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Residential Mobility and Flourishing Among United States School-Age Children, 2011/2012 National Survey of Children's Health

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Abstract
Objectives To investigate the association of residential mobility with flourishing among school-age children. *Methods* Data from the 2011/2012 National Survey of Children's Health were used to examine parent/caregiver-reported information on flourishing and residential mobility for children age 6–17 (N = 63,333). Residential mobility was the number of times the child moved categorized as: none, 1–2, and 3+. Children who were reported to show interest/curiosity, finish tasks, stay calm/in control, care about doing well in school, and do all homework were coded as flourishing. Sex-specific multivariable models were used to model the relative risk of mobility on flourishing. Interactions of mobility with age and poverty were tested. *Results* Among US school-age children, 22% had no moves, 39% had 1–2 moves and 39% had 3+ moves in their lifetime. Nearly half (45%) were flourishing. Both boys and girls who moved 3+ times were less likely to flourish compared to children with no moves. Among poor boys moving 3+ times was associated with less flourishing (aRR 0.83, 95% CI 0.71, 0.98) with no association for non-poor boy. Among girls the pattern was reversed (aRR 0.88, 95% CI 0.81, 0.95 for non-poor girls and no association for poor girls). *Conclusions for Practice* Residential mobility may lead to lower rates of flourishing. The patterns, when stratified by age or poverty, are different for boys and girls.

Keywords Flourishing · School engagement · Residential mobility

Significance

What is already known on this subject? Residential mobility in childhood has been shown to have adverse effects on child health but little is known about the impact of childhood residential mobility on positive childhood development.

What does this study add? This study provides evidence that residential mobility in childhood is also associated with less successful childhood development. Having multiple moves in childhood is associated with decreased flourishing for both boys and girls and the patterns, when stratified by age or poverty are different for boys and girls.

Introduction

In the United States in 2008–2009, 13.8% of school-age children moved (Ihrke et al. 2011) with 35% having three or more moves in their lifetimes according to the 2007 National Survey of Children's Health (Busacker and Kasehagen 2012). Residential moves during childhood are disruptive and can be stressful (Adam 2004; Caughy et al. 2008; Humke and Schaefer 1995; Leventhal and Brooks-Gunn 2000; Scanlon and Devine 2001; Singh and Ghandour 2012; Stokols and Shumaker 1982; Xue et al. 2005). Depending on family context, the stress may result in adverse developmental consequences, such as learning and memory impairment and behavior problems (National Scientific Council on the Developing Child 2005/2014;

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Sandstrom and Huerta 2013; Shonkoff et al. 2012). In addition, compared to children who experienced no lifetime moves, children who moved are much more likely to have worse overall physical and oral health, lack a medical home, and be uninsured or to have experienced periods of no insurance coverage (Busacker and Kasehagen 2012). Household mobility in the US is more common among families living in poverty and older children (Ihrke and Faber 2012; Ihrke et al. 2011; Murphey et al. 2012).

Childhood residential mobility has been associated with multiple negative outcomes such as externalizing behavior, adjustment problems, poorer physical and oral health, and increased preventable hospitalizations (Adam and Chase-Lansdale 2002; Busacker and Kasehagen 2012; Fowler et al. 2014; Gillespie 2013; Gilman et al. 2003; Hutchings et al. 2016; Simpson 1994). Mechanisms that can lead to poorer outcomes are increased chaos and stress (Adam 2004; Caughy et al. 2008; Humke and Schaefer 1995; Leventhal and Brooks-Gunn 2000; National Scientific Council on the Developing Child 2005/2014; Sandstrom and Huerta 2013; Scanlon and Devine 2001; Stokols and Shumaker 1982). In addition to understanding child residential mobility's association with negative outcomes, understanding the relationship with positive developmental markers is also important. Flourishing, having positive emotions and positive psychological and social functioning, is an important marker for child health (Keyes 2002; Lippman et al. 2011; Singh and Junnarkar 2015). Unfortunately, no universal, valid, and robust measures of flourishing, also called thriving and well-being have been developed yet (Moore et al. 2017), but more attention is being paid to determinants of positive child development (Keyes 2002; Lippman et al. 2011; Moore et al. 2017). Various subdomains of child flourishing have been suggested and include school engagement, self-regulation, and curiosity (Lippman et al. 2011; Measures of Flourishing: Indicators on Children and Youth 2013). Research suggests that the more positive flourishing items a child has, the more likely they are to engage in positive health behaviors and the less likely they are to engage in negative health behaviors (Murphey et al. 2004). Previous research has suggested that older children and children living in poverty are less likely to be reported as flourishing and engaged in school (Keyes 2006; Measures of Flourishing: Indicators on Children and Youth 2013).

Previous research on childhood residential mobility has focused on adverse outcomes with little information on the association between childhood residential mobility and markers of successful childhood development (Murphey et al. 2012). The goal of this paper was to assess the association of residential mobility with flourishing among US children age 6–17. We further assessed whether that association differed by gender, age, or family poverty level of the child.

Methods

We conducted an analysis of data from the 2011/2012 National Survey of Children's Health (NSCH) (Child and Adolescent Health Measurement Initiative (CAHMI)). The NSCH is a nationally representative cross-sectional telephone survey in which one child is randomly chosen per household. Both landlines and cellphones were included in the sample frame and the response rate was 38.2% for the landline sample, 15.5% for the cellphone sample, and 23.0% for the combined dual-frame sample with a 54.1% completion rate for households known to include children in the landline sample and 41.2% for the cell-phone sample (2011–2012 National Survey of Children's Health Frequently Asked Questions 2013). Approximately 1800 children per state were included in the sample, resulting in a representative sample of 95,677 children ages 0–17. We limited our analyses to children age 6–17, among whom information on flourishing and residential mobility was collected (N = 63,333). Children under age 6 were excluded because our outcome measures were either measured differently or were not collected for this subpopulation.

Outcome variables

Flourishing is a composite measure based on parent/caregiver responses to five items in two domains. First, self-regulation/curiosity was measured by three items: (1) shows interest and curiosity in learning new things, (2) finishes tasks and follows through with plans, and (3) stays calm and in control when faced with a challenge. Second, school engagement was assessed by (1) whether a child cared about doing well in school and (2) did all required homework. Response options included: "never," "rarely," "sometimes," "usually," and "always." Children with all five items endorsed as "usually" or "always" were coded as flourishing. Self-regulation/curiosity and school engagement were similarly considered present if all sub-items were endorsed.

Residential mobility

The primary explanatory variable was residential mobility. Residential mobility was measured by the question, ''How many times has [the sample child] ever moved to a new address?'' Similar to previous studies (Busacker and Kasehagen 2012; Simpson 1994), we examined this variable as a categorical variable: no lifetime moves, 1–2 lifetime moves, and 3 or more lifetime moves.

Covariates

Parents or caregivers provided demographic information on the sample child, including sex, age, race, ethnicity, parental/caregiver education, and family income. Age was recoded into four categories: 6–8, 9–11, 12–14 and 15–17 years. Race and ethnicity were recoded into a single variable: Hispanic, non-Hispanic Black, non-Hispanic White, and non-Hispanic multi-racial/other. Family household structure was categorized into four levels: two-parent households (two biological or adoptive parents), two-parent households with one step-parent, single-mother households (no father present), and all other family household compositions. Parental/caregiver education was computed as the highest level of parental or caregiver education, recoded into two levels: no college education and some college education. Family poverty was based on the imputed variable (Child and Adolescent Health Measurement Initiative (CAHMI)) for family incomes and dichotomized as < 200% of the federal poverty level (FPL) and 200% or more FPL.

Statistical analysis

Descriptive statistics were computed as unweighted counts and weighted prevalence by residential mobility. Since previous evidence suggests that the effects of residential mobility may be different for males and females (Sanbonmatsu et al. 2011), all analyses were stratified by gender. Multivariable models, accounting for weighting and complex survey design, were used to model the relative risk of mobility on flourishing and the domains of self-regulation/curiosity and school engagement, controlling for age, race/ethnicity, parental/caregiver education, family poverty level, and household composition. We tested interactions separately for age and poverty in the gender stratified models and present regression results stratified for each set of these models. We assessed whether results differed if flourishing and its subcomponents were treated as counts instead of a binary variable. Results were substantially the same and we therefore present the binary measures results. Stata SE v.15 software (College Station, TX, USA) was used for all analyses.

Results

Among US children age 6–17, 22% had no moves, 39% had 1–2 moves and 39% had 3+ moves in their lifetime. Nearly half (45%) were flourishing with 48% meeting all three criteria for self-regulation/curiosity and 80% considered engaged in school. Both boys and girls with more moves were more likely to be older, a race/ethnicity other than non-Hispanic white, have less educated parents, live below 200% of the FPL, and not live in a two-parent household (Table 1).

Children with 3+ moves were less likely to flourish compared to children with no moves. Among girls with 3+ moves 43.1% were flourishing compared to 54.4% of girls with no moves. Among boys with 3+ moves, 35.6% were flourishing compared to 46.6% of boys with no moves. Among girls with 3+ moves, 45.8% had all three measures of self-regulation/curiosity endorsed by parents compared to 55.6% among girls with no moves. Among boys with 3+ moves, 39.7% had all three measures of self-regulation/curiosity endorsed by parents compared to 49.5% of among boys with no moves. Overall, parent-reported school engagement was high, yet significant differences by number of moves were observed: 84.8% of girls with 3+ moves were considered engaged in school compared to 89.6% of girls with no moves and 80.8% of boys with 3+ moves were considered engaged in school compared to 86.9% of boys with no moves. Differences persisted when accounting for age, race/ethnicity, parental/caregiver education, family poverty, and household composition. Children who moved 3+ times were less likely to flourish compared to children with no moves (girls adjusted relative risk (aRR) 0.89, 95% confidence interval (CI) 0.83, 0.95 and boys aRR 0.89, 95% CI 0.82, 0.97). Both boys and girls who moved 3+ times were less likely to have all three measures of self-regulation/curiosity endorsed (girls aRR 0.91, 95% CI 0.85, 0.98 and boys aRR 0.93, 95% CI 0.86, 0.998) or to be engaged in school (girls aRR 0.94, 95% CI 0.91, 0.96 and boys aRR 0.95, 95% CI 0.92, 0.99), compared to children with no moves (Table 2).

When stratified by age, the association between moves and flourishing were different for boys and girls. Among boys age 12–14 and 15–17, 3+ moves was associated with less flourishing (age 12–14: aRR 0.77, 95% CI 0.65, 0.91 and age 15–17: aRR 0.84, 95% CI 0.71, 0.99) compared to same age boys with no moves. No association was seen among boys age 6–8 or 9–11 years old or for 1–2 moves among boys of any age. For boys, no association was seen between moves and self-regulation/curiosity or school engagement in any age group (Table 3).

Among girls age 6–8 and 12–14, 3+ moves was associated with less flourishing (age 6–8 aRR 0.81, 95% CI 0.70, 0.94 and age 12–14 aRR 0.77, 95% CI 0.66, 0.89) compared to same age girls with no moves, while among girls age 15–17, having 1–2 moves was associated with more flourishing (aRR 1.13, 95% CI 1.01, 1.27). A similar pattern was seen for the association between moves and self-regulation/curiosity. Among girls age 6–8, 3+ moves was associated with less school engagement (aRR 0.93, 95% CI 0.89, 0.97) and the models for other age groups did not converge (Table 3).

The association between moves and flourishing differed for boys and girls. For boys, 3+ moves was associated with less flourishing < 200% FPL (aRR 0.83, 95% CI 0.71, 0.98)

Table 1 Distribution of socioeconomic characteristics and flourishing by number of lifetime moves for children age 6–17 stratified by gender, NSCH 2011/2012

Measure	Males					Females				
	Unweighted N	Number of moves (lifetime)				Unweighted N	Number of moves (lifetime)			
		0	1–2	3+	p-value		0	1–2	3+	p-value
Overall	32,755	22.0%	39.5%	38.5%		30,578	22.6%	38.4%	39.0%	
Age					< 0.0001					< 0.0001
6–8	7534	31.06	24.83	19.86		7234	29.94	26.14	19.44	
9–11	7720	24.21	25.41	24.93		7384	26.16	24.23	24.25	
12–14	8130	22.06	25.16	27.11		7505	23.73	24.65	25.97	
15–17	9371	22.67	24.61	28.10		8455	20.16	24.98	30.34	
Race/ethnicity					< 0.0001					< 0.0001
Hispanic	4170	18.88	22.61	25.13		3755	19.29	20.40	23.88	
White, non-Hispanic	42,727	64.65	54.67	48.54		20,539	59.66	56.46	46.56	
Black, non-Hispanic	6077	8.38	13.06	16.49		2964	10.41	14.05	18.86	
Multi-racial/other, non-Hispanic	6604	8.09	9.66	9.84		3320	10.63	9.10	10.69	
Parental education					< 0.0001					< 0.0001
No college	7063	26.77	28.45	38.96		6357	25.48	30.33	35.09	
Some college	49,913	73.23	71.55	61.04		24,221	74.52	69.67	64.91	
Household poverty					< 0.0001					< 0.0001
< 200% FPL	10,239	30.82	37.19	54.75		9380	29.52	35.93	53.17	
200% or more FPL	22,516	69.18	62.81	45.25		21,198	70.48	64.07	46.83	
Family structure					< 0.0001					< 0.0001
Two parent—biological or adopted	22,109	78.51	68.56	43.15		20,568	79.76	68.34	44.01	
Two parent—step family	2947	4.38	8.26	19.87		2753	1.70	8.56	19.46	
Single mother—no father present	5069	10.63	16.58	26.43		5050	12.35	17.15	27.51	
Other family type	2630	6.48	6.60	10.55		2207	6.20	5.96	9.03	
Flourishing					< 0.0001					< 0.0001
No	18,796	53.53	57.32	64.61		14,606	45.60	46.82	56.92	
Yes	13,959	46.57	42.68	35.39		15,972	54.40	53.18	43.08	
Self-regulation/curiosity					< 0.0001					< 0.0001
No	17,508	50.50	54.16	60.28		14,047	44.44	45.00	54.22	
Yes	15,247	49.50	45.84	39.72		16,531	55.56	55.00	45.78	
School engagement					< 0.0001					< 0.0001
No	4994	13.14	16.91	19.16		3628	10.43	11.51	15.20	
Yes	27,744	86.86	83.09	80.84		26,937	89.57	88.49	84.80	

while among boys at or above 200% FPL, more moves had a small (1–2 moves: aRR 0.93, 95% CI 0.87, 0.996) or no association (3+ moves: aRR 0.95, 95% CI 0.87, 1.03) compared to boys in the same poverty category with no moves. Among girls at or above 200% FPL, 3+ moves was associated with less flourishing (aRR 0.88, 95% CI 0.81, 0.95). A similar pattern was seen for self-regulation/curiosity. For school engagement, no association was seen for boys while for girls, < 200 FPL 3+ moves was associated with less school engagement and for girls at or above 200% FPL, both 1–2 moves and 3+ moves was associated with less flourishing (Table 4).

Discussion

Similar to findings from 2007, this study saw high mobility among US children with 39% moving 3+ times during childhood. Number of moves in a child's life is inversely associated with flourishing overall and with the sub domains of self-regulation/curiosity and school engagement. Multiple moves can cause interruption in child healthcare (Busacker and Kasehagen 2012; Fowler 1993; Mustard et al. 1996) and school continuity (Scanlon and Devine 2001) that can lead to less self-regulation/curiosity and school engagement. These findings indicate that

Table 2 Adjusted relative risk of flourishing overall, self-regulation/curiosity, and school engagement stratified by gender

	Males aRR (95% confidence interval)	Females aRR (95% confidence interval)
Flourishing		
0 moves	1.00	1.00
1–2 moves	0.95 (0.89, 1.02)	1.01 (0.95, 1.07)
3+ moves	0.89 (0.82, 0.97)*	0.89 (0.83, 0.95)*
Self-regulation/curiosity		
0 moves	1.00	1.00
1–2 moves	0.96 (0.90, 1.02)	1.02 (0.97, 1.08)
3+ moves	0.93 (0.86, 0.998)*	0.91 (0.85, 0.98)*
School engagement		
0 moves	1.00	1.00
1–2 moves	0.99 (0.96, 1.01)	0.98 (0.97, 0.997)*
3+ moves	0.95 (0.92, 0.99)*	0.94 (0.91, 0.96)*

Adjusted for age, race/ethnicity, parental/caregiver education, family poverty level, and household composition

*$p < 0.05$

having multiple moves in childhood is associated with decreased flourishing for both boys and girls and the patterns, when stratified by age or poverty are different for boys and girls.

These results are consistent with findings from the randomized, controlled moving to opportunity (Sanbonmatsu et al. 2011) study among low income families in which moving was detrimental for boys but not for girls. These observational findings add to this evidence and, in addition, provide evidence that for girls at or above 200% FPL, multiple moves were detrimental. Previous evidence has demonstrated that poor children tend to move more (Ihrke et al. 2011; Murphey et al. 2012) (in these data 26.8% of children < 200% FPL had no moves compared to 16.1% among children ≥ 200% FPL) and to flourish less (Measures of Flourishing: Indicators on Children and Youth 2013) these findings add to the knowledge by suggesting that not only are low income children more likely to move (Ihrke and Faber 2012; Murphey et al. 2012) but that the disruption caused by residential mobility is more harmful for boys in poverty than for boys not in poverty while the reverse may be true for girls.

The NSCH does not have information on children's original neighborhoods and how original neighborhoods may have differed from subsequent neighborhoods. Previous research has indicated that whether a move is detrimental for a child is moderated by the poverty attributes of both the original and new neighborhood with moves from high poverty neighborhoods to low poverty neighborhoods being beneficial for 5th grade behavioral and cognitive health (Roy et al. 2014).

While the association of residential mobility and school engagement was evident in both children 6–11 years old and children 12–17 years old, the association was strongest among the adolescents. As expected, adolescents had a larger accumulation of lifetime moves with 42.5% of 12–17 year olds having 3+ moves compared to 34.9% of 6–11 year olds. Adolescents in the high moving category did not, however, have a substantially higher mean number of moves compared to younger children. Among the 12–17 year olds with 3+ moves, the average number of lifetime moves was 4.9 compared to 4.4 for the 6–11 year olds in the 3+ lifetime moves category. One possibility is that residential mobility has delayed effects on decreased flourishing that are more evident during adolescence. Previous work using longitudinal assessments provides evidence, however, that child cognitive and school outcomes associated with residential mobility are short term and dissipate over time (Coley and Kull 2016).

Limitations

The findings from this study should be assessed in the context of some limitations. This study used cross-sectional data that collected information on the number of lifetime moves, but not the timing of the moves. As a result, we could not assess if lack of flourishing or not being engaged in school precipitated the moves, for instance, in order to find a better neighborhood or school fit (Cohen and Wardrip 2011). In addition, by not knowing the timing of the moves, we could not assess for sensitive time periods and could not determine if decreased flourishing and school engagement is a proximal or delayed response. If, as previous work using longitudinal assessments suggests, child cognitive and school outcomes associated with residential mobility are short term and dissipate over time (Coley and Kull 2016) then this study may have underestimated the association of residential mobility with school engagement and flourishing

Table 3 Adjusted relative risk of flourishing, self-regulation/curiosity, and school engagement stratified by gender and age category

	1–2 moves aRR (95% confidence interval)	3+ moves aRR (95% confidence interval)
Flourishing		
Males		
Age 6–8	0.97 (0.85, 1.10)	1.03 (0.89, 1.20)
Age 9–11	0.96 (0.84, 1.09)	0.94 (0.80, 1.11)
Age 12–14	0.91 (0.80, 1.03)	0.77 (0.65, 0.91)*
Age 15–17	0.98 (0.85, 1.12)	0.84 (0.71, 0.99)*
Females		
Age 6–8	0.92 (0.83, 1.02)	0.81 (0.70, 0.94)*
Age 9–11	1.07 (0.96, 1.20)	0.94 (0.82, 1.07)
Age 12–14	0.95 (0.84, 1.06)	0.77 (0.66, 0.89)*
Age 15–17	1.13 (1.01, 1.27)*	1.05 (0.92, 1.20)
Self-regulation/curiosity		
Males		
Age 6–8	0.97 (0.85, 1.09)	1.02 (0.88, 1.17)
Age 9–11	0.97 (0.86, 1.09)	0.96 (0.83, 1.12)
Age 12–14	0.90 (0.80, 1.01)	0.87 (0.75, 1.04)
Age 15–17	0.99 (0.88, 1.12)	0.87 (0.75, 1.01)
Females		
Age 6–8	0.93 (0.84, 1.03)	0.83 (0.72, 0.97)*
Age 9–11	1.09 (0.98, 1.21)	0.94 (0.83, 1.07)
Age 12–14	0.95 (0.85, 1.07)	0.82 (0.71, 0.95)*
Age 15–17	1.14 (1.02, 1.28)*	1.06 (0.94, 1.21)
School engagement		
Males		
Age 6–8	–	–
Age 9–11	0.99 (0.94, 1.03)	0.99 (0.93, 1.05)
Age 12–14	1.03 (0.97, 1.09)	0.92 (0.85, 1.00)
Age 15–17	0.97 (0.89, 1.06)	0.92 (0.84, 1.02)
Females		
Age 6–8	0.98 (0.96, 1.00)	0.93 (0.89, 0.97)*
Age 9–11	–	–
Age 12–14	–	–
Age 15–17	–	–

Adjusted for race/ethnicity, parental/caregiver education, family poverty level, and household composition

–: Model did not converge

*$p < 0.05$

by using a cumulative measure of residential mobility. Given the cross-sectional data collection and lack of information on when in a child's life the move(s) occurred, the findings do not provide evidence if moves during adolescences are more detrimental to flourishing and school engagement or if moves during early childhood can result in a delayed response that is more evident during adolescences. We also had no information on the reason for a residential move. Previous research and theoretical frameworks indicate that the effects on children's health are likely different depending on reason for moving (such as seeking a better neighborhood/school or for a better job versus needing more affordable housing, leaving dangerous living situations, or suffering foreclosure/eviction) (Humke and Schaefer 1995; Roy et al. 2014; Scanlon and Devine 2001). In addition the NSCH is parent-reported and had only a limited number of questions on flourishing. They did not, for instance, ask about a child's sense of purpose or life satisfaction which may also be important markers of child flourishing (Lippman et al. 2014). Collecting only parent-reported data may have resulted in overestimating flourishing due to both social desirability and reporter bias (Lippman et al. 2011).

Conclusion

A large body of work documents the association between residential mobility and poor outcomes among children and adolescents (Adam and Chase-Lansdale 2002; Dewit 1998; Fowler et al. 2014; Gillespie 2013; Gilman et al. 2003; Murphey et al. 2012; Simpson 1994), almost all of it demonstrating a negative effect of high residential mobility (Adam and Chase-Lansdale 2002; Fowler et al. 2014; Gillespie 2013; Gilman et al. 2003; Simpson 1994). The findings from this study are consistent with previous work and expand that work to include flourishing and sub domains of self-regulation/curiosity and school engagement as outcomes in a recent population-based US sample of school age children. Residential mobility may lead to lower rates of flourishing for both school-age boys and girls. The pattern by age group and by poverty is different for boys and girls, however. These findings support place-based policies that reduce high numbers of residential moves for families (Scanlon and Devine 2001) and interventions for children with a history of multiple moves that would help them be engaged in school (Scanlon and Devine 2001).

Table 4 Adjusted relative risk of flourishing, self-regulation/curiosity, and school engagement stratified by gender and poverty category

	1–2 moves aRR (95% confidence interval)	3+ moves aRR (95% confidence interval)
Flourishing		
Males		
< 200% FPL	1.01 (0.87, 1.18)	0.83 (0.71, 0.98)*
≥ 200% FPL	0.93 (0.87, 0.996)*	0.95 (0.87, 1.03)
Females		
< 200% FPL	1.08 (0.94, 1.23)	0.91 (0.79, 1.05)
≥ 200% FPL	0.98 (0.92, 1.04)	0.88 (0.81, 0.95)*
Self-regulation/curiosity		
Males		
< 200% FPL	1.01 (0.88, 1.17)	0.86 (0.74, 0.996)*
≥ 200% FPL	0.93 (0.87, 0.997)*	0.98 (0.91, 1.07)
Females		
< 200% FPL	0.94 (0.82, 1.08)	1.09 (0.95, 1.24)
≥ 200% FPL	0.99 (0.94, 1.05)	0.90 (0.83, 0.97)*
School engagement		
Males		
< 200% FPL	0.99 (0.93, 1.06)	0.94 (0.87, 1.01)
≥ 200% FPL	0.98 (0.95, 1.01)	0.97 (0.93, 1.00)
Females		
< 200% FPL	0.99 (0.97, 1.02)	0.91 (0.87, 0.96)*
≥ 200% FPL	0.98 (0.97, 0.998)*	0.95 (0.93, 0.98)*

Adjusted for age, race/ethnicity, parental/caregiver education, and household composition

*$p < 0.05$

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