sample experience excessive residential relocation according to this definition. Table 1 below shows the question wording for the items included in this measure along with the distribution of endorsements to each item.

As prior research has shown, several of these destabilizing factors often co-occur, and we hypothesize that it is not only residential mobility that has an impact on victimization likelihood (among other negative childhood outcomes), but also the cumulative effect of experiencing multiple types of instability. The tables that follow employ logistic regression to examine the impact of residential instability on the adjusted odds of experiencing six different types of victimization and one measure of polyvictimization. The two sets of models control for a variety of demographics, including the child's age, race/ethnicity, sex, family socio-economic status (a standardized measure of parent's education and household income), and household structure. In the first set of models for each dependent variable, we include a traditionally-utilized measure: excessive residential mobility. This is a dichotomous measure where children are coded as 1 if they experienced more than one move for every 3.33 years of life, the average number of moves per year in this sample. The second set of models build on this by adding a count of other non-residential mobility forms of instability, our LDF Index. We display odds ratios for the components of the models we discuss as well as summary statistics for each model in order to evaluate how our measures perform.

### 3. Results

In total, 39.7% of children reported at least one of the seven destabilizing factors in their lifetime, with 26.3% reporting only one, 9.6% reporting two, and 3.8% reporting three or more. The overlap of LDFs reported is presented in Table 2 for reference, including the traditional residential mobility measure that we do not count in our LDF counts. Note that there is substantial overlap between several categories, particularly parental unemployment with factors such as imprisonment, homelessness, and having a child removed from the home. Focusing on the final row of the table, we note the overlap between excessive residential mobility and these other LDFs is consistently high, which emphasizes the extent to which excessive moves may be related to these other destabilizing experiences. A primary interest of ours is understanding the impact that multiple LDFs have on the child's risk for victimization. Thus, we focus on the number of destabilizing factors a child experienced rather than which specific types of challenges they faced.

Demographic characteristics by type of LDF are presented in Table 3. Overall, the weighted sample was 51.2% male, with 60.7% from two parent households, and 56.8% White, non-Hispanic.

In general, non-Hispanic White children were less likely to be exposed to LDFs compared to children of other races or ethnicities. Although they represent 56.8% of all children, non-Hispanic White children represent only 39% of children who experienced homelessness, 54% of children who had a parent experiencing job loss, 53.3% of children with a parent who had two or more marriages, and just 45.8% of children with a parent who had been incarcerated. By contrast, non-Hispanic Blacks represent 14.5% of all children, but represent a significantly higher share (compared to non-Hispanic Whites and Hispanic children) of all children experiencing homelessness (33.8%), parental incarceration (24.1%), or children with a parent having two or more marriages (19.1%). One exception to the advantage in stability that non-Hispanic White children face is parental deployment; non-Hispanic White children were more likely to have a parent deployed (62.2%) compared to Hispanic children (16.4%) and children of some other race or ethnicity (21.4%; p < 0.05). Children in twoparent households are also less likely to be exposed to these LDFs compared to those in most other family arrangements. Specifically, they are significantly less likely than singleparent or step-parent households to experience a housing disaster, homelessness, being sent away from home, excessive marriages, or excessive moves (p < 0.05).

The relationship between LDFs and each of the six prior year childhood victimization domains was computed in two sets of logistic regression models, as described above. The first set of models in Table 4 presents the results using a traditional measure of residential instability: excessive residential mobility. The adjusted odds ratios (AOR's) presented here demonstrate that when examined as a sole measure of residential instability (while controlling for demographic characteristics), excessive residential mobility predicts an increased AOR of being a victim in the prior year of physical assault (AOR-1 = 1.36), maltreatment (AOR-1 = 1.34), being a witness in the prior year to family violence (AOR-1 = 1.47), being a witness in the prior year to community violence (AOR-1 = 1.29), and being a polyvictim (that is, experiencing three or more of the six types of victimizations measured,

AOR-1 = 1.34). For the other two forms of prior year victimizations (property crime and sexual victimization), the impact of excessive residential mobility is not statistically significant, though the AOR's are in the same direction as the other measures. Taken together, these findings indicate that children who change residences an excessive number of times experience increased odds of being victimized, which is consistent with previous literature using residential mobility as a measure of stability.

In the second set of models, we explore how prediction could be improved by adding a composite measure of the other LDFs to the equation. These AOR's show that the count of LDFs (values ranging from 0 to 7) has a statistically significant (p< 0.001 for all forms of victimization) association with the odds of each of the six forms of victimization as well as the polyvictimization measure (Table 4). However, in most cases, excessive residential mobility is no longer significant when the count of other LDFs is taken into account; the only odds ratio which remains statistically significant (p< 0.05) is the physical assault measure. To compare whether incorporating our LDF Index offers a statistically significant improvement in model fit, we calculated a likelihood-ratio test to compare the two models. For each of the seven dependent variables, using the LDF Index as the predictor (Model 2) resulted in statistically significant improvement in fit (p< 0.001) compared to the model with only excessive residential mobility (Model 1).

In addition to the associations between instability and each victimization domain, LDF Index counts were also associated with increased risk of experiencing prior year polyvictimization (AOR-2 = 1.69; see Table 4). As such, the more destabilizing factors that children experienced over their lifetimes, the more likely they were to experience at least three domains of victimizations in the prior year. The adjusted odds ratio indicates a 69% increased odds of polyvictimization for each additional LDF a child experiences. It is worth noting that 13% of youth experienced two or more LDFs. The number of LDFs appears to be a strong predictor of poly-victimization as well as every individual type of victimization we analyzed.

#### 4. Discussion

The results from the current study suggest that our LDF Index is strongly associated with each type of prior year victimization among children. This index provides an expanded conceptualization of household instability, counting destabilizing factors other than excessive residential mobility. For most outcomes examined, excessive moves, the traditional indicator of household instability, became nonsignificant once the LDF Index was included in the model.

Scores on the index were associated with increased odds of all experiences of childhood victimization in the prior year for each of the seven victimization dependent variables (i.e., property crime, physical assault, maltreatment, sexual victimization, witnessed family violence, witnessed community violence, polyvictimization). As such, the more destabilizing factors children experienced throughout their lives, the greater their likelihood of being victimized in the past year. Furthermore, the LDF index significantly explained more variance in the model than residential mobility alone.

Our findings are generally consistent with past literature on stability, but our expanded operationalization demonstrates that an accumulation of multiple types of instability is associated with adverse outcomes. These findings are consistent with studies on Adverse Childhood Experiences (ACEs) that repeatedly find that for every increase in ACE Score (or LDF in the current study), the odds for experiencing negative health outcomes (childhood victimization here) also increases (Felitti et al., 1998). Our data also provide national estimates of the prevalence and consequences of having experienced multiple lifetime destabilizing factors. By focusing on the cumulative impact of multiple types of destabilizing factors in describing residential instability, we highlight how residential mobility alone can be insufficient as it relates to understanding the ways in which multiple moves impact children. Because some residential mobility occurs for positive reasons - to a larger home for a growing family, as a result of a better-paying job for a parent, or to a community with higher-performing schools – it may be the case that when residential mobility is correlated to negative outcomes for children that this is a proxy for some of the other destabilizing factors in the child's life. In fact, in this study, residential mobility as measured by excessive moves alone was no longer significant for six of the seven outcomes after adjusting for the LDF Index.

There are some limitations to this analysis. For instance, our analysis focused on *lifetime* destabilizing factors because many LDFs may have long-term effects that expose children to complicated situations that they might not have otherwise experienced. The comparison of lifetime destabilizing factors with prior year victimizations is helpful for testing the cumulative effect of LDF's, but it might underestimate the effects of immediate risks. For example, it is unclear how instability resulting from excessive moves in the past year would compare to other LDF's in predicting victimization. Additionally, it is possible for youth to experience a single incident in their lives (e.g., natural disaster) that results in multiple destabilizing factors (e.g., temporary homelessness, parental job loss, and residential mobility). It is not possible for us to disentangle the number of negative events from the number of self-reported destabilizing factors in this study.

The CDC's technical package to prevent child abuse and neglect includes a number of strategies based on the best available evidence, including strengthening economic supports to families, providing quality care and education early in life, enhancing parenting skills to promote healthy child development, changing social norms to support parents and positive parenting, and intervening to lessen harms and prevent future risk (Fortson, Klevens, Merrick, Gilbert, & Alexander, 2016). The technical package includes specific approaches and examples of programs, policies, or practices for each strategy along with descriptions of the evidence. These strategies can increase stability, modify other risk and protective factors for child abuse and neglect, and reduce child victimization. For instance, housing assistance to low-income families significantly reduces homelessness, the number of household moves, and poverty, as well as improves the well-being of families with young children, all factors associated with child violence victimization (Abt Associates et al., 2006).

Strategies to increase stability and related positive outcomes for youth likely need collaboration among sectors. For example, the McKinney-Vento Homeless Assistance Act outlines approaches by multiple federal agencies to increase housing, food, and education

stability for homeless youth and families (National Coalition for the Homeless, 2006). As part of this Act, the Education of the Homeless Children and Youth program aims to create stability and continuity for children by enabling them to remain in a school even if their families relocate out of the district, providing school transportation, and creating collaboration between education and housing authorities to meet the needs of the youth and family (National Center for Homeless Education, 2017). Multiple federal agencies also support a coordinated and comprehensive approach to help military families cope with instability, transitions, and uncertainty by providing services to enhance their well-being and psychological health, ensuring the educational development of children, supporting the career and educational opportunities for spouses, and increasing the availability and quality of child care (White House, 2011).

Families with multiple risk factors for instability, child abuse and neglect, and other forms of child development and behavior difficulties likely need comprehensive and intensive support services to create safe, stable, nurturing relationships and environments for children. A combination of services designed for youth, parents, and families might be needed to address difficulties that have emerged as well as to prevent future problems.

Multidimensional Treatment Foster Care and Multisystemic Therapy are examples of intensive, multi-component programs designed for families with multiple risk factors.

Although primarily implemented to help families address youth's chronic behavior problems, participants of Multidimensional Foster Care often have histories of child abuse and Multisystemic Therapy has been associated with decreased rates of child maltreatment and out-of-home placements (Fisher & Gilliam, 2012; Schaeffer, Swenson, Tuerk, & Henggeler, 2013).

In summary, the Lifetime Destabilizing Factor Index is strongly associated with each type of victimization examined, including polyvictimization. The index provides a useful alternative to simply measuring the number of residential moves in research examining the health effects of household instability. The range of destabilizing factors included in the index provides helpful directions for research and practice efforts to understand and enhance protective factors that can reduce or mitigate risks within vulnerable families.

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# **Appendix A. Victimization measures**

#### **Conventional Crime**

- At any time in (your child's/your) life, did anyone use force to take something away from (your child/you) that (he/she was/ you were) carrying or wearing?
- C2 At any time in (your child's/your) life, did anyone steal something from (your child/you) and never give it back? Things like a backpack, money, watch, clothing, bike, stereo, or anything else?
- C3 At any time in (your child's/your) life, did anyone break or ruin any of (your child's/your) things on purpose?
- C4 At any time in (your child's/your) life, did anyone hit or attack (your child/you) on purpose with an object or weapon? Somewhere like: at home, at school, at a store, in a car, on the street,

C5 At any time in (your child's/your) life, did anyone hit or attack (your child/you) WITHOUT using an object or weapon?

- C6 At any time in (your child's/your) life, did someone start to attack (your child/you), but for some reason, it didn't happen? For example, someone helped (your child/you) or (your child/you) got away?
- C8 At any time in (your child's/your) life,

#### Child maltreatment

- M1 Not including spanking on (his/her/your) bottom, at any time in (your child's/your) life did a grown-up in (your child's/your) life hit, beat, kick, or physically hurt (your child/you) in any way?
- M2 At any time in (your child's/your) life, did (your child/you) get scared or feel really bad because grown-ups in (your child's/your) life called (him/her/you) names, said mean things to (him/her/you), or said they didn't want (him/her/you)?
- When someone is neglected, it means that the grown-ups in their life didn't take care of them the way they should. They might not get them enough food, take them to the doctor when they are sick, or make sure they have a safe place to stay. At any time in (your child's/your) life, (was your child/were you) neglected?
- M4 At any time in (your child's/your) life did a parent take, keep,

# Peer and sibling victimization

- P1 At any time in (your child's/your) life, did a group of kids or a gang hit, jump,
- P2 (If yes to P1, say: "Other than what you just told me about...") At any time in (your child's/your) life, did any kid, even a brother or sister, hit (your child/you)? Somewhere like: at home, at school, out playing, in a store, or anywhere else?
- P3 At any time in (your child's/your) life, did any kids try to hurt (your child's/your) private parts on purpose by hitting or kicking (your child/you) there?
- **P6** At any time in your life, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?

### Sexual victimization

At any time in (your child's/your) life, did a grown-up (your child knows/you know) touch (your child's/your) private parts when they shouldn't have or make (your child/you) touch their private parts? Or did a grown-up (your child knows/you know) force (your child/you) to have sex?

S2 At any time in (your child's/your) life, did a grown-up (your child/you) did not know touch (your child's/your) private parts when they shouldn't have, make (your child/you) touch their private parts or force (your child/you) to have sex?

- S3 At any time in (your child's/your) life,
- At any time in (your child's/your) life, did anyone TRY to force (your child/you) to have sex, that is sexual intercourse of any kind, even if it didn't happen?
- At any time in (your child's/your) life, did anyone make (your child/you) look at their private parts by using force or surprise, or by "flashing" (your child/you)?
- At any time in (your child's/your) life, did anyone hurt (your child's/your) feelings by saying or writing something sexual about (your child/you) or (your child's/your) body?

# Witnessing and indirect victimizations

- W1 At any time in (your child's/your) life, did (your child/you) SEE a parent get pushed, slapped, hit, punched, or beat up by another parent, or their boyfriend or girlfriend?
- W2 At any time in (your child's/your) life, did (your child/you) SEE a parent hit, beat, kick, or physically hurt (his/her/your) brothers or sisters, not including a spanking on the bottom?
- W3 At any time in (your child's/your) life, in real life, did (your child/you) SEE anyone get attacked or hit on purpose WITH a stick, rock, gun, knife, or other thing that would hurt? Somewhere like: at home, at school, at a store, in a car, on the street, or anywhere else?
- W4 At any time in (your child's/your) life, in real life, did (your child/you) SEE anyone get attacked or hit on purpose WITHOUT using a stick, rock, gun, knife, or something that would hurt?
- W5 At any time in (your child's/your) life, did anyone steal something from your house that belongs to (your child's/your) family or someone (your child/you) live with? Things like a TV, stereo, car, or anything else?
- W6 At any time in (your child's/your) life, was anyone close to (your child/you) murdered, like a friend, neighbor, or someone in (your child's/your) family?
- W8 At any time in (your child's/your) life, (was your child/were you) in any place in real life where (he/she/you) could see or hear people being shot, bombs going off, or street riots?
- W9 At any time in (your child's/your) life, (was your child/were you) in the middle of a war where (he/she/you) could hear real fighting with guns or bombs?

## **Exposure to family violence (additional items)**

**EF2** At any time in (your child's/your) life, did one of (your child's/your) parents, because of an argument, break or ruin anything belonging to another parent, punch the wall, or throw something?

**EF6** Now we want to ask you about fights between any grown-ups and teens, not just between (your child's/your) parents. At any time in (your child's/your) life, did any grown-up or teen who lives with (your child/you) push, hit, or beat up someone else who lives with (your child/you), like a parent, brother, grandparent, or other relative?

# **Aggregated measures**

- 1. Any Physical Assault: Child experienced any physical assault victimization in the prior year (any of screener items C4, C5, C6, C8, M1, P1, P2, P3, P6).
- **2.** Any Property Victimization: Child experienced any property victimization in the prior year (any of screener items C1, C2, C3).
- **3.** Any Maltreatment: Child experienced any maltreatment victimization in the prior year (any of screener items M1, M2, M3, M4).
- **4.** Any Sexual Victimization: Child experienced any sexual victimization in the prior year (any of screener items S1, S2, S3, S4, S5, S6).
- **5.** Witnessing Family Violence: Child exposed to any family violence in the prior year (any of screener items W1, W2, EF2, EF6).
- **6.** Witnessing Community Violence: Child exposed to any community violence in the prior year (any of screener items W3, W4, W5, W6, W8, W9).
- **7.** Polyvictimization: Child experienced victimization in the prior year in any 3 of the 6 preceding categories, omitting any overlap of items endorsed.

Table 1

Measures used to construct Lifetime Destabilizing Factor Index (range 0-7, mean = 0.58, sd = 0.82, n = 12,935).

Question wording	Percentage Responding "Yes" during lifetime
Have there ever been any times when your mother, father, or guardian lost a job or couldn't find work?	22.9%
At any time in your life did either of your parents, a stepparent, or guardian ever have to go to prison?	7.3%
In your whole life, were you ever in a very bad fire, flood, tornado, hurricane, earthquake or other disaster? This would be a time that your home or apartment was damaged and you might have had to live somewhere else for a while.	7.2%
Did a parent or someone who takes care of you ever have to leave the country to fight in a war, when he or she had to be away for several months or longer?	6.7%
Was there ever a time in your life when your family had to live on the street or in a shelter because they had no place to stay?	2.8%
Were you ever sent away or taken away from your family for any reason?	2.7%
[From the caretaker interview] Counting your current partner, how many different spouses or live-in partners have you had since your [child] was born? (Instability count for any cases greater than two).	8.5%
Traditional measure of stability, not in LDF Index [From the caretaker interview] How many times has your [child] moved households since he/she was born? (Response divided by child's age is greater than 0.3, or more than once every 3.3 years)	25.4%

Note: question wording is for children 10 and older. For those aged 1 month to 9 years, questions were asked of primary caretaker about "any time in your child's life".

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Table 2

Percentage of Lifetime Destabilizing Factors (LDFs) co-occurring with others.

	House damaged in fire/flood (n = 962)	Lived on street/ shelter $(n = 291)$	Child sent away $(n = 347)$	Parent job loss $(n = 2,918)$	Parent in prison $(n = 870)$	Parent deployed $(n = 786)$	Parent has $2 + $ marriages $(n = 914)$
House damaged in fire/flood	I	18.9%	%6.6	11.9%	12.7%	12.8%	10.0%
Lived on street/shelter	7.4%	I	15.6%	7.8%	12.1%	5.6%	7.6%
Child sent away	3.7%	14.9%	I	5.6%	%9.6	6.3%	9.1%
Parent job loss	38.0%	63.7%	47.7%	I	48.9%	27.2%	36.2%
Parent in prison	12.9%	31.5%	26.1%	15.6%	I	11.6%	19.5%
Parent deployed	11.9%	13.3%	15.7%	8.0%	10.7%	I	10.4%
Parent has 2 + marriages	11.8%	23.2%	28.8%	13.5%	22.8%	13.2%	I
Excessive # moves for age (> 1/3.33yrs)	26.1%	64.7%	48.4%	35.3%	45.3%	37.9%	44.8%

Note: Cells should be read as column percentages.

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Demographic characteristics of children/households by type of LDF experienced and traditional residential instability measure.

	Overall	Гиепт	e Destal	Overall Lifetime Destabilizing Factors (LDFs)	ors (LDFs)											Traditional measure	measure
		House damaged in fire/ flood	d in	Lived on st	ived on street/shelter	Child sent away	ıt away	Parent jo	ssol qo	Parent in	prison	Parent job loss Parent in prison Parent deployed	ployed	Parent has 2 + marriages	as 2 iges	Excessive # moves	moves
Family SES (mean)	-0.07	-0.06		-0.93	**	-0.55	**	-0.33	* * * *	-0.68	* * *	-0.08		-0.50	**	-0.32	***
Child's age (mean)	8.63	10.72	**	10.05	* * *	10.71	**	9.12	**	10.57	* * *	9.84	* * *	11.06	**	6.92	**
Child's sex			*														
$Male^a$	51.2%	56.5%		45.3%		52.7%		49.2%		50.7%		54.7%		52.3%		52.2%	
Female <sup>b</sup>	48.8%	43.5%		54.7%		47.3%		80.9%		49.3%		45.3%		47.7%		47.8%	
Child's race/ethnicity					* * *				*		* *		* *		**		***
Non-Hispanic Whitea	56.8%	52.7%		39.0%	p	57.1%		54.0%	q	45.8%	b,c	62.2%	c,d	53.3%	þ	53.4%	b,c
Non-Hispanic Black <sup>b</sup>	14.5%	16.9%		33.8%	a,c,d	15.0%		17.1%	p,e	24.1%	a,c,d	16.2%		19.1%	a,d	15.8%	а
Hispanic (any race) <sup>c</sup>	20.6%	20.1%		20.6%	p	17.1%		21.7%		22.8%	a,b	16.4%	а	21.2%		22.6%	а
Other, non- Hispanic <sup>d</sup>	7.8%	10.3%		%9.9	p	10.7%		7.3%	<b>P</b>	7.4%	þ	5.2%	а	6.5%	þ	8.3%	
Household structure			*		* * *		*		*		*		*		*		**
Two parent <sup>a</sup>	%2.09	53.5%	b,c	14.5%	b,c,d	24.6%	b,c,d	45.4%	b,c,d	18.0%	b,c,d	51.9%	p,d	7.4%	b,c,d	45.9%	b,c,d
Single parent <sup>b</sup>	26.9%	30.2%	В	%0.09	a,c,d	37.3%	a,d	36.7%	а	53.8%	a,d	34.7%	в	41.1%	a,c,d	33.3%	a,c,d
Parent and step <sup>c</sup>	8.0%	10.9%	в	11.4%	a,b,d	14.3%	a,d	11.3%	в	14.2%	a,d	7.5%		48.0%	a,b,d	14.1%	a,b
Other adult <sup>d</sup>	4.3%	5.5%		14.2%	a,b,c	23.8%	a,b,c	%9.9	а	14.0%	a,b,c	5.9%	а	3.5%	a,b,c	6.7%	a,b

Note:

 ${*\atop p<0.05;} * \\ {**\atop p<0.01;}$ 

\*\*\* p < 0.001 for t-tests comparing average experiencing LDF versus those not (average Family SES and child's age) and ANOVA for categorical variables (household structure, race/ethnicity, sex).

Scheffe posthoc tests note comparisons that were statistically significant (a,b,c,d within each category) at p < 0.05. Percentages sum within each column; therefore each group's representation in any one LDF should be compared to overall column value.

Table 4

Comparison of stability measures in predicting odds of prior year victimization for children.<sup>a</sup>

	Model 1				Model 2						
	AOR-1 (	AOR-1 (95% C.I.)		Pseudo-R <sup>2</sup>		AOR-2 (95% C.I.)					Pseudo-R <sup>2</sup>
Dependent variable	Excessiv	Excessive lifetime residential mobility $^{\mathcal{C}}$	bility <sup>C</sup>		Excessive	Excessive lifetime residential mobility $\overline{\mathrm{LDFIndex}^d}$	bility I	LDF In	pxep <sub>i</sub>		
Type of prior year victimization											
Sexual victimization	1.29	(0.89-1.87)		0.14	1.04	(0.70-1.55)		1.50	1.50 (1.33–1.70) ***	*	0.16
Witness community violence	1.29	(1.07–1.56)	*	0.10	1.15	(0.94–1.39)	_	1.36	1.36 (1.24–1.49)	**	0.11
Maltreatment	1.34	(1.04–1.72)	*	90.0	1.11	(0.85-1.43)	_	1.54	(1.39–1.71)	**	0.08
Witness family violence	1.47	(1.16–1.85)	*	0.03	1.20	(0.94-1.53)		1.59	(1.43–1.76)	**	0.06
Physical assault	1.36	(1.17–1.58)	*	0.02	1.21	(1.04–1.41)	*	1.44	(1.32–1.56)	**	0.03
Property crime <sup>a</sup>	1.18	(0.99–1.41)	*	0.01	1.03	(0.86–1.25)	_	1.45	(1.33–1.59)	**	0.02
Polyvictimization $ab$	1.34	(1.07–1.68)	*	0.05	1.07	(0.85–1.35)	_	69.1	1.69 (1.53–1.87) ***	*	0.08

<sup>&</sup>lt;sup>a</sup>Property crime victimization was not measured for children under age 2, so this item (and the overall polyvictimization count) includes only children ages 2 and older.

b Polyvictimization is measured as experiencing three or more of any type of victimization in the prior year.

 $<sup>^{</sup>c}$ Excessive lifetime residential mobility is operationalized as moving more than once every 3.33 years.

d. LDFs can be found in Table 1. Both models control for the following demographic characteristics: household socio-economic status and family structure, and child's race, sex, and age.

 $<sup>{^*}</sup>_{p} < 0.05.$   ${^{**}}_{p} < 0.01.$