Published in final edited form as:

J Marriage Fam. 2017 February ; 79(1): 94–109. doi:10.1111/jomf.12374.

Mothers' Union Statuses and their Involvement in Young Children's Schooling

Robert Ressler,

PhD Candidate, Graduate Student, Department of Sociology, Population Research Center, University of Texas at Austin. 512-270-1404

Chelsea Smith,

PhD Candidate, Graduate Student, Department of Sociology, Graduate Student Trainee, Population Research Center, University of Texas at Austin. 314-443-4463

Shannon Cavanagh, and

Associate Professor Department of Sociology and Population Research Center University of Texas at Austin, 512-471-8319, <http://liberalarts.utexas.edu/prc/directory/faculty/sec429>

Robert Crosnoe

C.B. Smith, Sr. Centennial Chair #4 & Department Chair, The University of Texas at Austin, Department of Sociology | Population Research Center 512.471.8329, <http://www.utexas.edu/cola/centers/prc/directory/faculty/crosnoe>

Abstract

U.S. schools often expect the educational involvement of parents, which may be facilitated when parents have partners, especially a partner also invested in the child. As such, parental involvement at school and at home could be a channel of the diverging destinies of U.S. children from different families. This study applied fixed effects modeling to the Early Childhood Longitudinal Study—Kindergarten Cohort (ECLS-K) to examine the link between mothers' union statuses and their involvement behaviors. Being partnered appeared to benefit mothers' school and home involvement when children were in the primary grades, with little evidence of an additional benefit from that partnership being marital. A biological tie between the male partner and the child only seemed to matter for mothers' school involvement. These patterns did not vary by family income, maternal depression, or maternal employment, but they were stronger when children were just beginning schooling.

Keywords

parental involvement; family process; inequality; early childhood; schools

Parental involvement in education has long garnered a great deal of attention both in terms of theory, such as Lareau's (2011) concerted cultivation thesis, and policy, such as the family-school compact of No Child Left Behind (U.S. Department of Education, 2002). The growing lifelong returns to educational attainment (Fischer & Hout, 2006; Blau & Duncan, 1967) and the ever-intensifying norms about parental management of children's educational careers (Crosnoe, 2015) have helped to increase the potential for parental involvement to

both reflect and drive social stratification. This dimension of contemporary parenting, therefore, is a crucible in which to investigate how social conditions, such as parents' union statuses, interact with social institutions, such as the public education system (Alexander, Entwisle, & Olson, 2014). Because the parental involvement expected by school personnel and other families requires effort and follow-through that may be facilitated when parents have partners, especially one also invested in the child, advantages in the family context can translate into advantages in the school context. In this way, parental involvement is a channel in the intergenerational transmission of inequality.

In this spirit, this study examines the dynamic link between mothers' union statuses and their involvement in children's schooling using data from the Early Childhood Longitudinal Study—Kindergarten Cohort (ECLS-K; <https://nces.ed.gov/ecls/>). It leverages fixed effects methods to test hypotheses about the kinds of unions (partnered vs. unpartnered, married vs. cohabiting, biological ties to child vs. no such ties) that seem to boost or hinder parental involvement. Importantly, this study examines these associations over time and across different family contexts as children move through a critical phase of the primary education system.

This study contributes to the family literature by extending family structure research into a new domain of parenting, to the education literature by shifting attention to an understudied family-related source of educational inequality, and to the stratification literature by highlighting how inequality occurs across, not just within, ecological contexts. It is also policy relevant, as parental involvement differs from many other dimensions of parenting, such as parenting styles or methods of discipline, in that it is viewed as an appropriate focus of policy that is amenable to outside intervention (Crosnoe, 2015; U.S. Department of Education, 2002).

Parental Involvement and Maternal Involvement

Parental involvement in children's educational careers is a form of household labor and a parental investment that requires significant time, energy, and emotion work (Erickson & Cottingham, 2014). It can occur within and outside of the physical space of schools. In-school involvement includes parents' participation in school events, parent teacher conferences, and school support activities. This dimension captures parents' visible presence at schools and their direct interactions with school personnel and other parents. The second form concerns the ways in which parents construct a home learning environment that supports children's learning and cognitive development. These activities include reading with the child at home, playing stimulating games with children so that their learning opportunities extend beyond the school day, and helping children do arts and crafts. These behaviors often parallel and support the learning environment of school (Crosnoe, 2015; Epstein, 2011).

Increasingly, both types of involvement are emphasized by schools and educational policy (Domina, 2005). A large literature suggests that children benefit when parents are involved in their educational careers in developmentally appropriate ways. Specifically, both in-school and at-home involvement among parents are associated with better grades and test

scores, lower participation in problem behavior, and higher levels of school engagement among children during the transition into elementary school (Crosnoe, 2015; Fan & Chen, 2001; Pomerantz, Moorman, & Litwack, 2007). Although the underlying causal evidence is not as strong as advocates of parental involvement imply (Domina, 2005; Robinson & Angel, 2014), parental involvement remains a source of stratification among students, especially during elementary school (Entwisle, Alexander, & Olson, 1997; Raver, Gershoff, & Aber, 2007).

In some ways, the term parental involvement is a misnomer, as involvement activities are much more often carried out by and prioritized by mothers than fathers and mothers are judged more as parents by their engagement in such activities than are fathers. This gendered nature of parental involvement is a concrete dimension of the broader gender division of household labor in families with children, in which mothers take on most responsibility for managing the care and development of children (Bianchi, 2000; Craig, 2006; Hochschild & Machung, 2003). Indeed, active management of the educational activities of children is part of the contemporary cultural phenomenon of intensive mothering—child-centered, guided by expert advice, labor-intensive, and expensive—that has taken hold among socioeconomically advantaged White women and shapes the dominant standards of mothering against which all mothers are judged (Hays, 1996). Moreover, although certain dynamics of non-nuclear families may result in more adults available to be involved in a child's education, mothers still tend to manage adult involvement overall across families (Hook & Chalasani, 2008). As a result, mothers are the primary focus of parental involvement research, especially when measurement is vague about which parents are involved and how. This study follows that tradition.

Social Class, Family Structure, and Maternal Involvement

The socioeconomic and racialized components of intensive mothering are also important to our understanding of maternal involvement in education. Educational involvement behaviors—and the expectations that they provide crucial social and academic boosts that help children get ahead during the early stages of their formal schooling—are central to the predominant class-based contemporary philosophy of education-focused parenting detailed so well by Lareau (2011). The valuing of parental involvement within this philosophy is widespread among socioeconomically advantaged, typically White, families, who wield enormous influence and power in the educational system. Partly as a result, these values shape the involvement “scripts” of school personnel, or how they think that parental involvement should work (Crosnoe & Benner, 2012). To the extent that the investment of school personnel in children may be responsive to visible parental involvement that adheres to such scripts, the children of working-class and poor parents may lose out if their parents do not or cannot follow them (Hoover-Dempsey & Sandler, 1997; Pomerantz et al., 2007). Thus, both in-school and at-home involvement can become another way that (dis)advantage is reproduced across generations.

Recently, scholars have called for more consideration of family structure, not just social class, as a stratifying force in parental involvement (Crosnoe & Benner, 2012). Children today are more dispersed across diverse family structures defined by their parents' union

statuses, particularly their mothers' union statuses (Cherlin, 2010). These statuses, which are related to but not completely determined by social class, can provide different contexts for parenting that may promote or constrain parents' ability to be actively involved in their children's educational careers at home and/or in school. Because involvement behaviors require time (and control over time), money, and emotional resources (e.g., conscientiousness, affection, patience) across a fairly long period (Thomson, Mosely, Hanson, & McLanahan, 2001), they need to be understood at the meeting point between demands and resources that shape how much a mother can invest in any one aspect of family life. Union statuses, in turn, influence this significant interplay between demands and resources (Crosnoe & Benner, 2012).

A family systems perspective (see Cox & Paley, 1997; Lerner, Johnson, & Buckingham, 2015) can guide research on the link between mothers' union statuses and their educational involvement by pointing to specific angles of inquiry into what creates obstacles to or supports for maternal involvement. First, the perspective emphasizes that any one relationship or relational behavior must be situated within a broader matrix of family relations, such as connecting mother-child relations or maternal parenting behaviors to mothers' relationships with their partners or to children's relationships with their fathers or other parental figures. Second, it emphasizes how relational systems external to any one person are related to developmental systems internal to that person, such as connecting mothers' behaviors vis a vis their children with their own socioemotional functioning. Third, it emphasizes how relational systems within the family are influenced by the broader social contexts of the family and what they provide to the family, such as connecting mothers' relations with children and romantic partners to their available economic resources. Fourth, the perspective emphasizes that relational systems are bidirectional. In other words, mothers' parenting towards their child reflects, in part, aspects of that child (e.g., skill level, temperament) that can actively or passively influence mothers' behavior. Following these four points, whether and with whom mothers are partnered is likely to shape the degree to which they engage in educational involvement behaviors, and this association, in turn, is likely sensitive to characteristics of mothers, their families, and their children that facilitate or impede involvement more generally.

Aims and Hypotheses

The first aim of this study is to consider how mothers' union statuses are related to their engagement in their children's educational careers. Following the family systems perspective's emphasis on linked relational systems, we connect mothers' relationships with children to their relationships with partners. For many, a partner means having someone with whom they can divide the parenting labor (even if unequally), coordinate schedules, share support for parenting, and pool resources to purchase goods and opportunities and alleviate stress (Gibson-Davis, 2008; Hale, LeBourgeois, & Brooks-Gunn, 2009; McLanahan & Sandefur, 1994).

Unpartnered women, on the other hand, are more limited in what they can devote to children's education. In the face of such economic stress, time crunches, and responsibilities, educational involvement might be sacrificed in favor of more immediate

demands (e.g., earning a wage to purchase food or pay rent) (Batalova & Cohen, 2002; Crosnoe & Benner, 2012; Edin & Kefalas, 2011; Hays, 2003). Assuming that mothers think that being involved in their children's education is an important part of parenting, those with coresidential partners, of any type, may be better able to act on this value than an unpartnered mother (Crosnoe & Benner, 2012; Lareau, 2011; Pomerantz et al., 2007). The *two-body hypothesis*, then, is that partnered women will have higher levels of in-school and at-home involvement than unpartnered women.

Yet, not all partners provide the same kind of support for maternal involvement. In some cases, the partner is married to the mother and in other cases cohabiting with her. This distinction is important because cohabiting unions tend to be less stable and are less governed by norms of obligation and support, especially as they relate to children, whereas marriage provides a longer time horizon and more economic resources. Consequently, a married partner has greater potential to help mothers meet parenting demands than a cohabiting one (Cherlin, 2004; Nock, 1995; Sweeney, 2010). The *marriage hypothesis*, then, is that partnered women will have higher levels of involvement when married than cohabiting.

An added layer of complexity concerns whether mothers' partners are the biological parents of their children. Ample evidence suggests that stepparents do not invest in children to the same degree as biological parents. As a result, a woman married to or cohabiting with her child's stepparent may have someone to support her parenting but not necessarily someone who will share in it (Ganong & Coleman, 1997; Sweeney, 2010; Thomson et al., 2001). The *biological hypothesis*, then, is that partnered women will have higher levels of involvement when their partners are the biological parents of their children.

Notably, the family systems perspective's emphasis on the bidirectional nature and embeddedness of a relational system within systems internal and external to the people in the relationship calls for greater attention to variation in maternal involvement by the characteristics of mothers, the larger contexts in which they live, and their children's developmental needs. The second aim of this study, therefore, builds on the first by considering how the potential for mothers' union statuses to influence their educational involvement varies by mothers' socioemotional functioning, their family resources, and the age of their children.

To begin, mothers' mental health is an internal system that could be a moderating factor. Mothers who have more depressive symptoms are less able to translate their parenting values into behavior, and healthier mothers can better guard their parenting from external threats. Depressed mothers, for example, have trouble sustaining the motivation and energy needed to consistently engage in stimulating childrearing or interact with others (Augustine & Crosnoe, 2010; Meadows, McLanahan, & Brooks-Gunn, 2007). The *internal resources hypothesis*, then, is that the link between mothers' union statuses and involvement behaviors will be weaker when they have better mental health and stronger when they have worse mental health.

Next, family income is a marker of the external system of socioeconomic stratification that is a key context of union formation/dissolution and parenting. Money influences and is influenced by whether women are partnered (and with whom). It also supports involvement through the purchase of educational materials and activities and by allowing for the outsourcing of family responsibilities (e.g., housework) to free up time for involvement (Bianchi, 2000). Thus, like maternal mental health, income is a confound in the link between maternal union statuses and educational involvement. It may also be a moderator of this link, as money buffers against other constraints on time and engagement and helps mothers maintain more consistent parenting regardless of the interpersonal help they receive. The *external resources hypothesis*, then, is that the link between women's union statuses and involvement behaviors will be weaker when they have more money and stronger when they have less money. Another external economic system that can shape family dynamics is the workplace. Mothers' employment statuses can affect their abilities to be educationally involved, as women who are not in the paid labor force may have more time to participate in involvement activities while mothers who work for pay experience competing demands between home and school roles (Crosnoe, 2015; Muller, 1995). Due to this potential for the constraints of work to dilute any advantages of being partnered, we pose the *employment conflict hypothesis* that differences in involvement by union status will be less pronounced among employed rather than unemployed mothers.

Finally, tapping into bidirectionality in mother-child relations, children of different ages and in different stages of schooling have different needs and make different demands that can influence mothers' involvement behaviors. Younger children often require more involvement due to their relative lack of autonomy, but, as they age, their parents tend to pull back in terms of monitoring and awareness of children's activities (Petit, Keiley, Laird, Bates, & Dodge 2007). Moreover, as children move from grade to grade, their classrooms become more formalized and impersonal, their schoolwork becomes more challenging, and they are increasingly expected to be independent learners. As such, older children can actively and passively alleviate educational involvement demands and reduce the responsiveness of their parents' involvement to demands and resources (Crosnoe, 2015). The *elicitation hypothesis*, then, is that the link between mothers' union statuses and involvement behaviors will be weaker when children are older and stronger when they are younger.

We should note that, for the most part, the hypotheses that we have laid out are not specific to women who were or are partnered with men. Yet, data constraints limit our ability to examine women with all types of past and present union statuses. We return to this limitation in our discussion section as we place the results of our hypothesis-testing in context.

Methods

Data

ECLS-K is a nationally representative study of 21,260 children enrolled in approximately 1,000 kindergarten programs in the fall of 1998. The multistage sampling frame began with 100 primary sampling units (typically counties) from which schools were selected and ended with approximately 23 students from each school selected for participation in the fall of kindergarten (West, Denton, & Reaney, 2000). Subsequent waves of data collection occurred

in the spring of kindergarten, fall and spring of first grade (1999–2000), and the spring of third (2002), fifth (2004), and eighth (2006) grades. At each wave, trained personnel performed in-depth interviews with parents over the phone or at home in the language of their choice, school administrators completed surveys about the school's basic demographic, structural, and environmental characteristics, and children had academic assessments.

The analytical sample for this study was limited to families who participated during the kindergarten through third grade waves, given the changing nature of and expectations for parental involvement after the primary grades (Crosnoe, 2015). With this time frame, we selected biological mothers in the first wave who were interviewed in at least two of the three waves ($n = 15,540$; note, per NCES reporting requirements, all sample sizes are rounded to the nearest 10). As described below, the longitudinal sampling weights accounted for biases related to differential attrition across waves, and multiple imputation was used to retain all cases within this analytical sample despite some item-level missingness.

Measures

Maternal educational involvement—School involvement was measured by summing six binary mother-reported indicators (1 = “yes”): attended an open house, PTA, parent advisory group, parent teacher conference, or school event; acted as a volunteer. Home involvement was measured with a scale averaging seven mother-reported indicators from 1 (*not at all*) to 4 (*every day*) about a series of home learning activities with the child in a typical week (e.g., building something or playing with construction toys, doing science projects). Both scales have been used in past research (Crosnoe, 2015; Raver et al., 2007).

Maternal union status—A categorical variable was derived from household rosters reported by mothers about parent figures residing in the household (biological mother and biological father, biological mother and other father, biological father and other mother, or biological mother only) and their marital statuses (married, divorced, widowed, never married, or no parents). Mothers were categorized as married to the child's biological father, married to a new partner, cohabiting with the biological father, cohabiting with a new partner, and single.

Focal moderators—Maternal depressive symptomology was based on self-reported depressive symptoms during the past week using 11 items from 1 (*never*) to 4 (*most of the time*) derived from the Center for Epidemiologic Studies-Depression Scale (CES-D, see Radloff & Locke, 1986), such as poor appetite or not being able to “shake off the blues” during the past week. The scale had good internal consistency ($\alpha = .89$). Items about depressive symptoms were only asked at the kindergarten and 3rd grade waves, so values for the 1st grade wave were derived from averaging the other two waves. Families were categorized as low-income if their income-to-needs ratio was 1.85 or below, meaning that their incomes did not exceed 185% of the federal poverty line for their household size (U.S. Department of Agriculture, 2015). Sensitivity analyses revealed that a continuous income-to-needs ratio was less associated with the involvement outcomes than this binary variable. Maternal employment had three categories 0 (*unemployed*), 1 (*full-time*), and 2 (*part-time*), and dummy variables captured *children's grade level* at each wave.

Covariates—Several covariates tapped into time-varying sources of endogeneity in links between mothers' union statuses and involvement behaviors. School-level characteristics included school size (1, *0–149*, to 5, *750 or more*), percent of the student body who were racial/ethnic minorities, percent of the student body receiving free or reduced lunch, school sector (1 = private, 0 = public), and school's parent outreach. This last scale was the mean of 9 items from 1 (*never*) to 5 (*7+ times a year*), such as having parent teacher organization meetings and fundraisers. These variables did not appear to mediate observed associations between union status and involvement. Other standard variables in studies of families, such as child gender or parental race/ethnicity, are effectively time-invariant, and the fixed effects framework we employed to strengthen causal inference only allowed the examination of time-varying factors.

Plan of Analyses

Multivariate analyses drew on the fixed effects procedure in Stata (see Allison, 2005). Due to the nature of fixed effects models, time-invariant characteristics drop out of the model so that biases associated with unmeasurable and persistent characteristics are differenced out (Gibson-Davis, 2008). This within-person approach is particularly valuable for family research because it accounts for unobservable confounds that remain constant over time, such as children's race/ethnicity or birth order as well as the more difficult to measure genetic propensities of mothers and children (Johnson, 1995). Fixed effects models can be compared to OLS estimates that include dummy variables to control for each individual. Although this framework leveraged changes in family structure to assess observed family structure effects, it did not measure the observed effects of changes in union status (e.g., marrying). Fixed effects models rely on changes over time to produce estimates but do not capture the effect of change per se. Thus, our models do not measure the effect of the change in a particular union status (e.g., marrying) but rather estimate the effect of being in that status (e.g., being married) relative to the same individual being in another union status (e.g., cohabiting with a new partner) (Burnett and Farkas, 2009). For example, Gibson-Davis (2008) notes that these models do not distinguish between parents who had a positive relationship transition (e.g., went from cohabiting to married) versus those who had a negative one (e.g., went from married to cohabiting).

The fixed effects modeling strategy necessarily eliminated respondents who experienced no union transition over the three waves. Nearly 2,000 individuals, however, had one or two maternal union transitions during the study period. Thus, rather than contrasting the involvement of mothers who were married to the involvement of mothers who were single, this method compared the involvement of mothers during periods when they were married to their involvement during periods when they were single. This tradeoff between improved causal inference and increased sample selectivity should be taken into account when assessing the results. In addition, several sensitivity analyses were performed to investigate the consequences of these limitations of fixed effects modeling and will be described with the results.

The baseline model included maternal union status and a series of dummy variables for the survey wave (fall kindergarten, 1st grade, 3rd grade). We then added the maternal and family

factors. In order to test the three hypotheses embedded in our first aim, educational involvement was regressed on maternal union status, rotating the union status reference category through each of the five possible options. This approach allowed us to compare results according to each hypothesis (e.g., testing for a biological effect by comparing cohabiting with the biological father to cohabiting with a new partner). The model with married biological unions as the reference offered the best overview of our results and is presented in all figures and tables. In order to test the three hypotheses embedded in our second aim, we added interactions of mothers' union statuses with the maternal and family factors as well as with children's grade levels.

To maximize available information and minimize bias, missing data were imputed with the *mi estimate* suite of commands in Stata. To account for the survey design, sampling weights were included in the imputation procedure, and all analyses used the recommended child-level weight to produce nationally representative estimates. The use of these weights resulted in a final sample of 13,500 respondents present in our fixed effects models. As already noted, these weights also addressed potential biases related to differential attrition from the sample across the primary grades. See Table 1 for a description of the study measures for the full analytical sample.

Results

Table 2 presents descriptive statistics for self-reported maternal involvement at school in the top panel and at home in the lower panel across each maternal union status, by children's grade level. It also displays significant differences ($p < .001$) among union categories based on *t*-tests. In terms of school-based parental involvement, mothers married to the child's biological father reported greater involvement than mothers in all other union statuses across all primary grades. Among the other union statuses, single mothers reported less involvement, on average, than mothers cohabiting with either the biological father or a new partner during most time periods. In terms of home-based parental involvement, very few differences by maternal union status emerged. Thus, maternal union status appeared to be associated with maternal involvement at school more than in the home.

Mothers' Union Statuses and their Involvement at School

The first aim was to explore the link between mothers' union statuses and involvement behaviors. Beginning with school-based involvement, Table 3 presents the results of a series of fixed effects models, first including only maternal union status and child grade as predictors and then adding maternal and family characteristics. According to the second model, which included time-varying factors for low-income status, maternal depressive symptomatology, and maternal employment, women reported lower levels of school involvement when they were married to a new partner ($b = -.24, p < .05$), cohabiting with a new partner ($b = -.29, p < .01$), or single ($b = -.29, p < .001$) compared to when they were married to the child's biological father. Note that regardless of union status, such involvement increased as children transitioned from kindergarten to the primary grades. Women did not have different levels of involvement when they were married to or cohabiting with their children's biological fathers. Yet, rotating the reference category

revealed no significant differences between the cohabiting with biological father category and any other union status.

Thus, the overall pattern was that mothers who were partnered with their children's biological fathers, regardless of marital status, were most likely to be involved at school. Mothers who were single or partnered with someone else, on the other hand, were the least likely to be involved. This pattern offers support for the two-body hypothesis and the biological hypothesis, less so for the marriage hypothesis.

The second aim was to explore variability in the associations between mothers' union statuses and involvement behaviors according to maternal, family, and child factors. No interactions between mothers' union statuses and their incomes, depressive symptomatology, or maternal employment reached statistical significance (not presented in Table 3). Some interactions between mothers' union statuses and children's grade levels were statistically significant ($b = .30$, $p < .05$ for cohabiting with the child's biological father $\times$ 3rd grade and $b = .18$, $p < .01$ for single mother $\times$ 3rd grade in Model 3). To interpret these results, we graphed the predicted maternal involvement score for women in selected union statuses when their children were in different grade levels, with all other covariates held to their sample means. Figure 1 shows that as children moved through the primary grades, mothers' school-based involvement increased in general but especially among those who were cohabiting with the father's biological child or were single. As a result, disparities in maternal involvement at school by maternal union statuses declined as children moved across the primary grades, supporting the child elicitation hypothesis that union status would be a stronger differentiator of maternal involvement when children were younger.

Mothers' Union Statuses and their Involvement at Home

Table 4 presents the results from the same series of models for home involvement. Analyses for the first aim revealed that women tended to have the lowest levels of home involvement when they were single ($b = -.075$, $p < .05$ in Model 2) than when they were in all other union statuses, net of maternal and family factors and regardless of the reference category. No other significant differences in this dimension of involvement among various maternal union statuses were detected. These results most clearly support the two-body hypothesis and lend no support to the marriage or biological tie hypotheses.

As for the second aim, we once again found no significant interactions between mothers' union statuses on one hand and their incomes, depressive symptomatology, or maternal employment on the other but did find one significant interaction between mothers' union statuses and the children's grade levels ($b = .11$, $p < .05$ for cohabiting with a new partner $\times$ 3rd grade in Model 3). This interaction indicates that, unlike school involvement, mothers reported less home involvement as their children moved from grade to grade, but this decline was sharper and happened from a higher starting point for mothers married to their children's fathers. Consequently, disparities in home involvement by union status were more pronounced at the start of formal schooling, again providing partial support for our child elicitation hypothesis.

Sensitivity Analyses

To address concerns about the use of changes in maternal union statuses to capture associations between such statuses and maternal involvement in our fixed effects framework, we re-estimated models with direct measures of two union status transitions across waves as the focal independent variables (partner moves into or out of household). The results revealed that an adult exiting the home predicted a decrease in maternal involvement at school and home, accounting for between a fourth and a half of the observed differences between single and partnered mothers in the original models. Thus, the two-body advantage likely reflects the benefits of having a partner and the risks of losing one. We also re-estimated the models with interactions between the maternal union status variables and two time-unvarying variables (indicating if the mother was single or married at the first wave). None were significant, indicating that specific transitions across waves were not driving the observed associations between mothers' union statuses and involvement behaviors within waves.

Regarding concerns about the exclusion of mothers with stable union statuses across waves from the fixed effects analyses, *t*-tests revealed that mothers who experienced a union status transition during the study period were more socioeconomically disadvantaged and less involved in school and at home than mothers who experienced no such transitions. Because this bias could potentially affect the results, we performed an additional analysis to determine what percentage of the sample of 1,940 mothers who experienced union status transitions would have to be substituted with different mothers who had not in order to invalidate inferences based on Tables 3 and 4 (see Frank et al., 2013 for a description of this statistical "replacement" procedure). These analyses further supported the generalizability of most results. For example, in order to reduce the observed coefficient of $-.27$ for single mothers in the fully controlled school involvement model in Table 3 to non-significance, 42% the sample would have to be replaced with mothers who were stably single during their children's primary grades and who did not differ from other stably partnered mothers in their involvement behaviors. The most suspect coefficient was for married to the child's biological father (vs. married to a new partner), which would be invalidated by replacing a mere 1% of the sample with mothers who were stably in these union statuses. Given this post-hoc analysis, the significant evidence for the biological-tie hypothesis should be interpreted with caution.

Discussion

The involvement of a diverse array of parents in their children's education is viewed by many as a way to break the perpetuation of educational disparities. At the same time, the narrow scope of involvement defined and emphasized by schools, the unequal ways that schools support and block parental involvement efforts, and the ways in which many individuals in and out of the school equate involvement behaviors with the motivations of parents and judge parents accordingly mean that differences in involvement across segments of the population can reflect and fuel social stratification. Investigating the links between mothers' union statuses and involvement behaviors can inform how educators respond to all

families and how educators and policy makers can help increase the involvement of and partnership with all types of families.

This study contributed to this discussion by using the family systems perspective to organize a series of fixed effects models. The first aim was to look at the interplay of relational systems within families to consider whether mothers' school and home involvement would be greater when they were partnered, especially married and/or with their children's biological fathers. The most support was for the two-body hypothesis, the least for the marriage hypothesis. The biological hypothesis only held for school involvement, but sensitivity analyses suggested that this finding might reflect the selective nature of the sample required by the fixed effects framework. The second aim was to investigate how the interplay of the mother-partner and mother-child systems might be complicated by systems internal and external to the family. The results indicated no support for hypotheses that mothers' internal systems (e.g., depressive symptomatology) and families' connections to external economic systems (e.g., income, employment) would moderate the links between mothers' union statuses and involvement behaviors, but some support for the hypothesized moderating role of children's grade level (i.e., child elicitation). Collectively, these findings highlight three avenues of discussion.

The first avenue concerns the role of additional adults in the household and the differential importance of biological ties for school and home involvement. We found clear support for the two-body hypothesis and some for the biological tie hypotheses, such that mothers who were living with a partner reported more school involvement, perhaps even more so when the partner was the child's biological father. Union status did not do much to differentiate mothers' home involvement, likely because such involvement did not vary much overall. Single mothers were the only group to report significantly lower home involvement, which is further evidence for the two-body hypothesis. These findings echo prior research on cognitive development showing that children in two-parent cohabiting biological families do not fare better or worse than children in two-parent cohabiting stepfamilies (Artis, 2007). Involvement at school and at home can be a burden that is lighter if more people are carrying it. Our results complicate this interpretation by indicating that the biological tie between father and child may be important above and beyond having two adults in the home. This finding may reflect how cohabitation remains an incomplete institution (Nock, 1995), such that school involvement involves time outside of the home with the parent actively representing themselves as a family member, which may be easier in a context that relies on socially recognized ties. The importance of biological ties is also seen in early home involvement, which may reflect the challenges non-biological fathers face when raising another man's young children (Gold & Adeyemi, 2013). Because school environments can be instrumental in encouraging or discouraging parental involvement from marginalized families (Maton, Hrabowski, & Greif, 1998), future research should investigate the role of school environment and context in how cohabiting, step, and single-parent families navigate parental involvement both at school and at home, something that our fixed effects framework made difficult to do due to the static nature of many school characteristics.

The second avenue concerns the failure of mothers' incomes, employment and depressive symptoms to moderate the links between their union statuses and involvement behaviors.

This lack of moderation may have reflected the fact that having additional partners in the home (perhaps especially so for those biologically related to the child) is associated with both depressive symptoms and economic resources in such a way that overrides direct associations between external and internal resources and educational involvement. Mothers may also not have experienced sufficient variability in either depressive symptoms or financial resources to reveal significant differences in the fixed effects models. Along these same lines, although these models controlled for time-invariant characteristics, they could not take into account time-varying characteristics that we did not include due to a lack of data availability. Any such time-varying measures not included would have had to exert a level of influence on the association between maternal union status and home or school involvement greater than that of these important internal/external resources. Because the fixed effects approach modeled change, our models necessarily excluded individuals who did not change their union statuses and so it is difficult to generalize to those who do not experience union status changes across a similar time period. The true differences between women in stably-partnered unions and women who experienced relationship instability during our window of interest—which we could not capture here—are likely more pronounced than the differences among individual mothers experiencing union transitions (Osborne, Berger, & Magnuson, 2012). How this may bias our estimates, however, is unclear because, as previously discussed, our fixed effects models capture women who transition without regard to the direction of that transition. In order to compare mothers who are single and those who are married to the biological father, for example, the women in our sample might have gotten married, or gotten a divorce. Future research should investigate if the differences we observe between union statuses and involvement are due to characteristics that are intrinsic to the unions or due to the impact of experiencing a transition, or some combination of both.

The third avenue concerned the variations in maternal involvement across children's grades. We are aware that moderation by child grade level could be about the developmental status and needs of children but also about the changing demands and supports of schools. In testing the child elicitation hypothesis, we found that disparities in school involvement were most pronounced when children were in the earliest grades of school, when such involvement was lowest overall. Home involvement disparities were also most pronounced during this period, but that was when home involvement was highest overall. These grade-level variations in school and home involvement by maternal union statuses could reflect the way mothers' union statuses influence their involvement according to the context in which it was operating. We note that our involvement measure did not include time spent doing homework or organizing after-school activities like clubs or sports. Such activities have demands that fluctuate as children progress through school (Hoover-Dempsey & Sandler, 1997), which may influence the time mothers have to engage in the other home involvement activities that were measured. Even if the decline in home involvement over time was due to increased homework and other demands, mothers in more institutionally recognized unions with more resources would still be the ones most able to accommodate all forms of involvement. The greater disparities in school involvement in earlier grades may have emerged because school involvement is less common at that time, so involvement is more prevalent among mothers who have the most institutional support. When fewer families were

participating in school involvement, for example, partnered mothers were, in fact, the ones who reported the most involvement. As school involvement became more common, this “advantage” decreased. That partnered mothers may have been better able to respond to school- and community-based norms of involvement as they changed or became more/less difficult to enact suggests some mixture of how mothers were responding to children (child elicitation) and how schools were responding to families (school elicitation).

Although we have noted several limitations of this study in the discussion so far, we want to emphasize that we recognize another limitation of this study, one mentioned when we initially laid out our hypotheses. This study investigated the experiences of women in heterosexual relationships, but the hypotheses were not solely relevant to them. Yes, the biological hypothesis does relate to men partnered with women, and, in the historical context in which the data were collected, the marriage hypothesis was limited to different-sex marriage. Still, the general processes about having partners and their ties to mothers and their children apply more broadly than just the subset of the population on which we focused. At the same time, previous research has indicated that relationship dynamics are dependent upon the gendered context of that relationship, suggesting that hypothesis-testing might have revealed different results for different groups of women, not to mention between women and men (Umberson, Thomeer, & Lodge, 2015). Those comparisons were not possible with these data, but they certainly should be prioritized in future data collections, especially given that men are becoming more involved in their children’s lives (Parke, 2014) and mothers in same-sex relationships spend more time with children than other women and men do (Prickett, Martin-Storey, & Crosnoe, 2015).

To close, we should reiterate that parental involvement in education—as defined by schools, educational policies, and researchers—may have inherent value for children, schools, and families. It may also matter simply because it has been socially constructed as something valuable and, therefore, is rewarded by prevailing institutional and cultural structures and processes. Whether the first, second, or both phenomena are true, the link between maternal union status and educational involvement is a channel of the intergenerational transmission of inequality, a way that social stratification plays out in the everyday ecological systems and contexts of U.S. families.

Acknowledgments

The authors acknowledge the support of grants from the National Institute of Child Health and Human Development (R21 HD083845; PI: Robert Crosnoe; R24 HD42849, PI: Mark Hayward; T32 HD007081-35, PI: R. Kelly Raley) to the Population Research Center at the University of Texas at Austin.

References

- Alexander, K.L., Entwisle, D.R., Olson, L.S. The long shadow: Family background, disadvantaged urban youth, and the transition to adulthood. New York: Russell Sage; 2014.
- Allison, P. Fixed effects regression methods for longitudinal data. Cary, NC: SAS Institute; 2005.
- Artis J.E. Maternal cohabitation and child well-being among kindergarten children. *Journal of Marriage and Family*. 2007; 69(1):222–236. DOI: 10.1111/j.1741-3737.2006.00355.x

- Augustine JM, Crosnoe R. Mothers' depression and educational attainment and their children's academic trajectories. *Journal of Health and Social Behavior*. 2010; 51(3):274–290. DOI: 10.1177/0022146510377757 [PubMed: 20943590]
- Batalova JA, Cohen PN. Premarital cohabitation and housework: Couples in cross-national perspective. *Journal of Marriage and Family*. 2002; 64(3):743–755. DOI: 10.1111/j.1741-3737.2002.00743.x
- Bianchi SM. Maternal employment and time with children: Dramatic change or surprising continuity? *Demography*. 2000; 37(4):401–414. DOI: 10.1353/dem.2000.0001 [PubMed: 11086567]
- Blau, PM., Duncan, OD. *The American occupational structure*. New York: Wiley; 1967.
- Burnett K, Farkas G. Poverty and family structure effects on children's mathematics achievement: Estimates from random and fixed effects models. *Social Science Journal*. 2009; 46(2):297–318. DOI: 10.1016/j.soscij.2008.12.009
- Cherlin AJ. The deinstitutionalization of American marriage. *Journal of Marriage and Family*. 2004; 66(4):848–861. DOI: 10.1111/j.0022-2445.2004.00058.x
- Cherlin A. Demographic trends in the United States: A review of research in the 2000s. *Journal of Marriage and Family*. 2010; 72(3):403–419. DOI: 10.1111/j.1741-3737.2010.00710.x [PubMed: 22399825]
- Cox M, Paley B. Families as systems. *Annual Review of Psychology*. 1997; 48(1):243–267. DOI: 10.1146/annurev.psych.48.1.243
- Craig L. Does father care mean fathers share? A comparison of how mothers and fathers in intact families spend time with children. *Gender and Society*. 2006; 20(2):259–281. DOI: 10.1177/0891243205285212
- Crosnoe, R. Continuities and consistencies across home and school systems. In: Kim, EM., Sheridan, SM., editors. *Processes and pathways of family-school partnerships across development*. New York: Springer; 2015. p. 61-80.
- Crosnoe R, Benner A. Families, schools, and major demographic trends in the U.S. *New Directions in Youth Development*. 2012; 135:87–95. DOI: 10.1002/yn.20031
- Domina T. Leveling the home advantage: Assessing the effectiveness of parental involvement in elementary school. *Sociology of Education*. 2005; 78(3):233–249. DOI: 10.1177/003804070507800303
- Edin, K., Kefalas, M. *Promises I can keep: Why poor women put motherhood before marriage*. Berkeley, CA: University of California; 2005. 1962
- Entwisle, DR., Alexander, KL., Olson, LS. *Children, schools, and inequality*. Boulder, CO: Westview; 1997.
- Epstein, JL. *School, family, and community partnerships: Preparing educators and improving schools*. Boulder, CO: Westview; 2011.
- Erickson, RJ., Cottingham, MD. Families and emotions. In: Stets, JE., Turner, JH., editors. *Handbook of the sociology of emotions: Volume II*. New York: Springer; 2014. p. 359-383.
- Fan X, Chen M. Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*. 2001; 13(1):1–22. DOI: 10.1023/A:1009048817385
- Fischer, CS., Hout, M. *Century of difference: How America changed in the last one hundred years*. New York: Russell Sage Foundation; 2006.
- Frank KA, Maroulis S, Duong M, Kelcey B. What would it take to change an inference? Using Rubin's causal model to interpret the robustness of causal inferences. *Educational Evaluation and Policy Analysis*. 2013; 35:437–460. DOI: 10.3102/0162373713493129
- Ganong L, Coleman M. How society views stepfamilies. *Marriage and Family Review*. 1997; 26(1–2): 85–106.
- Gibson-Davis CM. Family structure effects on maternal and paternal parenting in low-income families. *Journal of Marriage and Family*. 2008; 70(2):452–465. DOI: 10.1111/j.1741-3737.2008.00493.x
- Gold JM, Adeyemi O. Stepfathers and noncustodial fathers: Two men, one role. *The Family Journal*. 2013; 21(1):99–103. DOI: 10.1177/1066480712456829
- Hale L, Berger L, LeBourgeois M, Brooks-Gunn J. Social and demographic predictors of preschoolers' bedtime routines. *Journal of Developmental and Behavioral Pediatrics*. 2009; 30(5):394–402. [PubMed: 19745760]

- Hays, S. The cultural contradictions of motherhood. New Haven, CT: Yale; 1996. 1956
- Hays, S. Flat broke with children: Women in the age of welfare reform. New York: Oxford University Press; 2003.
- Hochschild, AR., Machung, A. The second shift. New York: Penguin; 2003.
- Hook JL, Chalasani S. Gendered expectations? reconsidering single fathers' child-care time. *Journal of Marriage and Family*. 2008; 70(4):978–990. DOI: 10.1111/j.1741-3737.2008.00540.x
- Hoover-Dempsey KV, Sandler HM. Why do parents become involved in their children's education? *Review of Educational Research*. 1997; 67(1):3–42. DOI: 10.2307/1170618
- Johnson DR. Alternative methods for the quantitative analysis of panel data in family research: Pooled time-series models. *Journal of Marriage and Family*. 1995; 57(4):1065–77. <http://doi.org/10.2307/353423>.
- Lareau, A. Unequal childhoods: Class, race, and family life. Berkley, CA: University of California; 2011.
- Lerner RM, Johnson SK, Buckingham MH. Relational developmental Systems-Based theories and the study of children and families: Lerner and spanier (1978) revisited. *Journal of Family Theory & Review*. 2015; 7(2):83–104. DOI: 10.1111/jftr.12067
- Maton KI, Hrabowski FA III, Greif GL. Preparing the way: A qualitative study of high-achieving african american males and the role of the family. *American Journal of Community Psychology*. 1998; 26(4):639–668. DOI: 10.1023/A:1022197006900 [PubMed: 9772734]
- McLanahan, S., Sandefur, GD. Growing up with a single parent: What hurts, what helps. Cambridge, MA: Harvard; 1994. 1951
- Meadows SO, McLanahan SS, Brooks-Gunn J. Parental depression and anxiety and early childhood behavior problems across family types. *Journal of Marriage and Family*. 2007; 69(5):1162–1177. DOI: 10.1111/j.1741-3737.2007.00439.x
- Muller C. Maternal employment, parent involvement, and mathematics achievement among adolescents. *Journal of Marriage and Family*. 1995; 57(1):85–100. <http://doi.org/10.2307/353818>.
- Nock SL. A comparison of marriages and cohabiting relationships. *Journal of Family Issues*. 1995; 16(1):53–76. DOI: 10.1177/019251395016001004
- Osborne C, Berger LM, Magnuson K. Family structure transitions and changes in maternal resources and well-being. *Demography*. 2012; 49(1):23–47. DOI: 10.1007/s13524-011-0080-x [PubMed: 22215507]
- Parke, RD. Future families: Diverse forms, rich possibilities. New York: Wiley; 2013.
- Pettit GS, Keiley MK, Laird RD, Bates JE, Dodge KA. Predicting the developmental course of mother-reported monitoring across childhood and adolescence from early proactive parenting, child temperament, and parents' worries. *Journal of Family Psychology*. 2007; 21(2):206–217. DOI: 10.1037/0893-3200.21.2.206 [PubMed: 17605543]
- Pomerantz EM, Moorman EA, Litwack SD. The how, whom, and why of parents' involvement in children's academic lives: More is not always better. *Review of Educational Research*. 2007; 77(3):373.
- Prickett KC, Martin-Storey A, Crosnoe R. A research note on time with children in different- and same-sex two-parent families. *Demography*. 2015; 52(3):905–918. DOI: 10.1007/s13524-015-0385-2 [PubMed: 25911578]
- Radloff LS, Locke BZ. The community mental health assessment survey and the CES-D scale. *Community Surveys of Psychiatric Disorders*. 1986; 4:177–88.
- Raver CC, Gershoff ET, Aber JL. Testing equivalence of mediating models of income, parenting, and school readiness for white, black, and hispanic children in a national sample. *Child Development*. 2007; 78(1):96–115. DOI: 10.1111/j.1467-8624.2007.00987.x [PubMed: 17328695]
- Robinson, K., Harris, AL. The broken compass: Parental involvement with children's education. Cambridge, MA: Harvard; 2014.
- Sweeney M. Remarriage and stepfamilies: Strategic sites for family scholarship in the 21st century. *Journal of Marriage and Family*. 2010; 72(3):667–684. DOI: 10.1111/j.1741-3737.2010.00724.x

- Thomson E, Mosley J, Hanson TL, McLanahan SS. Remarriage, cohabitation, and changes in mothering behavior. *Journal of Marriage and Family*. 2001; 63(2):370–380. DOI: 10.1111/j.1741-3737.2001.00370.x
- U.S. Department of Agriculture. Child nutrition programs—Income eligibility guidelines. *Federal Register*. 2015; 80(61):17026–17027.
- U.S. Department of Education. (2002). No child left behind (NCLB) act of 2001, Pub. L. No. 107–110, § 115, Stat. 1425 (2002).
- Umberson D, Thomeer MB, Lodge AC. Intimacy and emotion work in lesbian, gay, and heterosexual relationships. *Journal of Marriage and Family*. 2015; 77(2):542–556. DOI: 10.1111/jomf.12178 [PubMed: 25814771]
- West, J., Denton, K., Reaney, LM. The kindergarten year: Findings from the Early Childhood Longitudinal Study, Kindergarten class of 1998–99. Washington, DC: National Center for Education Statistics; 2000. (NCES 2001-023)

Figure 1.
Predicted School Involvement, by Mothers' Union Statuses and Children's Grade Levels

Table 1

Descriptive Statistics of the Study Variables, by Children's Grade Level

	Frequency (%) or Mean (SD)							
	Full Sample				No Transition			
	Kinder	1st Grade	3rd Grade	Kinder	1st Grade	3rd Grade	Kinder	1st Grade
Maternal Involvement								
At school	3.78 (1.54)	4.07 (1.52)	4.28 (1.44)	3.85 (1.53)	4.16 (1.50)	4.37 (1.42)	3.40 (1.53)	3.65 (1.53)
In home	2.72 (0.51)	2.56 (0.50)	2.53 (0.49)	2.72 (0.51)	2.56 (0.50)	2.53 (0.49)	2.72 (0.51)	2.58 (0.51)
Maternal Union Status								
Married to child's biological father	0.68	0.69	0.70	0.73	0.75	0.79	0.35	0.29
Married to a new partner	0.03	0.03	0.02	0.05	0.05	0.04	0.06	0.13
Cohabiting with child's biological father	0.05	0.06	0.07	0.02	0.02	0.01	0.13	0.12
Cohabiting with a new partner	0.03	0.03	0.03	0.02	0.01	0.01	0.13	0.14
Single mother	0.20	0.19	0.18	0.18	0.17	0.15	0.33	0.32
Family Factors								
Low-income	0.61	0.36	0.36	0.64	0.33	0.32	0.44	0.52
Maternal depression	1.44 (0.46)	1.41 (0.43)	1.38 (0.51)	1.43 (0.45)	1.40 (0.42)	1.36 (0.50)	1.53 (0.50)	1.52 (0.48)
Maternal employment								
Full-time	0.45	0.48	0.49	0.43	0.46	0.48	0.57	0.60
Part-time	0.23	0.23	0.25	0.24	0.24	0.26	0.17	0.16
School Context								
Private school	0.21	0.21	0.20	0.23	0.22	0.22	0.15	0.14
School size	3.30 (1.15)	3.38 (1.15)	3.33 (1.09)	3.28 (1.16)	3.36 (1.15)	3.32 (1.09)	3.37 (1.11)	3.45 (1.12)
Minority representation	35.71	35.65	35.35	34.57	34.19	33.71	42.56	43.36
Free and reduced lunch	28.82	25.92	29.24	27.75	24.35	27.33	35.45	34.02
Parental outreach	3.39 (0.46)	3.41 (0.41)	3.62 (0.42)	3.39 (0.46)	3.42 (0.41)	3.62 (0.42)	3.43 (0.48)	3.41 (0.39)
Experienced Transition	-	950	990	-	-	-	-	-
N	12,880	14,520	12,200	11,070	11,950	9,950	1,690	1,870
								1,620

Table 2

Mothers' Involvement at School and at Home, by their Union Statuses and Children's Grade Levels

	Mean (SD)		
	Kindergarten	1st Grade	3rd Grade
Involvement at School			
Married to child's biological father	4.10 (1.42)	4.37 (1.41)	4.53 (1.34)
Married to a new partner	3.57* (1.42)	3.80* (1.47)	3.96* (1.41)
Cohabiting with child's biological father	3.12* (1.52)	3.29* (1.54)	3.67* (1.43)
Cohabiting with a new partner	3.17* (1.51)	3.29* (1.44)	3.64* (1.48)
Single mother	3.11* (1.59)	3.51* (1.60)	3.81* (1.53)
<i>N</i>	12,830	14,470	12,130
Involvement at Home			
Married to child's biological father	2.73 (0.49)	2.56 (0.48)	2.53 (0.48)
Married to a new partner	2.73 (0.50)	2.58 (0.49)	2.59* (0.49)
Cohabiting with child's biological father	2.69 (0.58)	2.55 (0.56)	2.49 (0.53)
Cohabiting with a new partner	2.69 (0.52)	2.58 (0.51)	2.56 (0.52)
Single mother	2.68* (0.53)	2.56 (0.53)	2.53 (0.52)
<i>N</i>	12,860	14,510	12,130

Note:

* Significantly different from the category of mothers married to the child's biological father ($p < .001$)

Table 3

Fixed Effects Models Predicting School Involvement by Maternal Union Status

	β Coefficient (SE)		
	(1)	(2)	(3)
Maternal Union Status (Ref: married to child's biological father)			
Married to a new partner	−0.237* (0.103)	−0.230* (0.104)	−0.224+ (0.125)
Cohabiting with child's biological father	−0.098 (0.113)	−0.098 (0.113)	−0.197 (0.137)
Cohabiting with a new partner	−0.292** (0.104)	−0.278** (0.104)	−0.266* (0.122)
Single mother	−0.287*** (0.067)	−0.272*** (0.068)	−0.382*** (0.079)
Children's Grade Level (Ref: kindergarten)			
1st grade	0.300*** (0.018)	0.307*** (0.019)	0.284*** (0.024)
3rd grade	0.462*** (0.022)	0.472*** (0.023)	0.420*** (0.029)
Family Factors			
Low-income		0.022 (0.018)	0.001 (0.020)
Maternal depression		0.030 (0.041)	0.034 (0.041)
Maternal employment (ref: unemployed)			
Full-time		−0.124** (0.040)	−0.123** (0.040)
Part-time		0.037 (0.037)	0.038 (0.037)
Union Status × Grade Level Interactions			
Married to a new partner × 1st grade			−0.003 (0.088)
Cohabiting with child's biological father × 1st grade			0.009 (0.112)
Cohabiting with a new partner × 1st grade			−0.068 (0.104)
Single mother × 1st grade			0.093+ (0.053)
Married to a new partner × 3rd grade			−0.031 (0.095)
Cohabiting with child's biological father × 3rd grade			0.302* (0.154)
Cohabiting with a new partner × 3rd grade			−0.014 (0.131)
Single mother × 3rd grade			0.180** (0.060)
Constant	3.580*** (0.133)	3.575*** (0.153)	3.608*** (0.154)
Pseudo R ²	0.1717	0.1818	0.1837

Note:

 $p < .001$,**
 $p < .01$,*
 $p < .05$,†
 $p < .10$; all models included school-level controls; Hausman $p = .000$ $n = 13,550$, observations = 36,850

Table 4

Fixed Effects Models Predicting Home Involvement by Maternal Union Status

	β Coefficient (SE)		
	(1)	(2)	(3)
Maternal Union Status (Ref: Married to child's biological father)			
Married to a new partner	0.002 (0.036)	0.001 (0.036)	−0.031 (0.042)
Cohabiting with child's biological father	0.010 (0.039)	0.012 (0.039)	−0.015 (0.051)
Cohabiting with a new partner	−0.004 (0.034)	−0.002 (0.034)	−0.060 (0.048)
Single mother	−0.050 [*] (0.022)	−0.049 [*] (0.023)	−0.063 [*] (0.026)
Children's Grade Level (Ref: kindergarten)			
1st grade	−0.141 ^{***} (0.006)	−0.134 ^{***} (0.007)	−0.140 ^{***} (0.008)
3rd grade	−0.164 ^{***} (0.008)	−0.157 ^{***} (0.008)	−0.172 ^{***} (0.009)
Family Factors			
Low-income		0.041 ^{***} (0.006)	0.037 ^{***} (0.007)
Maternal depression		−0.012 (0.013)	−0.011 (0.013)
Maternal employment (ref: unemployed)			
Full-time		−0.034 ^{**} (0.013)	−0.033 [*] (0.013)
Part-time		−0.021 ⁺ (0.012)	−0.020 (0.012)
Union Status × Grade Level Interactions			
Married to a new partner × 1st grade			0.008 (0.029)
Cohabiting with child's biological father × 1st grade			0.037 (0.049)
Cohabiting with a new partner × 1st grade			0.050 (0.041)
Single mother × 1st grade			0.009 (0.017)
Married to a new partner × 3rd grade			0.045 (0.032)
Cohabiting with child's biological father × 3rd grade			0.039 (0.060)
Cohabiting with a new partner × 3rd grade			0.105 [*] (0.051)
Single mother × 3rd grade			0.027 (0.020)
Constant	2.760 ^{***} (0.041)	2.771 ^{***} (0.046)	2.778 ^{***} (0.046)
Pseudo R	0.0316	0.0321	0.0323

Note:

 $p < .001$,**
 $p < .01$,*
 $p < .05$,[†]
 $p < .10$; all models included school-level controls; Hausman $p = .000$ $n = 13,550$, observations = 36,850