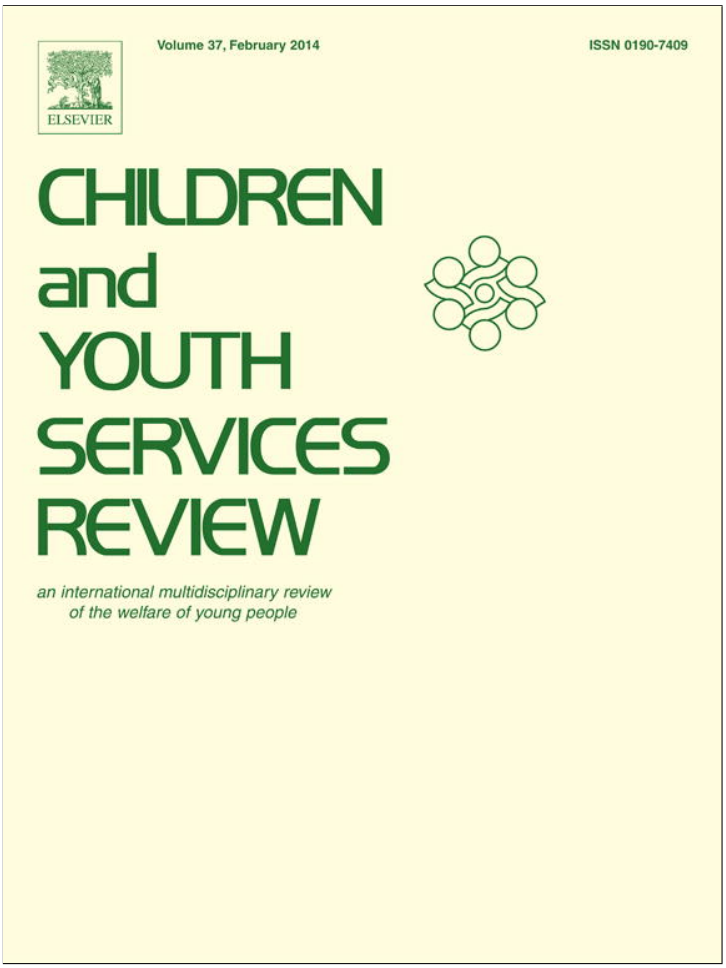

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What explains instability in foster care? Comparison of a matched sample of children with stable and unstable placements

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ABSTRACT

This study investigates what characteristics explain placement instability for children in foster care. Using a matched sample of children experiencing stable and unstable placements, bivariate and logistic regression analyses were conducted to identify factors for placement instability. The study also examines specific reasons for placement changes for a group of children who experienced multiple placements. Findings from this study highlight the following three components that contribute to placement stability for children in foster care: a) a caregiver's commitment to a child's legal permanence; b) the absence of a child's mental health diagnosis; and c) placements with a relative caregiver. The findings of the study also illustrate that while system- or policy-related reasons explain the largest proportion of placement changes for children's earlier stay in foster care, a majority of placement changes are attributed to either foster family-related or child behavior-related reasons over time. Implications of these findings are discussed.

1. Introduction

Preserving the stability of family life for children removed from their original homes has been of concern since long before the establishment of a formal child welfare system (Child Welfare League of America, n.d.; Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services, 2010; Maas & Engler, 1959). While there is consensus that all children deserve a stable living environment, a significant number of children in foster care continue to experience multiple placements while in care. In 2010, the national median percentage of children who were in foster care for less than a year but experienced three or more out-of-home placements was 14.9% (Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services, 2012). Similarly, it was reported that 10.9% of children in England experienced three or more placements in 2010, which is a decrease from 12.9% in 2006 (Children looked after in England (including adoption and care leavers) year ending 31 March, 2010). Moreover, the percentage of children in foster care who experienced three or more placements increased with their length of stay in care: 37.8% of children in foster care for 12 to 24 months, and 67.0% of those in care for 24 months or longer were reported to have experienced three or more placements (Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services, 2012).

Due to the negative effects of placement instability on children in foster care, including emotional and behavioral problems, juvenile delinquency, and poorer adult outcomes (Festinger, 1983; James, 2004; Newton, Litrownik, & Landsverk, 2000; Rubin, O'Reilly, Luan, & Localio, 2007; Ryan & Testa, 2005; Testa, Cohen, & Smith, 2003; Wulczyn, Kogan, & Harden, 2003), many researchers have strived to identify factors that lead to placement disruptions in foster care (Jones & Wells, 2008; Leathers, 2006; Oosterman, Schuengel, Slot, Bullens, & Doreleijers, 2007). Many studies have identified child deviant behaviors and other behavioral problems as significant predictors of placement instability in foster care (Hartnett, Falconnier, Leathers, & Testa, 1999; Herrenkohl, Herrenkohl, & Egolf, 2003; Jones & Wells, 2008; Leathers, 2006; Oosterman et al., 2007; Ryan & Testa, 2005). In their meta-analysis on risk and/or protective factors for placement disruptions, Oosterman et al. (2007) cited 13 studies that support this finding.

Child age is another factor related to placement instability for children in foster care (Children and Family Research Center [CFRC], 2004; Jones & Wells, 2008; Oosterman et al., 2007), with older children experiencing more placement instability than younger children (Hartnett et al., 1999; Smith, Stormshak, Chamberlain, & Whaley, 2001; Webster, Barth, & Needell, 2000; Wulczyn et al., 2003). However, Newton et al. (2000) found no significant effect of child age on placement instability when controlling for child behavioral problems. A child's previous experience in foster care is also commonly reported to affect later placement instability for children in out-of-home care

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(CFRC, 2004; Jones & Wells, 2008; Oosterman et al., 2007): children who spent longer time in care, experienced more previous placements, and had a history of residential care were at higher risk of experiencing multiple placements. Poor academic performance is also known to be associated with placement instability (Pecora & Huston, 2008).

In addition to child characteristics, foster parent characteristics have been shown to be related to placement stability for children in foster care (CFRC, 2004; Jones & Wells, 2008). Several studies suggest that relative foster parents are more likely to provide placement stability than non-relative foster parents (Iglehart, 1994; James, 2004; Jones & Wells, 2008; Koh, 2010; Koh & Testa, 2008; Testa, 2001; Webster et al., 2000; Wulczyn et al., 2003). Also, foster parents who are more invested in and accepting of foster children increase the likelihood of placement stability (Butler & Charles, 1999; Dozier & Lindhiem, 2006). Foster parents who are able to handle children's emotional and/or behavioral problems, and who have social support, emotional resilience, cooperative marriages and organized but flexible life styles are more likely to provide placement stability for children in foster care (Buehler, Cox, & Cuddeback, 2003; Chamberlain et al., 2006; Preston, Yates, & Moss, 2012; Walsh & Walsh, 1990). On the other hand, changes in foster parents' lives, such as illness and the birth of a child, can lead to placement instability for children in foster care (Proch & Taber, 1985; Sinclair, Wilson, & Gibbs, 2005).

Other research has found that the presence of other children at home, including foster parents' biological children, increased the risks of placement instability for children in foster care (Kalland & Sinkkonen, 2001; Wattenberg et al., 2003). However, inconsistent results have been found on the effect of placements with siblings, partly due to differences in methods across studies (Oosterman et al., 2007). Similarly, prior research has not indicated a consistent relationship between the amount of contact children have with their biological parents and their placement stability in foster care (Oosterman et al., 2007). However, Palmer (1996) noted that placement stability is increased when biological parents are included in the planning process, preparing their children for out-of-home placements.

Previous literature also reports system- or policy-related factors that affect placement instability. For example, children's placement in temporary or transitional placements increases the number of placements that children experience (Hartnett et al., 1999; Webster et al., 2000). In other situations, the system's effort to achieve important principles of care, such as continuity and permanence, also leads to multiple placements (James, 2004; Wattenberg et al., 2003). In addition, caseworker-related factors, such as their time spent with foster families and employee turnover, are related to placement instability (CFRC, 2004; Wattenberg et al., 2003).

Despite the considerable number of studies that have identified both protective and risk factors for placement stability of children in foster care, current knowledge remains limited in several ways. One challenge is that many predictors are correlated with each other. This suggests that the relationship between specified variables (e.g., child age or mental health problems) and placement stability could be spurious. Yet few studies use statistical methods that can help identify spurious effects. Oosterman et al.'s (2007) meta-analysis found that only 6 out of 26 identified studies addressed the possible confounding effects of third variables by employing multivariate analytic methods.

Another limitation of existing literature is that most studies examined individual placement disruptions or the number of placements, not placement stability per se. In a meta-analysis by Oosterman et al. (2007), only 3 out of the 26 studies used multiple moves as an indicator of placement instability, and none of the three studies used multivariate analytical methods. While there is likely to be a considerable overlap, the factors that explain placement changes in general may differ in important ways from those that explain why a given child experiences multiple moves. While Eggertsen (2008) investigated multiple moves as an outcome in a multivariate model, the predictor variables in his statistical model were limited.

Previous literature is also limited in that a majority of studies examined statistical relationships between case characteristics and placement instability without assessing specific reasons for placement disruptions. Havlicek (2010), for example, used multivariate statistical models to examine patterns of placement changes for children in foster care, and identified five patterns that describe movement trajectories (i.e., late movers, settled with kin, community care, institutionalized, and early entry). Her study, however, was limited to a sample of children who had aged out of foster care, and did not investigate the reasons why those children had experienced placement instability while in care. Lack of information on the dynamics underlying placement disruptions limits the utility of such statistical relationships for practice and policy. James (2004) explored specific reasons for disruptions, but did not distinguish between placement changes for children who experienced a single move and placement changes that occurred when children experienced multiple moves.

In order to fill the gap in the existing literature on placement stability, the current study investigates the factors that lead children in foster care to experience multiple placement changes by applying a multivariate analytic method. Particularly, the study focuses on the effect of placement-related factors as well as child-related characteristics. The majority of current literature examined child-related factors in relation to placement stability, but limited attention was paid to caregiver or placement characteristics. Furthermore, the findings on the effects of caregiver or placement-related factors were inconclusive in prior studies, especially when the results from univariate and multivariate analyses were compared (Oosterman et al., 2007). The current study also explores specific reasons for placement changes within a group of children who have experienced placement instability. This article complements another article we completed from the same project that used content analysis and qualitative analysis to explore the dynamics underlying placement stability (Cross, Koh, Rolock, & Eblen-Manning, 2013).

For the current study, matched samples of children were studied: one sample had experienced placement stability and the other had experienced instability over an 18-month period. These samples were created using propensity score matching (PSM) methods. The two groups of children were matched on their demographic characteristics and child welfare history at the beginning of the study period, yet they diverged on placement stability over the course of the study period. Matching the two groups of children on differences that predated the study period, the study attempts to assess the net impact of placement-related characteristics on placement stability.

Specifically, the study addresses the following research questions:

1. What placement-related characteristics help explain placement instability for children in foster care, controlling for pre-existing differences in their demography and child welfare history?
2. What are the specific reasons for placement changes in a group of children in foster care who have experienced placement instability?

2. Method

2.1. Study sample

Data for the study were provided by the Illinois Department of Children and Family Services (IDCFS), and the samples were selected from these data. To understand our sample selection process, it is important to know that we chose our sample retrospectively, based on the number of moves the child experienced during the study period. We categorized each child into either the multiple-move or the stable group, and then selected the two groups of children for inclusion in the study who profiled similarly at the baseline but had divergent experiences during the study period.

The stable group was defined as all children placed in relative or non-relative foster homes who had two or fewer placements during a

specified 18-month period[5] (from July 1, 2006 to December 31, 2007). The multiple-move group was defined as children who had experienced three or more family foster homes during the same period of time. The initial dataset provided by the IDCFS included 3483 children placed in either kinship or traditional foster care; 260 (7.0%) in the multiple-move group and 3223 (93.0%) in the stable group. Among these children, those who entered out-of-home care before July 1, 2006, the beginning date of the observational period of the study, were selected as a study sample, resulting in 184 cases from the multiple-move group and 3223 from the stable group. Because the review of case records, which was the primary method of data collection for the study, would require extensive time and effort, a subset of 122 children were selected for the final sample. First 61 children from the multiple-move group were selected for the final sample of the study: 11 children with the most placement changes were initially chosen due to the considerable policy interest in these cases by the IDCFS and other stakeholders, and an additional 50 children were randomly selected out of the remaining 173 cases. Using propensity score matching (PSM) methods, these children were then matched to 61 children from the stable group who profiled similarly at the beginning of the study period: the two groups were matched on child-related factors that previous studies had found would impact stability for children in foster care. With the matched sample, the present study attempted to examine the net impact of placement-related factors (e.g., the type of the relationship between children and foster caregivers) on placement stability or instability.

2.1.1. Propensity score matching

Propensity score matching (PSM) methods were used to select children from the stable group who were most like those in the multiple-move group. A propensity score, representing an estimate of the likelihood that a child would become a multiple-move case during the study period, was calculated applying a logistic regression model (see Rosenbaum & Rubin, 1983). The logistic regression model included the following predictors of instability that were selected based on previous literature and data availability: child age at entry into foster care, gender, race and presence of a diagnosis from the Diagnostic and Statistical Manual of Mental Disorders (DSM: American Psychiatric Association, 2000), geographic location of a case, number of previous removal episodes, number of previous placements experienced during the current removal episode as of July 1, 2006, length of stay in care as of July 1, 2006, and completion of a clinical screening (Integrated Assessment). On the basis of the logit of the estimated propensity scores, matched samples of multiple-move and stable groups were created: multiple-move cases were matched to stable cases, using nearest neighbor matching within caliper and without replacement as a matching algorithm.

2.2. Data collection

Study data were abstracted from case records maintained by the IDCFS. Case records were reviewed by the members of the research team, including researchers from the University of Illinois at Urbana-Champaign and staff from the IDCFS Division of Quality Assurance, and coded data were collected based on a standardized coding scheme developed by the research team. Case reviewers were blind to whether a given case belonged to the multiple-move or stable group, although such information was readily inferred from the information in case records. Two reviewers were responsible for collecting coded data on each case: one abstracted data from case records based on the coding scheme, and the other reviewed the collected data to assure their quality and accuracy.

The case records included materials from a variety of sources, including investigation reports/notes; notes by caseworkers and/or supervisors, service plans and Integrated Assessment Program reports[6]; mental health, educational and medical assessments and reports; placement change forms; case review feedback forms; case assignment, permanency goals and referral forms, summary reports, and action plans for services. From these materials, information on child-, caregiver- and placement-related characteristics was obtained. In addition, the complete history of investigations at both the child and family levels was collected.

It should be noted that case records could not be abstracted for one stable case because the case file was not available when the reviewers were in the field. Therefore, the comparison between the multiple-move and stable groups on their placement-related characteristics involved a total sample size of 121 cases: 61 multiple-move and 60 stable cases. In addition, due to the unavailability of information on short-term placements, which lasted no longer than 7 days, 33 short-term placements experienced by 17 children were excluded from the analyses of the study.

2.3. Study variables

As stated, the current study focused on the effect of placement-related characteristics on placement stability for children in foster care. Based on previous literature and data availability, information on the following placement-related variables was collected and their effect on placement stability was investigated. In addition, the study examined reasons for placement change for the sample of children in the stable and the multiple-move group.

2.3.1. Caregiver's relationship to the child

To assess the impact of relatedness between a caregiver and a child, a variable was created that measured the proportion of time a child spent in placements with relative caregivers (i.e., kinship foster care), versus non-relative placements, during the study period.

2.3.2. Caregiver's willingness to commit to the child's legal permanence

Information on this variable was derived from an examination of the case file for explicit language in the case notes stating that the caregiver had an intention to provide a permanent home for the child or a completed Caregiver Commitment Form in the file. The variable derived from these data represented whether the child ever had a caregiver who expressed her/his willingness to provide a permanent home for the child during the study period. Due to a large number of placements (31.6%) with missing information, it was not possible to calculate the proportion of time a child spent with committed caregivers.

2.3.3. Child's placement with siblings

To assess the impact of sibling placements, a variable was created to capture the proportion of time a child spent in placements with at least one sibling, versus no siblings, during the study period. As in prior research on the impact of placements with siblings in foster care (e.g., Barth, Berry, Yoshikami, Goodfield, & Carson, 1988; Hegar & Rosenthal, 2009; Rushton, Dance, Quinton, & Mayes, 2001), placements with no siblings in this study include placements of children with no biological siblings and placements where children were not with any of their siblings.

[5] In this study, placement instability is defined as children experiencing three or more placements during any given 18-month period because this is what IDCFS used to determine whether a case should be the subject of a multi-disciplinary team meeting, called Child and Youth Investment Team (CAYIT) meeting. CAYIT was designed to prevent placement instability, bringing together panels of experts to improve decision-making and service-planning when children in care experienced multiple moves or other important transitions. Several studies also treated three placements as the threshold for placement instability taking into account the fact that children in care could have one or two placements on an emergency or short-term basis before they are placed in a permanent setting (see Hartnett et al., 1999; Webster et al., 2000).

[6] Integrated Assessment is a comprehensive assessment completed by a clinical screener for children upon entering foster care, and at regular intervals while in state custody (see Smithgall et al., 2009).

2.3.4. DSM diagnosis for the child

This dichotomous variable represented a child's diagnosis from the DSM (American Psychiatric Association, 2000) during the study period. The children who had an existing DSM diagnosis before the study period were coded as 'no' on this variable, since the presence of a DSM diagnosis before the study period was used as a matching variable in the PSM procedures of the sample selection.

2.3.5. Reasons for placement change

During the review of the case records, the case reviewers identified the primary reasons for placement change. Two reviewers reviewed each case as described above. They discussed any disagreements and reached consensus on a reason. The study followed the coding scheme James (2004) had developed in her study, and categorized the primary reasons for placement change into four groups: 1) system- or policy-related; 2) foster family-related; 3) biological family-related; and 4) child behavior-related reasons.

2.4. Data analysis

2.4.1. Comparison of multiple-move and stable cases

For both unmatched and matched samples, the multiple-move and stable cases were compared on the variables that were included in the logistic regression model to calculate the propensity scores, using simple Pearson χ^2 comparisons. The findings from this comparison were expected to demonstrate how successfully the PSM method balanced the characteristics of the two groups of children as of July 1, 2006, the beginning of the study period.

2.4.2. Analysis of placement-related characteristics

A descriptive analysis of the identified placement-related variables provides an overall illustration of the placements the sample of children had experienced. In this descriptive analysis, placement was used as a unit of analysis. A bivariate analysis was then conducted to examine which variables differentiated multiple-move and stable groups using child as a unit of analysis.

In addition to the bivariate analysis, a logistic regression model was applied to investigate the independent effects of each placement-related characteristic on the child's likelihood to become a multiple-move case. The model included all the variables that were used in the bivariate analysis (a caregiver's relationship to the child, a caregiver's willingness to commit to the child's legal permanence, the child's placement with siblings, and the child's DSM diagnosis). Variables on which the two groups of children were matched were not included in the model; the two groups were, by design, comparable on these variables. Furthermore, an additional logistic regression analysis (not reported here) that had included the matching variables resulted in similar findings.

2.4.3. Reasons for placement change

Using a descriptive analysis, the study compared the reasons for placement change between the multiple-move and stable groups before the beginning of the study period. During the study period, the reasons for placement change were reviewed only for the multiple-move group since the stable group, by definition, had not experienced multiple placement changes during this period of time.

3. Results

3.1. Propensity score matching

As shown in Table 1, prior to the matching, the multiple-move and stable groups differed in their demography and foster care experiences as of July 1, 2006, the beginning of the study period: statistically significant differences between the two groups of children were observed for all variables except for the child's gender and disability, and the completion of Integrated Assessment.

Children in the multiple-move group were more likely to have entered foster care at an older age than those in the stable group: the mean age at entry into foster care was 5.5 years old for the multiple-move group while it was 3.7 years old for the stable group ($p < 0.001$). Also, children in the stable group were more likely to be African American than those in the multiple-move group: 62.3% of children in the stable group, and 54.4% of those in the multiple-move group were comprised of African American children ($p < 0.05$). The two groups of children were similar in their gender and disability.

Only about a quarter of the multiple-move cases were served in Cook County, the largest urban area in Illinois that includes Chicago. On the other hand, more than half of the cases in the stable group came from Cook County ($p < 0.001$). At baseline (July 1, 2006), children in the multiple-move group had shorter lengths of stay in care than those in the stable group for the current removal episode: 18.5% of children from the multiple-move group were in care for less than three months compared to 8.0% of the children from the stable group ($p < 0.001$). Yet, children in the multiple-move group experienced more placement changes during the current removal episode than those in the stable group prior to baseline (July 1, 2006): children in the multiple-move group had 2.7 placements on average while the mean number of placements for children in the stable group was 2.2 ($p < 0.05$). Furthermore, more children in the multiple-move group experienced previous removal episodes at baseline (July 1, 2006), compared to those in the stable group: 19.6% children from the multiple-move group experienced previous removal episodes while the comparable percentage was 13.8% for the stable group ($p < 0.05$). While children in the multiple-move group were more likely to have an Integrated Assessment completed than children in the stable group, the difference was not statistically significant at the 0.05 level ($p = 0.08$).

However, the significant differences between the multiple-move and stable groups disappeared after matching (see Table 1), indicating that the pre-existing differences between the two groups were successfully controlled for by the PSM.

3.2. Comparison of placement-related characteristics for multiple-move and stable cases

A descriptive analysis was completed on the characteristics of all placements the matched samples of children from the multiple-move and stable groups had experienced (see Table 2). During the study period, children from the stable group experienced a total of 60 placements, including their current placement as of December 31, 2007, while those from the multiple-move group had a total of 275 placements.

It is observed that placements for the multiple-move group were substantially more likely to be with non-relative foster parents, compared to placements for the stable group. However, the percentage of caregivers who expressed commitment to the child's legal permanence was much lower for the multiple-move group than for the stable group. For both groups, over 60% of the placements were with at least one sibling. It is noted that 36.7% of the placements had a missing value on the variable, caregiver's willingness to commit to a child's legal permanence variable, for the multiple-move group while only 8.3% of the placements had a missing value for the stable group.

Using bivariate analyses with independent t-tests and Pearson χ^2 tests, the matched samples of the multiple-move and stable cases were then compared on placement-related characteristics, using child as a unit of analysis, during the study period, July 1, 2006 through December 31, 2007 (Table 3).

The findings showed that the two groups of children were substantially different in terms of the amount of time they had spent with relative caregivers versus non-relative caregivers: throughout the study period of 18 months, children from the multiple-move group spent 5.6 months on average with relative caregivers, compared with

Table 1
Characteristics of multiple-move and stable cases as of July 1, 2006 (%).

Characteristics	Unmatched samples		Matched samples	
	Multiple-move	Stable	Multiple-move	Stable
	(N = 184)	(N = 3223)	(N = 61)	(N = 61)
Child age at entry				
0 year	10.87***	34.10	11.48	13.11
1–2 years	21.20	19.52	29.51	36.07
3–5 years	25.54**	17.28	18.03	13.11
6–8 years	18.48*	12.69	16.39	14.75
9–11 years	9.78	8.94	9.84	14.75
12 years or older	14.13**	7.48	14.75	8.20
Child gender[a]				
Male	51.63	51.79	42.62	49.18
Female	48.37	48.21	57.38	50.82
Child race				
African American	54.35*	62.30	55.74	54.10
White	34.24	28.20	34.43	34.43
Others	11.41	9.50	9.84	11.48
Child disability				
Yes	9.78	7.14	11.48	16.39
No	90.22	92.86	88.52	83.61
Region of services provided				
Cook County	27.72***	53.40	27.87	22.95
Northern region	28.26***	17.78	39.34	42.62
Central region	29.89***	17.93	19.67	24.59
Southern region	14.13	10.89	13.11	9.84
Number of previous placements during current removal episode				
One	37.50*	45.49	34.43	36.07
Two	23.37	24.48	26.23	21.31
Three	15.22	13.96	13.11	14.75
Four or five	16.30*	10.92	13.11	14.75
Six or more	7.61	5.15	13.11	13.11
Length of stay in care for current removal episode				
Less than 3 months	18.48***	8.04	14.75	18.03
3 months–6 months	14.67**	8.16	19.67	19.67
6 months–12 months	15.76	16.88	13.11	6.56
12 months–18 months	11.96	13.19	11.48	11.48
18 months–24 months	11.96	12.94	8.20	4.92
24 months–36 months	10.87	14.86	11.48	13.11
More than 36 months	16.30**	25.94	21.31	26.23
Number of previous removal episodes				
One	80.43*	86.16	78.69	83.61
Two	14.67	12.53	16.39	16.39
Three or more	4.89**	1.30	4.92	0.00
Integrated Assessment				
Completed	27.17	21.44	29.51	26.23
Not completed	72.83	78.56	70.49	73.77

[a] 12 stable cases in the unmatched sample had missing values.
*** $p < 0.001$
** $p < 0.01$
* $p < 0.05$

12.6 months for the stable group ($p < 0.001$). The two groups were also significantly different in terms of a caregiver's commitment to a child's legal permanence: 88.3% of children in the stable group had at least one caregiver who was committed to providing a permanent home while the comparable percentage was 73.8% for the multiple-move group ($p < 0.05$). Further investigation (not shown here) was conducted to understand the 37 placements that did not last for children in the multiple-move group even though the caregiver had expressed their commitment to the child's legal permanence. Of the 37 placements reviewed, more than half (19 placements) disrupted due to foster

Table 2
Description of placement-related characteristics for multiple-move and stable cases during study period, using placement as a unit of analysis: % (N).

	Multiple-move (n = 275)	Stable (n = 60)
Type of caregiver		
Relative	26.91 (74)	70.00 (42)
Non-relative	73.09 (201)	30.00 (18)
Caregiver willingness to commit to permanence		
Willing	26.18 (72)	88.33 (53)
Unwilling	37.09 (102)	3.33 (2)
Missing	36.73 (101)	8.33 (5)
Placement with at least one sibling		
Yes	62.55 (172)	61.67 (37)
No	37.45 (103)	38.33 (23)

Table 3
Comparison of matched multiple-move and stable cases during study period, using child as a unit of analysis.

	Multiple-move (n = 61)	Stable (n = 60)
Proportion of time spent in relative foster homes	0.31***	0.70
Caregiver willingness to commit to permanence: % (N)		
Had at least one caregiver who was willing	73.77 (45)*	88.33 (53)
Had no caregiver who was willing	19.67 (12)**	3.33 (2)
Missing	6.56 (4)	8.33 (5)
Proportion of time spent in placements with at least one sibling	0.64	0.62
New DSM diagnosis since July 1, 2006: % (N)		
Yes	31.15 (19)***	5.00 (3)
No	68.85 (42)***	95.00 (57)

*** $p < 0.001$
** $p < 0.01$
* $p < 0.05$

family-related reasons (7 due to stressors or events in foster parents' life and 12 to complaints or maltreatment allegations against foster parents).

Children in the multiple-move group were significantly more likely to receive a psychiatric diagnosis during the study period than children in the stable group: the percentage of children who were newly diagnosed during the study period was 31.2% and 5.0% for the multiple-move and stable groups, respectively ($p < 0.001$). This is noteworthy considering that the percentage of children with psychiatric disorders was similar between the two groups at the beginning of the study period: 19.7% (n = 12) and 11.7% (n = 7) of the children in the multiple-move and stable groups, respectively, had a psychiatric diagnosis prior to the study period ($p = 0.318$). The two groups of children were similar in the amount of time they spent with siblings: children in the multiple-move and stable groups were in the same placements with at least one sibling for 11.5 and 11.2 months on average, respectively, during the 18-month study period.

The results of the logistic regression analysis were consistent with those from the bivariate analysis (see Table 4). The two groups of children differed significantly in the proportion of time they spent with relative caregivers, a caregiver's willingness to commit to their legal permanence, and their psychiatric diagnosis. For example, the odds that children with a new diagnosis of a psychiatric disorder would be in the multiple-move group were approximately 8 times greater than those without such a diagnosis, when controlling for the other placement-related variables ($OR = 7.79$, 97% CI [1.97, 30.82]). There was not a statistically significant difference between children from the multiple-move and stable groups in the proportion of time they spent in the same placements with at least one sibling ($OR = 1.84$, 95% CI [0.66, 5.08]).

3.3. Reasons for placement change

3.3.1. Prior to study period

Before the study period, the matched samples of multiple-move and stable cases profiled similarly in their reasons for placement change (see Table 5). The most common reasons for placement change were system- or policy-related for both groups, with approximately 45% of placement changes explained by system- or policy-related reasons in either group. More specifically, a change in the child's level of care, such as a move from a shelter to a foster home, was the reason for 43.9% and 31.3% of the system- or policy-related placement changes for the multiple-move and the stable group, respectively. In addition, 36.6% and 46.9% of the system- or policy-related moves in the multiple-move and stable groups, respectively, were made to place the children with a relative, including permanent placements with a relative.

The next most common reasons for placement change prior to the study period were foster family-related, explaining 29.4% of the placement changes in the multiple-move group and 26.8% in the stable group. Over half (51.9% and 57.9% for the multiple-move and the stable group, respectively) of the foster family-related placement changes occurred due to stressors or events in the foster parents' lives, which included a new job or a move to another state. Inappropriate behaviors by foster parents, such as inadequate care or maltreatment allegations against foster parents, explained the remaining foster parent-related placement changes.

Prior to the study period, only one placement change occurred due to a biological family-related reason, specifically a foster parent's conflict with a biological parent. Other than biological family-related moves, child behavior-related placement changes were the least common before the study period, explaining approximately 25% of the placement changes (25.0% for the multiple-move group and 23.9% for the stable group). In a majority of the child behavior-related moves, foster parents requested the child's removal, citing the child's behavioral problems. Prior to the study period, seven (30.4%) of the child behavior-related placement changes in the multiple-move group were explained by the child or youth's running away while no placement change in the stable group occurred due to the child or youth's running away.

3.3.2. During study period

The reasons for placement change were investigated only for the multiple-move group during the study period since the stable group did not experience any placement changes during this time period. The multiple-move group of 61 children experienced a total of 214

Table 4
Logistic regression model on child's likelihood of becoming a multiple-move case.

	Odds ratio	95% confidence intervals
Proportion of time spent in relative foster homes	0.13***	[0.05–0.35]
Caregiver willingness to commit to permanence		
(Reference group: had at least one caregiver who was willing)		
Had no caregiver who was willing	6.11*	[1.12–33.47]
Missing	0.93	[0.20–4.34]
Proportion of time spent in placements with at least one sibling	1.84	[0.66–5.08]
New DSM diagnosis since July 1, 2006	7.79**	[1.97–30.82]

*** $p < 0.001$
** $p < 0.01$
* $p < 0.05$

Table 5
Reasons for placement change prior to study period[a]: %[b] (N).

Reasons for placement change	Multiple-move (92 moves)	Stable (71 moves)
System- or policy-related	44.57 (41)	45.07 (32)
Change in level of care	43.90 (18)	31.25 (10)
Change to placement with relative	36.58 (15)	46.88 (15)
Change to be with siblings	9.76 (4)	6.25 (2)
Other reasons	9.76 (4)	15.63 (5)
Foster family-related	29.35 (27)	26.76 (19)
Stressors or events in foster parent(s)' life	51.85 (14)	57.89 (11)
Complaints or maltreatment allegations against foster parent(s)	48.15 (13)	42.11 (8)
Child behavior-related	25.00 (23)	23.94 (17)
Foster parent(s) requested change due to child's behaviors	60.87 (14)	88.24 (15)
Foster parent(s) requested change due to child's behaviors but caseworkers expressed concern about foster parent(s)	4.35 (1)	5.88 (1)
Foster child requested change due to behavioral problems at home	4.35 (1)	5.88 (1)
Child/youth went on run	30.43 (7)	0.00 (0)
Biological family-related	0.00 (0)	1.41 (1)
Other	1.09 (1)	2.82 (2)

[a] A total of 64 placements had missing values on reasons for placement change (41 from the multiple-move group and 23 from the stable group).
[b] The percentage of primary reasons for placement change (system- or policy-, foster family-, child behavior- and biological family-related reasons, and other reasons) sum to 100%. For each primary reason, the more detailed responses sum to 100%.

placement changes during the study period, and the number of placement changes experienced ranged from 1 to 8. As stated earlier, it should be noted that the short-term placements were not counted in the number of placement changes reported here. Also, reasons for placement change were not documented for 30 moves: consequently, they were excluded from the analysis, resulting in a final analysis of 184 placement changes for the multiple-move group.

Out of the 184 placement changes investigated, foster family-related reasons accounted for the largest percentage (37.5%) of placement changes, followed by child behavior-related (32.6%), and system- or policy-related reasons (24.5%; Table 6). Out of the 69 foster family-related placement changes, approximately half of them occurred due to stressors or events in the foster parents' lives, including divorce and unemployment. The remaining half was due to complaints or maltreatment allegations against foster parents: out of 35 allegations against foster parents, 10 (28.6%) were indicated or substantiated.

Child behavior-related reasons explained 32.6% ($n = 60$) of placement changes. A majority of the child behavior-related placement changes were initiated by foster caregivers who requested that the child be removed, citing the child's behavioral problems. Even though the foster parents are the one who requested the child's removal, in six of these cases caseworkers also raised concerns about the foster parents. During the study period, only one placement change was due to the child or youth's runaway.

System- or policy-related reasons explained 24.5% ($n = 45$) of placement changes. Out of the 45 system- or policy-related placement changes, 35.6% ($n = 16$) were due to a change in the child's level of care (e.g., a move from shelter to foster home), and 53.3% ($n = 24$) were attributable to placing the child with either relatives or siblings.

4. Discussion

The present study attempted to identify factors that distinguish children who experience stability from children who experience instability while in foster care. Since many previous studies are limited in their ability to control for children's pre-existing characteristics, the study used a matched sample of children created using propensity score matching (PSM) methods.

The study found that the children from the multiple-move and stable groups were significantly different in the amount of time they spent with relative caregivers during the study period: the children from the stable group spent a significantly larger proportion of time with relative caregivers than those from the multiple-move group during the given 18-month period ($p < 0.001$). This finding is consistent with previous research that reports the positive impact of kinship placements on placement stability for children in foster care (Chamberlain et al., 2006; Connell et al., 2006; Testa, 2001). However, further understanding of the effect of placement type (relative vs. non-relative foster

Table 6
Reasons for placement change during study period: %[a] (N).

Reasons for placement change	Multiple-move (184 moves)
System- or policy-related	24.46 (45)
Change in level of care	35.56 (16)
Change to relative	28.89 (13)
Change to be with siblings	24.44 (11)
Others	11.11 (5)
Foster family-related	37.50 (69)
Stressors or events in foster parent(s)' life	49.28 (34)
Complaints or maltreatment allegations against foster parent(s)	50.72 (35)
Child behavior-related	32.61 (60)
Foster parent(s) requested change due to child's behaviors	83.33 (50)
Foster parent(s) requested change due to child's behaviors but caseworkers expressed concern about foster parent(s)	10.00 (6)
Foster child requested change due to behavioral problems at home	5.00 (3)
Child/youth went on run	1.67 (1)
Biological family-related	1.09 (2)
Other	4.35 (8)

[a] The percentage of primary reasons for placement change (system- or policy-, foster family-, child behavior- and biological family-related reasons, and other reasons) sum to 100%. For each primary reason, the more detailed responses sum to 100%.

home) on placement stability should be obtained, considering that 67.2% of children in the multiple-move group experienced one or more placements with a relative caregiver even though the total amount of time they spent in relative foster homes was smaller, compared to children in the stable group. Future studies should investigate what factors contribute to stability or instability for children placed in kinship foster homes.

The findings of the study indicated that a caregivers' commitment to legal permanence for the child in their care was a significant predictor for placement stability: 73.8% and 88.3% ($p < 0.05$) of children in the multiple-move and the stable group, respectively, ever had a caregiver who expressed commitment to their legal permanence. The significant effect of a caregiver's commitment to legal permanence on a child's placement stability is consistent with previous literature (Dozier & Lindhiem, 2006; Testa, 2005), and this suggests that child welfare agencies should place greater emphasis on caregivers' willingness to commit to legal permanence for the child when they seek out-of-home placements for children in care. To assist in this effort, future studies should investigate how child welfare agencies can assess caregivers' level of commitment and factors that influence this commitment. While a caregiver's commitment to legal permanence plays a significant role in placement stability for children in foster care, a caregiver's commitment in and of itself may not ensure placement stability. The finding that many committed caregivers were not able to provide long-term care for children in the multiple-move group, often due to foster family-related reasons, including maltreatment allegations against foster caregivers, suggests that more thorough assessments may be needed to ensure the safety and stability in foster homes. Also, it is worth exploring whether additional support for the foster caregivers could have prevented the disruption of placements in cases where caregivers experienced a significant amount of stress and/or a substantial number of life changes.

Another difference between the multiple-move and the stable group was the proportion of children newly diagnosed with a psychiatric disorder during the study period: 31.2% of children in the multiple-move group were reported to have a new DSM diagnosis during the study period, while the comparable percentage was only 5.0% for the stable group ($p < 0.001$). While the two groups were similar in the proportion of children with a DSM diagnosis before the study period, they diverged significantly during the study period. This finding is quite consistent with previous literature that reports a significant relationship between placement instability, and child emotional and behavioral problems (Barth et al., 2007; Chamberlain et al., 2006; James, Landsverk, & Slymen, 2004; Leathers, 2006), but the findings of the present study cannot demonstrate any causal relationship between these two variables. However, the finding that half of the children in the multiple-move group did not have a clinical diagnosis of a psychiatric disorder until the end of the study period suggests that a child's mental health problems may not be a dominant predictor for children's placement instability in foster care. Or perhaps it is possible that a clinical diagnosis of a psychiatric disorder may not be accurately recorded, partly because children did not have an opportunity to receive an appropriate evaluation or diagnosis due to frequent placement changes.

The two groups of children were similar in the amount of time they spent with siblings in their out-of-home placements during the study period. Prior literature reports mixed findings regarding the effects of placement with siblings on placement stability (Drapeau, Simard, Beaudry, & Charbonneau, 2000; George, 1970; Thorpe & Swart, 1992), and the effects of sibling placements on stability warrant additional future research.

In addition to these factors, the study strived to understand the reasons for placement changes for children in foster care. Prior to the study period, system- or policy-related reasons explained the largest proportion of placement changes, including changes in a child's level of care and placement with relatives or siblings. However, during the study period, a majority of placement changes were attributed to either foster family-related or child behavior-related reasons. During the study period, 35.5% and 33.5% of placement changes were due to foster family-related and child behavior-related reasons, respectively, while the comparable percentages were 29.4% and 25.0% prior to the study period. The finding that 35.5% of placement changes during the study period were due to foster family-related reasons is concerning. Moreover, half of such moves were made because of maltreatment allegations against foster parents and 28.6% of the allegations were substantiated. Considering that one of the major goals of public child welfare services is to ensure the safety of children who already experienced the trauma of abuse and/or neglect, child welfare agencies should review their recruitment, training and support of foster parents to ensure that children are safe while in foster care. In addition to maltreatment allegations against foster parents, half of foster family-related placement changes were due to stressors or events in foster parents' lives. From this study, it cannot be determined how many of these moves could have been prevented. Child welfare agencies should explore whether such moves can be prevented with additional support and training of foster parents.

As stated previously, another main reason that children in the multiple-move group experienced placement instability was due to their behavioral issues. In 83.3% of the child behavior-related placement changes, foster caregivers requested the removal of the child from their home citing child behavioral problems. However, it is unknown from the present study how severe such behavioral problems were or when such behavioral problems began. It is, thus, unclear whether such child behavioral-related moves could have been prevented if foster caregivers had been more prepared to deal with behavioral problems with additional support, or if more intensive or different mental health treatment had been provided for children. Future research that investigates foster caregivers' perspectives in regard to their caregiving experience of abused and/or neglected children should enable us to better understand the impact of children's behavioral problems on placement instability.

5. Limitations of the study

The sample for this study is cross-sectional in design and therefore is biased towards children with longer lengths of stay (see Wulczyn, 1996). It should also be emphasized that this study represents the experiences of the minority of children entering foster care who experienced multiple placements while in custody as the majority who enter state custody experience stable placements (Children's Bureau et al., 2012).

An additional limitation of this study concerns the variable indicating whether the caregiver was committed to legal permanence for the child in care. Case files are a record of what a specific worker deemed important at a specific point in time. This may differ between caseworkers, may depend upon individual relationships and personalities of both the worker and the caregiver, and a worker's workload at the point at which the note was written, as well as a host of other factors. Given this limitation, it does reflect the impressions of the worker, the documentation that is available, and the assessment of the reviewer reading the note.

Another limitation of the study is missing data, especially as they related to the reasons for placement change. If certain reasons for placement change were more likely to be documented in the case records, it might bias the results of the study. For example, it is possible that reasons for placement change that did not necessarily reflect well on the agency or worker were less likely to be included in the case records. In addition, the study only allowed for coding the primary reason for placement change, thereby limiting the study findings. Many placement disruptions were likely to involve a combination of caregiver- and child-related reasons, reflecting a poor fit between a child and a caregiver. Some system-related moves may have been a response to caregiver- or child-related factors that were making a given placement unstable. The most significant limitation of the study might be that coding reasons for placement changes from the case records provide limited

information on the specific dynamics or processes that may have led to placement disruption. The documentation of events that led to a placement change might be limited to what the assigned caseworker chose to record. In many cases, the case records may not have provided details of what precipitated a placement change, and there may be biased reporting on why a placement ended. Future research on placement instability in foster care should conduct interviews with foster parents, children, and caseworkers, using both quantitative and qualitative methods, in order to gather more detailed information and to examine specific dynamics that lead to placement instability.

6. Conclusion

Placement instability can impair well-being and development of abused and/or neglected children in multiple ways (Festinger, 1983; Newton et al., 2000; Rubin et al., 2007; Wulczyn et al., 2003). The current research suggests that a variety of system, caregiver and child characteristics impact the risk of multiple placement disruptions. Therefore, child welfare professionals should critically evaluate risk factors for placement instability when they assess the fit between foster parents and children in foster care, and appropriate services and policies should be put in place to promote placement stability for children in foster care.

In addition, the needs of each child for placement stability should be considered when child welfare principles such as permanence, continuity, and least restrictive care are applied. Child welfare agencies also need to ensure that through adequate training and support, foster parents are equipped with the necessary skills and support they need in their role of caring for children who have experienced maltreatment. Crum (2010) reports that successful placements were positively related to the amount of emotional and social support foster parents had received and to firm but flexible parenting. Similarly, Buehler et al. (2003) found that foster parents' genuine concern for the child(ren) in their care, a cooperative marriage, and an organized but flexible lifestyle contributed to their successful experiences in foster care. These factors should be considered when child welfare agencies recruit, train, or provide on-going support for foster parents.

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