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The relationship of placement experience to school absenteeism and changing schools in young, school-aged children in foster care

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ABSTRACT

Background: Chronic school absenteeism and frequent school changes, particularly among younger children, may be antecedents for the high rates of school failure and subsequent dropout among youth in foster care. However, the relationship of foster care experience to absenteeism and school change has not been well studied.
Objective: This study examined the association of placement experience with absenteeism and changing schools among 209 urban children in foster care enrolled in public elementary schools.
Methods: A cohort of children aged 5 to 8 years who entered non-relative or kinship foster care from 2006–2008 were followed longitudinally for 2 years from entry into foster care. Children residing in foster care were categorized at the end of the study as early stable, late stable, or unstable, if they achieved a permanent placement prior to 45 days, between 45 days and 9 months, or failed to do so within 9 months, respectively. Children who reunified home were classified as a fourth category. Poisson regression, controlling for baseline factors, was used to compare days absent and number of schools attended across categories of placement experience.
Results: Among the 209 children, 51% were male, 79% were African American, and 55% were initially placed with kin. One third of children reunified home; among children who did not reunify, one half was early stable, and a third was unstable. Adjusted rates of school absenteeism increased in stepwise fashion as children's placements became more unstable; children with unstable placements were 37% more likely to be absent than those with early placement stability ($p = 0.029$). Children who reunified during the study demonstrated the highest rates of absenteeism; however, there was no significant difference in absenteeism before or after reunification. Number of schools attended increased as stability worsened, with the standardized rate of schools attended reaching 3.6 schools (95% CI 3.1–4.1) over a two year period among children in unstable placements.
Conclusions: The relationship between placement experience and school absenteeism and school change illustrates the need to better coordinate the educational experience of high-risk children in foster care. The secondary finding of high absenteeism among children in the process of returning home illustrates that educational challenges for youth may be equally if not more concerning among the greater majority of youth in child welfare who remain home with birth parents.

1. Introduction

1.1. Absenteeism and changing schools as risk factors for school success for children in foster care

One of the largest threats to the wellbeing of children in foster care as they transition toward adulthood is the high risk of poor educational outcomes. Studies among foster care children show higher levels of grade retention, suspensions, absenteeism, and lower standardized test scores (Smithgall, 2004; Wulczyn, Smithgall, & Chen, 2009). The *Fostering Connections to Success and Increasing Adoptions Act* (110th United States Congress, 2008) elevated concerns about educational stability for children in foster care. The legislation responded to reports documenting significant instability in schools for children in the child welfare system and rates of high school dropout as high as 75% (Balfanz, Herzog, & Iver, 2007; Ferguson & Wolkow, 2012; Smithgall, 2004; Stone, 2007). *Fostering Connections* placed new requirements on states to improve the educational stability of their child welfare populations.

While the critical outcomes of older youth in care demand attention, the antecedents of dropout can likely be found in earlier school engagement. Two predictors of dropout are absenteeism and school

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stability, which can threaten school engagement and achievement, particularly among young, school-aged children (Balfanz, 2006; Balfanz et al., 2007; Eckenrode, Rowe, Laird, & Brathwaite, 1995; Rumberger, 2003). For example, absenteeism in kindergarten predicts poor reading achievement in first grade, with an even stronger impact for children in poverty; therefore, decreasing absenteeism among young children may be critical for later educational success (Chang & Romero, 2008; Kearney, 2008).

For young children in foster care, who are an important potential population for targeted intervention, research to describe the degree of absenteeism and school stability or their predictors is limited. A recent literature review found only five studies reporting on absenteeism of children in care (Trout, Hagaman, Casey, Reid, & Epstein, 2008). One report of all school-aged children in care in public schools in New York City cited significant absenteeism with improved attendance on entering care for young children and modest negative effect of placement change on attendance (Conger & Rebeck, 2001). Conclusions about absenteeism are limited due to different attendance measures, population ages, placement types, and lack of appropriate controls.

Improving school stability has been a primary focus of *Fostering Connections*. In a national study of foster care alumni, 68% attended three or more elementary schools, and 33% attended five or more (Pecora et al., 2006). Whether younger children in care have similar rates of school change is unclear. Further research to describe how placement experience relates to school change and absenteeism could provide a valuable baseline for child welfare systems as they implement reforms to improve educational stability.

1.2. Foster care placement experience as a contributing factor

Undermining attempts to stabilize children in school, frequent placement changes pose a major challenge for child welfare systems responding to the new educational requirements of *Fostering Connections*. Prior data reveal a high level of placement instability for many children in foster care. Among children in foster care aged 5 to 7, a quarter had one placement move and a third had two or more (Wulczyn, Kogan, & Harden, 2003). Although 50–75% of fostered children may return home after placement (AFCARS, 2011), 20–40% of those returning home will likely recidivate to the foster care system within 10 years (Taussig, Clyman, & Landsverk, 2001; Wulczyn, Hislop, & Goerge, 2000). Despite efforts to improve permanency, over 40% of fostered children will remain in placement beyond 18 months (AFCARS, 2011); for these children, placement instability is common.

To improve educational outcomes for children in foster care, states need to consider both efforts to improve educational stability and attendance as well as reduce overall placement moves. Placement moves worsen overall behavioral problems, which can compound the difficulty of reducing absenteeism, school disruption, and poor achievement (Rubin, O'Reilly, Luan, & Localio, 2007). Needed are studies that examine more closely how placement experience impacts educational stability in young children. Despite population data that have quantified the magnitude of educational challenges for children in foster care, there are no studies that characterize the impact of placement experience on school disruption and absenteeism in elementary school children.

1.3. The goals of the study

For the above-mentioned reasons, we performed a longitudinal cohort study seeking to characterize the relationship between placement experience and absenteeism and changing schools for young children in foster care. We also sought to contrast the experiences of children who remained in foster care with the large subset of children who reunified home within the first two years after placement.

2. Method

2.1. Participants

The study sample was drawn from a larger, prospective, longitudinal cohort of 409 children between ages 3 and 8 years who were consecutively recruited from a large, Mid-Atlantic city's child welfare system upon a new placement into out-of-home care from 2006–2008. Only non-medically complex children in out-of-home care were enrolled in the longitudinal study (i.e. children with medically complex illness or those whose first placement was to treatment foster care were not enrolled). Children with a history of prior out-of-home placement were included as long as the most recent prior placement had ended at least 6 months prior to the study period. All children were in court-supervised care whether placed in formal kinship or non-kinship foster homes. Children in the cohort were followed longitudinally for an average of 24 months. The primary sources of data for this study were: (1) results of baseline surveys collected prospectively from foster caregivers and caseworkers; (2) attendance and enrollment data from the city's public school district between 2006 and 2010; and (3) child welfare administrative data summarizing maltreatment and child welfare history.

From the larger sample of 409 children enrolled in the longitudinal study, we restricted our analyses to those of school age (at least 5 years of age) and enrolled in the city's school district for at least 90 school days (half a school year) during their observation period. Although attendance is not mandatory in the school district until age 6, younger children were included because local child welfare policy supports early school enrollment. We excluded periods that a child was enrolled in preschool or was not eligible to enroll in kindergarten due to age. Children were identified as enrolled in the school district by matching the cohort of children in foster care to school district records using a sequential probabilistic match that prioritized social security number when available, and then elements of a child's name and date of birth. For children identified by the school district, school attendance and enrollment were collected for 24 months following entry into foster care. Only periods of enrollment within the city's school district were included. If a child moved out of the city for a period of time, that period was not included in subsequent analysis.

2.2. Measures

2.2.1. School enrollment and absenteeism

The primary outcomes were the number of days absent from school per year and number of schools attended during the child's observation period. Absences were defined as days not in school (both for recorded absences, excused and unexcused, and gaps in enrollment despite city residence) or days suspended. Regarding the decision to include gaps in enrollment, we made the a priori decision to include all possible days that a child missed school, as any day not in school is a missed opportunity for learning. Lack of prompt enrollment due to challenges in information transfer and other bureaucratic hurdles has been a significant problem, recognized and addressed by federal legislation. We therefore included gaps in enrollment to capture data on this problem.

Each child was also assigned an observation time based on eligible school days within the city's school district during their study period. School enrollment (or number of schools) was aggregated across the study period as the total number of new school enrollments after placement in out-of-home care including any school transition on entering care within an academic year.

2.2.2. Placement experience

The principal exposure was a nested measure of placement experience, which combined a measure of placement stability

for non-reunified children with a category dedicated for those children who reunified home. Categories were assigned at study completion based on the child's placement history over the average 24-month study period. This variable was adapted from a prior measure developed by Sigrid James and colleagues and used elsewhere (James, 2004; Rubin et al., 2007). The placement experience of children who did not reunify was categorized as early stable, late stable, or unstable. Early stability was defined as achieving a placement within 45 days of entering foster care that was maintained through the duration of the study. Late stability was defined as achieving a sustaining placement between 45 days and 9 months. Children with unstable placement histories continued to move beyond nine months into the study. Children who reunified home during the study were classified as a fourth, distinct category. Children with an early stable placement history formed the referent category for analysis. A placement experience variable was chosen instead of total number of placements because it prioritized the length of stable placements over enumerating placements. Such an approach permits the assignment of "good process" in the event of emergency placements within the first few weeks of foster care that leads quickly to a sustaining placement.

2.2.3. Behavioral assessment

Because behavior might confound the relationship between placement stability and attendance, a standardized measure of behavior was obtained near the onset of the study period. A Child Behavior Checklist (CBCL) was administered to the caregiver as soon as possible after two weeks of the child's first placement. The CBCL is a widely used measure of behavior problems and of social competence with established reliability and validity (Achenbach, 1991). It has been used in numerous previous studies in the child welfare population (Dubowitz, Zuravin, Starr, Feigelman, et al., 1993; James, 2004; Rubin et al., 2007; Zima et al., 2000). The caregiver is asked about the frequency of a behavior problem using a 3-point Likert scale. The individual scores are summed to create a total score, which is normed by age to identify standardized categories of normal, borderline (>83rd percentile), and clinical range (>90th percentile). A dichotomous variable for behavior was created with children scoring in the borderline or clinical range as having abnormal behavior. We chose to dichotomize the CBCL score, as the priority was to conservatively identify those children who had reached a threshold of significant behavioral problems and not simply adjust for those children with differences on a continuous scale that may have been meaningless within a non-clinical range of the CBCL score.

2.2.4. Additional child characteristics

Other demographic and clinical characteristics were obtained as covariates. Demographics included: age (ordinal by year), gender (categorical with boys as reference), race (binary with African-American as reference versus White, Hispanic, or Other). Clinical characteristics, chosen because of known relationship to placement experience, included: prior foster care placement (yes/no) (James, 2004), primary reasons for removal (encoded as binary variables for sexual abuse, physical abuse, or neglect) from the caseworker's perspective, and the type of initial placement (kinship vs. non-relative foster care) (Barth, 2008; James, 2004; Rubin et al., 2008). In addition, a chronic health variable was created from caregiver surveys combining two questions regarding presence of a health condition requiring frequent medical visits and medication and an assessment of the child's health on a Likert scale.

2.3. Missing data

The only missing data were the baseline CBCL scores for 8 of the 209 children in the sample. These children were excluded from the regression analysis.

2.4. Analysis description and plan

The data were described as frequencies for categorical variables, both for the total cohort, and stratified across categories of placement experience. A Chi-square test was performed to test the association of independent variables with the categories of placement experience. Poisson regression tested the unadjusted association of absent days and of schools attended with the independent variables including the primary predictor of placement experience. Across each variable the predicted margins and 95% confidence intervals of days attended per year and schools attended over 24 months, standardized for enrollment period were estimated. Selected from these were variables that were believed to be a priori important in the outcomes or those with a p value of less than 0.05.

Poisson regression estimated incident rate ratios for school absences and number of schools across placement experience, gender, age, sexual abuse as reason for placement, foster care type, prior placement history, and abnormal baseline CBCL. The models also permitted the estimation of days absent and school enrollment across strata of placement experience, while standardizing for the other covariates in the models. The number of eligible school days was used as an offset in the regression to adjust for varied lengths of time eligible for school attendance in the city.

Due to an unexpected finding of high absenteeism among children who were reunified, additional analyses were pursued to better understand the nature of when reunified children were missing school. Data were reorganized into a longitudinal structure at the day-level for eligible school days for each child in the cohort. A time-varying covariate identifying out-of-home care vs. reunification was added for each child-day. A generalized linear model with a logit link was used to disaggregate the within vs. across-child effect of reunification on the likelihood of absence from school.

Finally, to offer some descriptive analysis of the timing of absences in relationship to placements, the school attendance of all children with eligible days within a window of 60 days preceding and 60 days following each placement was aggregated for each day. Absence rates for each day of the time window were calculated as the fraction of children who were out of school divided by the total number of children with an eligible day of school. Separate histograms were created for first versus all other placements during the study period.

All statistical analyses were performed using Stata 10.0 software (Stata Corp, College Station, TX). The study was approved by the institutional review boards of Children's Hospital of Philadelphia, the University of Pennsylvania, and the school district and child welfare system participating in the study.

3. Results

From the original longitudinal cohort 409 children, we identified 257 children who were at least age 5 on enrollment in foster care, of whom 219 were matched to school district enrollment during the study period. From these 219 children, 10 children were excluded for being enrolled less than 90 school days out of the 24-month period. The final study sample was therefore 209 children who linked to the school's enrollment data with school eligibility of greater than 90 days during their study period. Children in the sample were evenly distributed by age and gender, and the majority were African-American (Table 1). A third of children had abnormal CBCL scores at baseline. Nearly a quarter of the children had a history of at least one prior placement in foster care. More than half were placed in kinship care on entry into foster care. A third of children reunified home during the study, and among those who did not reunify, half achieved early stability in their placements.

The mean number of days absent per year for the children in the study was 25. For the study population 13% of absences were due to days not enrolled in school, although such gaps in enrollment were

Table 1
Characteristics of the longitudinal cohort of children in foster care aged 5 to 8 years enrolled in a large, urban school district.

Characteristics of child			N (%)	Days absent*	95% CI	p value	Number of schools*	95% CI	p value
Child's age (years)	5		50 (24)	22.8	16.3–29.2		2.3	2–2.6	
	6		58 (28)	23.2	18.5–28	0.909	2.5	2.2–2.8	0.320
	7		58 (28)	20.8	17.2–24.4	0.595	2.9	2.6–3.3	0.009
	8		43 (21)	22.2	17–27.4	0.893	3	2.5–3.5	0.012
Child's gender	Male		106 (51)	25.4	21.1–29.7		2.7	2.5–3	
	Female			19.1	16.6–21.6	0.009	2.6	2.3–2.9	0.473
Child's race/ethnicity	African-American		164 (79)	22.7	19.8–25.6		2.7	2.4–2.9	
	White/Hispanic/other			20.5	15.8–25.1	0.431	2.8	2.3–3.2	0.656
Abnormal behavior on CBCL at baseline†		N	124 (59)	19.5	16.8–22.2		2.6	2.3–2.8	
		Y		27.1	22.1–32.1	0.005	2.9	2.5–3.2	0.139
Chronic health problem		N	152 (73)	21.1	18.9–32.1		2.8	2.5–3	
		Y		25.5	18.7–23.5	0.186	2.5	2.1–2.8	0.149
Characteristics of foster care experience									
Reason for placement	Neglect or abandonment	N	14 (7)	22.8	18.4–27.3		2.9	2.3–3.5	
		Y		22.2	19.6–24.9	0.817	2.7	2.5–2.9	0.382
	Physical abuse	N	111 (53)	23.7	20.1–27.3		2.7	2.5–3	
		Y		20.6	17.3–24	0.222	2.6	2.3–2.9	0.471
	Sexual abuse	N	165 (79)	22.6	19.6–25.5		2.6	2.4–2.8	
		Y		21.2	16.8–25.6	0.615	3	2.5–3.4	0.106
Foster care type	Foster care		95 (46)	24.1	20.9–27.4		3.1	2.9–3.4	
	Early kinship care			20.8	17.1–24.4	0.181	2.3	2.1–2.5	0.000
Any prior placement history		N	161 (77)	21.8	19.2–24.4		2.6	2.4–2.8	
		Y		23.8	17.2–30.3	0.584	2.8	2.4–3.3	0.343
Placement experience**	Early stable		66 (32)	15.2	12.2–18.2		1.7	1.5–1.8	
	Late stable		24 (12)	22.8	16.4–29.2	0.020	2.8	2.4–3.2	0.000
	Unstable		47 (23)	23.1	18.3–27.8	0.004	3.7	3.1–4.2	0.000
	Reunified		72 (35)	28.3	23.1–33.5	0.000	3	2.7–3.2	0.000

* Estimates of days absent per year and number of schools attended over two years were obtained from univariate Poisson regression with offset for enrollment time.
** Placement experience was categorized as early stable (established stable home within 45 days of entry into foster care), late stable (within 45 days to 9 months), unstable (beyond 9 months), or reunified (moved home to birth parents within the 24-month study period).
† CBCL = Child Behavioral Checklist, which was dichotomized at the 83rd percentile.

not equally distributed. Of the 209 children, 49 had gaps in enrollment, ranging from 1 to 230 total days not enrolled per child in a 24-month period. For children in unstable placements, unenrolled days represented 21% of absent days. While 20% of the children were suspended, only 4% of the absences were due to suspensions. A quarter of the children missed at least 33 days (the equivalent of 6.5 weeks) of school per year. In univariate analysis, absenteeism varied by placement stability with children in early stable placements having the least days absent with a stepwise increase to children with unstable placements, who averaged 23 days absent ($p = 0.004$, Table 1). Children who reunified home, however, were the most absent, although not statistically different from children with unstable placements. Significantly higher absenteeism was also seen among males and children with abnormal behavior at baseline.

The average number of schools attended by children was 2.7 (SD 1.3–4.1, Table 1) with 20% in 4 or more schools in 24 months. In univariate analysis, the highest rates of school change were among children with unstable placement histories, who averaged 3.7 schools (95% CI 3.1–4.2) over a 24-month average observation period. In contrast, children with early stable placements averaged 1.7 schools (95% CI 1.5-1.8).

Characteristics of the children varied by their placement experiences (Table 2). Across all characteristics, placement type was the most predictive of early stability; 46% of children who started in kinship care achieved early stability, compared to only 15% of children in non-relative foster care ($p<0.001$). History of a prior placement was associated with lower likelihood of reunification, and history of sexual abuse was associated with a greater likelihood of unstable placements. Among children with normal baseline CBCL scores, 37% achieved early stability, compared to only 22% of children with abnormal baseline CBCL scores.

Controlling for age, gender, baseline CBCL, placement type, prior placement history, and sexual abuse history, placement experience continued to be associated with days absent in a stepwise fashion. Children with unstable placement histories were 37% more likely (95% CI 1.03–1.81) to be absent than children with early stability. Worse yet, children who reunified home were 70% more likely to be absent (95% CI 1.27–2.27) than children with early stability (Table 3). Standardized across covariates, the estimated days absent from school per year appear in Fig. 1. Non-reunified children with early-stable placement were estimated to have 16 days absent (95% CI 13–18), compared to 22 days absent (95% CI 18–27) for children who were in unstable placements. Children who reunified during the study were estimated to have 28 absent school days per year (95% CI 23–33), nearly 6 weeks of school, far exceeding the absenteeism of children with early stable placements. Separate, adjusted, longitudinal, day-level analysis subsequently revealed that absenteeism for reunified children was driven by across-child differences more than within-child effects of moving from foster care to reunification. Apart from placement experience, abnormal baseline CBCL scores and being male continued to be associated with higher numbers of days absent. Children in early kinship care, standardized by their differences in placement experience, had no greater or less likelihood of absenteeism than children in non-relative foster care.

Similar to absenteeism, school changes continued to be associated with placement experience in the multivariable model (Table 3). Children with unstable placement histories were estimated to attend an average of 3.6 schools over 2 years (95% CI 3.1–4.1), twice as many as those with early stable placement (Fig. 2). In contrast to the pattern seen with absenteeism, children who reunified home had fewer school changes compared to children with unstable placements. Children in kinship care had fewer school changes, attending 2.5 schools over 2 years compared to 2.9 schools for non-relative foster care ($p = 0.005$). When school change was added to the full model evaluating absenteeism, it only slightly modified the coefficient for placement experience, meaning it was not likely a significant independent mediator separate from placement stability.

Table 2
Characteristics of children in foster care aged 5 to 8 years enrolled in a large, urban school district in relationship to their placement experience*.

Characteristics of child			Early stable (%)	Late stable (%)	Unstable (%)	Reunified (%)	p value
Child's age in years 5	5		28	10	28	34	
	6		34	12	24	29	
	7		29	12	17	41	
	8		35	12	21	33	0.939
Child's gender	Male		25	10	23	42	
	Female		38	13	22	27	0.117
Child's race/ethnicity	African-American		33	12	21	34	
	White/Hispanic/other		27	9	27	38	0.705
Abnormal behavior on CBCL at baseline**		N		10	22	31	
		Y	22	13	25	40	0.162
Chronic health problem		N	32	9	24	34	
		Y	30	18	18	35	0.328
Characteristics of foster care experience							
Reason for placement							
	Neglect or abandonment	N	29	7	7	57	
		Y	32	12	24	33	0.251
	Physical abuse	N	32	10	23	35	
		Y	31	13	23	34	0.897
	Sexual abuse	N	34	10	19	38	
		Y	23	18	36	23	0.014
Foster care type	Foster care		15	16	29	40	
	Early kinship care		46	8	17	30	0.000
Any prior placement history		N	32	12	18	39	
		Y	31	10	38	21	0.022

* Placement experience was categorized as early stable (established stable home within 45 days of entry into foster care), late stable (within 45 days to 9 months), unstable (beyond 9 months), or reunified (moved home to birth parents within the 24-month study period).
** CBCL = Child Behavioral Checklist, which was dichotomized at the 83rd percentile.

Fig. 3A and B provide further detail describing how average daily absenteeism varied in relationship to placement change. During the first couple of weeks after entry into foster care, there is a significant increase in the average daily absence rate. After this period, absenteeism improves compared to the absenteeism preceding entry into foster care (Fig. 3A). For subsequent placements, there is a similar pattern of a spike in absenteeism with placement change with the highest absenteeism occurring within a one-week window of a placement change (Fig. 3B).

4. Discussion

This study demonstrated that even after accounting for child characteristics, young children in foster care with more unstable placement experience had higher levels of absenteeism and school changes than children who stabilized more quickly. The value of this finding, beyond its methodological strength in adjusting for other characteristics, is that it characterized the risk for absenteeism and school change across strata of children according to the stability of their placement experiences. It is also the first that does so for young children at a time when school engagement may be critical for success.

This study also adds to the emerging literature about educational outcomes among children in the child welfare system. For those children who remained in foster care, our findings are similar to others that have demonstrated high levels of school change and absenteeism, although ours would suggest that concentrating on stabilizing children in care may alone be a significant asset toward improving educational stability. Regarding the high absenteeism of children pre-placement or returning home, the findings are similar to other studies that have reported higher rates of absenteeism among children in the child welfare system compared to community controls (Conger & Rebeck, 2001; Leiter & Johnsen, 1997; Taussig et al., 2001; Trout, Tyler, Stewart, & Epstein, 2012). But, the implication is potentially far-reaching: children in foster care may be the tip of the iceberg for a much larger issue of trauma and school disengagement for at-risk children who traverse the child welfare system. This larger group of children could benefit from improved coordination of

Table 3
Incident rate ratios* of school absences and of schools attended among a cohort of children in foster care aged 5 to 8 years enrolled in a large, urban school district.

	School absence			Number of schools		
	IRR	95% CI	p value	IRR	95% CI	p value
Placement experience**						
Early stable						
Late stable	1.35	0.91–1.99	0.132	1.55	1.29–1.87	0.000
Unstable	1.37	1.03–1.81	0.029	2.08	1.75–2.48	0.000
Reunified	1.70	1.27–2.27	0.000	1.67	1.45–1.93	0.000
Child's age	0.98	0.87–1.09	0.676	1.11	1.06–1.18	0.000
Female	0.79	0.64–0.97	0.024	1.01	0.89–1.13	0.928
Abnormal behavior on CBCL at baseline†	1.32	1.08–1.62	0.008	1.07	0.95–1.21	0.286
Early kinship care	0.93	0.75–1.15	0.484	0.84	0.75–0.95	0.005
Any prior placement history	1.16	0.85–1.58	0.348	1.02	0.89–1.18	0.733
Sexual abuse as reason for placement	0.93	0.76–1.13	0.459	1.02	0.89–1.17	0.803

* Rate ratios were obtained from multivariable Poisson regression with an offset of school exposure time.
** Placement experience was categorized as early stable (established stable home within 45 days of entry into foster care), late stable (within 45 days to 9 months), unstable (beyond 9 months), or reunified (moved home to birth parents within the 24-month study period). Early stable is referent group.
† CBCL = Child Behavioral Checklist, which was dichotomized at the 83rd percentile.

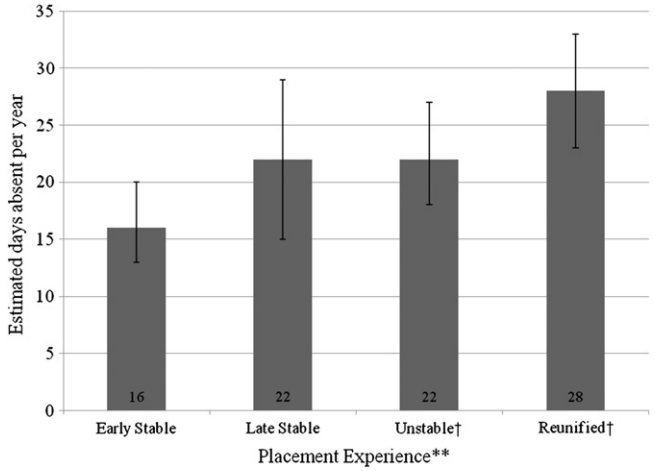

Fig. 1. Adjusted estimates of school days absent per year* across placement experience of children in foster care aged 5 to 8 years in a large, urban school district. *Estimates are predictive margins obtained from multivariable Poisson regression with an offset of school exposure time, controlling for age, gender, baseline Child Behavior Checklist, placement type, prior placement history, sexual abuse history, and placement experience. **Placement experience was categorized as early stable (established stable home within 45 days of entry into foster care), late stable (within 45 days to 9 months), unstable (beyond 9 months), or reunified (moved home to birth parents within the 24-month study period). Early stable is referent group. † Denotes p value <0.05 compared to early stable group.

responsibility between the school system, child welfare, and behavioral health around absenteeism.

4.1. Limitations

There are several limitations to our study. First, we did not have a control group of children not in foster care to provide a better context for how school change and absenteeism differ. However, the focus was on providing a description of variation within this high-risk group according to placement changes over time, which has not been done before. Other studies have already compared attendance of foster and non-foster care children (Stone, 2007), and even in our study, the rates far exceeded the district's standard of reducing absenteeism to less than 10% of school days. Second, unobserved confounding still remains a concern. For example, at the child level, we did not have

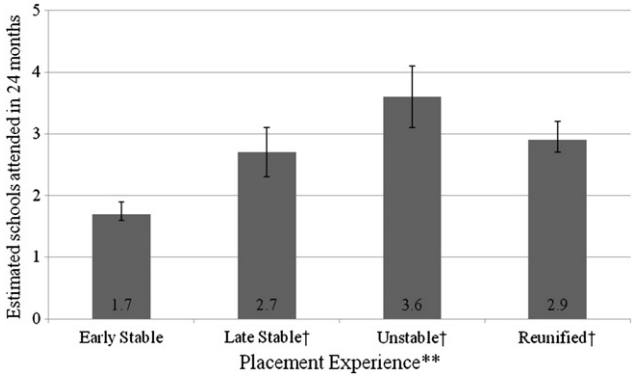

Fig. 2. Adjusted estimates of schools attended* in two-year window across placement experience for children in foster care aged 5 to 8 years in a large urban, school district. *Estimates are predictive margins obtained from multivariable Poisson regression with an offset of school exposure time, controlling for age, gender, baseline Child Behavior Checklist, placement type, prior placement history, sexual abuse history, and placement experience. **Placement experience was categorized as early stable (established stable home within 45 days of entry into foster care), late stable (within 45 days to 9 months), unstable (beyond 9 months), or reunified (moved home to birth parents within the 24-month study period). Early stable is referent group. † Denotes p value <0.05 compared to early stable group.

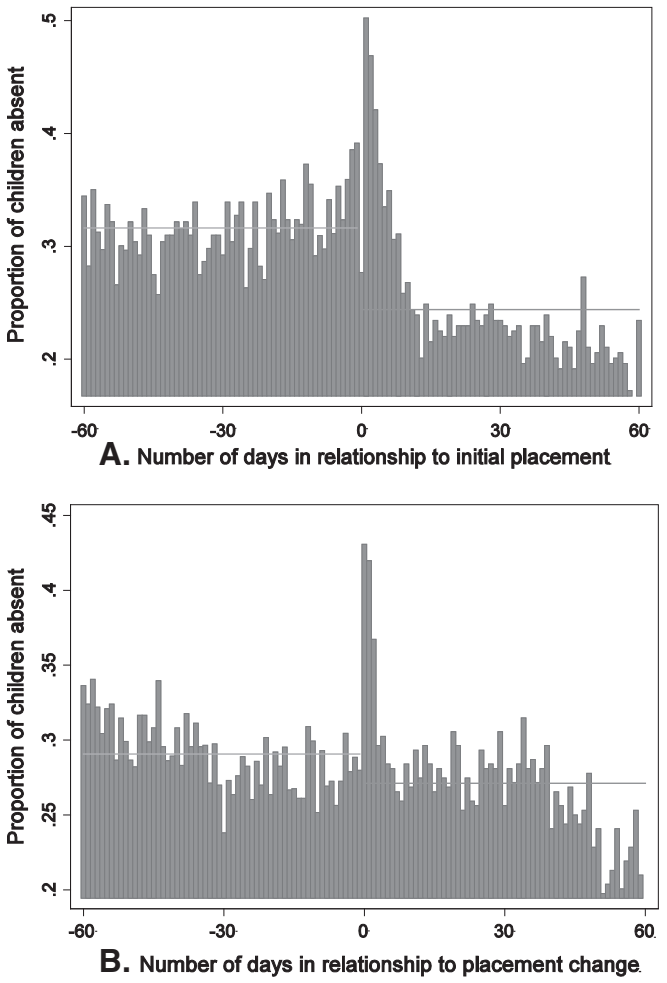

Fig. 3. Day-level absence rates for children in foster care aged 5 to 8 years in a large, urban school district, in relationship to: A) their initial placement into foster care; B) all subsequent placements while in foster care. Horizontal lines denote the mean absence rates before and after placement.

good measures of the child's physical health, which might have been influenced by placement stability and have significantly affected absenteeism (even if it is difficult to surmise a relationship with school change). At the school level, the climate of performance and absenteeism could significantly impact a child's likelihood of absenteeism, but we were not provided with the data to assess this variable. Finally, our data is from one school district and may not be generalizable to other areas, as local policies addressing absenteeism differ.

Another potential source of bias was in our approach to defining absences, in which we included suspensions and gaps in enrollment. Suspensions accounted for only 4% of absent days, and further analysis without suspensions did not change the relationship between placement experience and absenteeism. Given these reasons, we chose to include all absences because significant absenteeism, regardless of cause, has been linked to health risk behaviors and decreased educational achievement (Eaton, Brener, & Kann, 2008; Gottfried, 2009).

A final omission was that our analysis was unable to distinguish the degree to which placement in foster care explains the variation in attendance and outcomes for school-age children. Home environment is one of several factors that may influence school-age attendance and outcomes. Other important factors, for example, might be a child's baseline behavioral issues, one's educational achievement (e.g. reading performance) and – at a higher level – the overall school climate and neighborhood characteristics where the child lives. Although we include a child's baseline behavioral status, we acknowledge that we did not have access to some of these other data. Future study

should therefore consider the degree to which home setting influences attendance and outcomes apart from these other factors.

4.2. Implications for policy and practice

Despite these limitations, we have highlighted patterns of absenteeism and school change related to placement experience in a vulnerable population, susceptible to intervention. At a very superficial level, it is difficult to imagine a child achieving success when on average they may be exceeding six weeks of absenteeism and more than one school change in a given year. There is opportunity for intervention either by improving placement experience directly or decreasing its impact on absenteeism and delayed school enrollment or school changes. Even among children with early stable placement there were high levels of absenteeism on average and some outliers with high absenteeism. It is expected that there will be some immediate disruption to school as a result of the traumatic events occurring; however, attendance remains important for these children to make educational progress, which needs to be balanced against multiple priorities.

First and foremost, the school and child welfare systems should collaborate to measure absenteeism among all children in foster care, especially young children whose absenteeism is under greater control. Monitoring of absenteeism is encouraged in the guidance on *Fostering Connections* written by the Administration for Children and Families (July 9, 2010); however, agencies are given flexibility in how this is carried out. New initiatives to track and address absenteeism for children in foster care hold promise for establishing best practices (American Bar Association Legal Center for Foster Care & Education, 2008). Absenteeism should be defined broadly and consistently to capture the actual attendance in school. Second, a protocol for responding to absenteeism should be established or clarified for children in care if processes differ from broader truancy prevention programs. In addition, children reunifying home could benefit from monitoring and educational supports on a voluntary basis, which has been evaluated in one small program (Trout et al., 2012). The responsibility for such supports likely rests with both the educational and child welfare systems; at the very least, the child welfare system should acknowledge the process of reunification as a risk factor for absenteeism and consider ways to better communicate and coordinate this transition with their partners in the educational system.

4.3. Directions for future research

Apart from our primary finding among children in placement, we draw attention to the particularly higher risk of absenteeism prior to placement, and the significant absenteeism among children reunifying home, which exceeded the absenteeism among children remaining in care. Such a finding illustrates that despite concerns about educational stability for children in foster care, educational stability may be of equal if not of greater urgency among the larger group of children who are retained in-home. For children reunifying home, the underlying reasons for their absences remain unclear; our study demonstrated that absences were uniformly distributed both in care and after reunification. Whether this represents less attention paid to coordinating the educational outcomes of children returning home, challenges around home visits prior to reunification, or other reasons, should be a subject for future research.

While this study describes the association between placement stability and educational stability for young children, such a relationship is not completely linear. Some children with early stability had high rates of absenteeism; other children with poor placement stability had fewer absences or did not change schools frequently. Furthermore, children in kinship care, despite improved placement and school stability, were no less likely to have problems with absenteeism. Such data are not necessarily surprising; despite advantages that kinship care confers to placement stability, other studies have sometimes failed to detect significant benefits in outcomes when comparing kinship to non-relative foster care (Cuddeback, 2004; Dubowitz et al., 1994; Leslie, Landsverk, Horton, & Ganger, 2000).

Given the challenge of coordinating the services for children in the child welfare system, future research will need to disentangle the potential value of educational stability, regardless of placement stability, on child outcomes. *Fostering Connections* has made the assumption that educational stability alone can promote resiliency despite the experience in care, but if the protective effect of educational stability is weak, then we will need to concentrate more strongly on placement stability as the means to improving a range of outcomes on children traversing care.

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