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Are Children from Divorced Single-Parent Families Disadvantaged? New Evidence from the China Family Panel Studies

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Abstract: *Since the beginning of the twenty-first century, divorced single parenthood has become more prevalent in China. Nevertheless, divorced single parenthood and its impact on child outcomes have not been studied as much in China as in the West. Most studies in Western societies have reported that divorce and single parenthood are associated with disadvantaged child outcomes. This has been attributed in part to the prevalence of divorce among parents with low socioeconomic status and decreased child monitoring when one parent is absent. In China, however, there are several buffering mechanisms that may reduce the negative impact of divorce on children. Using data from four waves of the China Family Panel Studies, this study examines the effects of divorce and single parenthood on children's academic performance and subjective wellbeing. The results show that children living with divorced single mothers performed as well as children from intact families, whereas children living with divorced single fathers and stepparents were disadvantaged in academic performance and subjective wellbeing. Frequent quarrels between parents in intact families also had a negative impact on child outcomes.*

Introduction

The divorce rate in China has been on the rise over the past three decades. Between 1980 and 2017, the crude divorce rate increased from 0.35 per 1,000 people to 3.2 per 1,000 (Ministry of Civil Affairs of the People's

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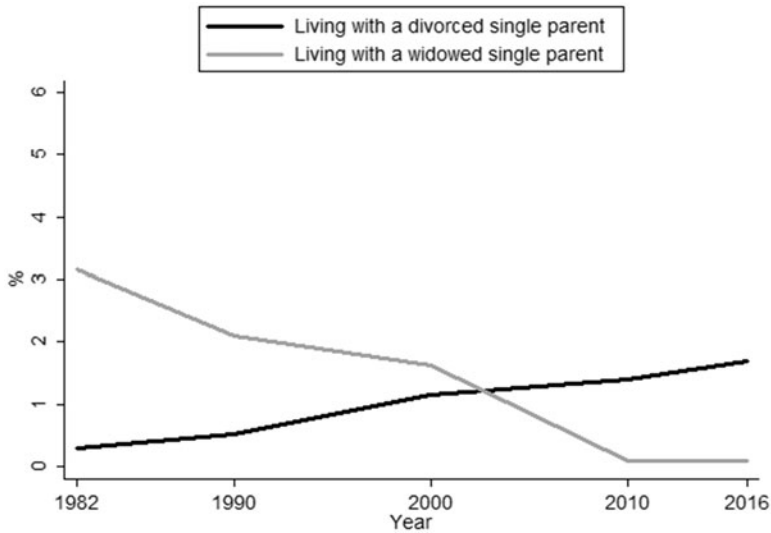
Republic of China 2018), exceeding the levels in many Western and Asian societies. The rising divorce level has inevitably changed the environment for child rearing in China because marriage, the basis of the family, has become less stable. In the past, the divorce level of China was very low, and the primary function of marriage was traditionally to generate offspring (Fei 1998). Children were supposed to be raised by two biological parents, unless one had passed away. Single parenthood was mainly the result of widowhood rather than parental divorce or having a child outside of marriage. However, over the past three decades, as divorce has become more prevalent, the number of children under age 18 in single-parent families due to divorce has gradually overtaken the number in single-parent families due to the death of a parent, making divorce the primary reason for single parenthood in China (see Figure 1). Despite the rising number of divorced single-parent families, very little is known about the effect of this phenomenon on child rearing and on the reproduction of intergenerational inequality in China.

A large body of research in Western societies has documented the association between parental divorce, single parenthood, and negative child outcomes. Compared to children living with married parents, children living with a divorced single parent have been viewed as disadvantaged in

Figure 1. **The percentage of children under age 18 living with a divorced single parent or widowed single parent. Data sources: data for 1982, 1990, and 2000 are from IPUMS 1 percent Chinese Census; data for 2010 and 2016 are from China Family Panel Studies (CFPS).**



academic performance, cognitive and noncognitive development, and psychosocial development (see the review by Amato and Keith 1991). Nevertheless, prior research has also found that the negative effect of single parenthood on children's academic performance is weaker in some Asian societies than in Western societies (Park 2007). The literature has pointed to the different demographic characteristics of single-parent families in Asia versus the West, and the strong family system in Asia, which acts as a safety net (Park 2007, 2008). However, China has been neglected in the literature. Thus, empirical knowledge of the conditions of single-parent families and their children in China remains very limited.

This study addresses whether children raised by a single divorced parent in China are disadvantaged in academic performance and subjective well-being compared to children with married biological parents. Divorce and single parenthood in China have a different demographic and sociocultural context relative to the West, such as a positive selection for divorcees' socioeconomic status, the availability of support from grandparents, the traditional gender division of labor in childcare, and strong preferences for traditional two-parent families, which may mitigate or exacerbate the effects of parental divorce or single parenthood following divorce on the wellbeing of children in China. Evidence from China will offer a useful basis for comparison with child outcomes in Western societies.

In the following section, I briefly review the literature on the outcomes of children with divorced or single parents in Western and Asian societies from a comparative perspective. Next, I describe the sociodemographic characteristics of divorced single-parent families in China, and their implications for the wellbeing of children with divorced parents.

Parental Divorce and Single Parenthood from a Comparative Perspective

Beginning in the last quarter of the twentieth century, many societies have experienced the Second Demographic Transition, with more diversified family structures and childrearing environments (Lesthaeghe 2014). These changes have greatly interested sociologists who study family structures as a mechanism for the reproduction of inequalities (McLanahan and Percheski 2008). The literature on the consequences of divorce leaves no doubt that children from divorced families exhibit more emotional and behavioral problems and do worse in school than children from intact two-parent families (e.g., Amato 2000; Amato and Anthony 2014; Amato and Cheadle 2008; Anthony, Di Perna, and Amato 2014; Havermans, Botterman, and Matthijs 2014; Kim 2011; Sigle-Rushton, Hobcraft, and Kiernan 2005; Steele, Sigle-Rushton, and Kravdal 2009).

Past research has identified three major mechanisms that link parental divorce and single parenthood to adverse child outcomes (Amato and

Keith 1991). The first is economic deprivation following parental divorce, which substantially lowers the family's living standard and restricts investment in the child's education. In the United States and some Asian societies, divorce has become more concentrated in couples of lower socioeconomic status. Further, divorce often entails a financial cost to the couple. Women in particular suffer from lost income following a divorce (Andreß et al. 2006; Duncan and Hoffman 1985; Smock, Manning, and Gupta 1999; Weitzman 1985). Children of divorced parents most often live with the mother, and therefore are especially vulnerable to economic deprivation and poverty. The second major mechanism disadvantaging children in single-parent families is the absence of one parent (Amato and Keith 1991; King and Sobolewski 2006). Parental involvement is crucial to children's education and development. However, single parents tend to spend less time with their children, be less involved in their children's education, and supervise their behavior less frequently. The third mechanism is the stress caused by marital discord. Divorce is stressful for both parents and children (Amato 2000). Research has shown that interparental discord prior to or during a divorce has a detrimental effect on children's psychological adjustment to divorce, increasing the risk of anxiety and behavioral problems (Amato and Cheadle 2008; Strohschein 2005).

Nevertheless, children whose parents divorce do not suffer homogenously. Previous research has shown many variations in post-divorce child outcomes across social classes and life stages (e.g., Amato 2000; Brand et al. 2019; Pan 2014). However, much less is known about how the heterogeneous disadvantages of children living with divorced single parents vary across social contexts or cultural backgrounds.

More recent studies have explored cross-country variations in the disadvantages of children from single-parent families versus children in two-parent families. A comparative study of eleven Western countries showed that the academic achievement gap between children from single-parent and two-parent families was smaller in countries with more generous and supportive family welfare policies. Allowances for families and children and parental leave provisions relieved economic deprivation in single-parent families and increased the time parents spent on children. In contrast, fewer resources were available for children in single-parent families in non-welfare countries (Pong, Dronkers, and Hampden-Thompson 2003).

Cross-country variations in the academic disadvantages of children raised by single parents appear to be more pronounced between Western and Asian countries, although more research is needed into the consequences of changes in family structure in non-Western societies (Park 2007). Park's comparative study showed that reading scores for students from single-parent families compared to two-parent families showed no difference in Indonesia and Thailand and negligible differences in Hong Kong and Korea, and also showed smaller differences in Japan than in the

United States. He attributed the weaker effect in Asia to strong family and kin networks, which serve as safety nets for vulnerable family members. However, support and protection from the extended family system was often less available to divorced single parents than widowed single parents (Park 2007). In another study, Park (2008) showed that parental divorce in Korea had a more detrimental effect on children's educational aspirations and disengagement than the death of a parent.

Another distinctive feature of single parenthood in Asia relates to the role played by gender in single-parent families. In some Western societies, living with a single mother is accompanied by more disadvantages than living with a single father (Borgers, Dronkers, and Van Praag 1996). Single mothers are often disadvantaged in the labor market. Moreover, it is more predominant and normative for a child to be raised by a single mother than a single father. As a result, single fathers as a group may be selected for their greater suitability for parenting (compared with their ex-spouses) or higher socioeconomic status (Borgers, Dronkers, and Van Praag 1996; Downey, Ainsworth-Darnell, and Dufur 1998). However, this selection is reversed in some Asian countries. In Korea, where custodial mothers are more often positively selected for socioeconomic status, children raised by divorced single mothers are less disadvantaged than children raised by divorced single fathers (Park 2008). The differences between single-father and single-mother families can be also explained by the gendered division of labor in terms of child-rearing responsibilities. A recent study by Cheung and Park (2016) found academic disadvantages among students from single-father families, but not single-mother families, in Hong Kong, even though sole custody by single mothers has been more prevalent in Hong Kong. The authors further found that single mothers communicated verbally more often with their children and showed more emotional attachment, compared to single fathers. Traditional male gender roles prevented single fathers from being more involved in parenting or expressing affection to children.

The findings from these comparative studies highlight the demographic, cultural, and institutional circumstances that produce varying effects of family structure on intergenerational mobility across countries. In some societies, single parenthood is less determined by social class, or better family policies or stronger family systems reduce the negative impact of breakups on vulnerable family members. However, many studies have been plagued by data limitations because they have been unable to separate the effects of single parenthood by type. In Western societies, for example, unmarried mothers account for a substantial number of single parents (McLanahan and Percheski 2008), whereas in Asian societies, single parenthood is frequently associated with widowhood (Park 2007). Thus, less is known about how much cross-country variation in children's condition can be attributed to divorced single parenthood.

Previous comparative studies have not included mainland China, the largest society in Asia, even though mainland China's demographic transitions and family culture share many features in common with other East Asian societies such as Japan, Korea, Hong Kong, and Taiwan. These shared features include stronger family ties and kinship networks, the low prevalence of children born out of wedlock, and the centrality of children to marriage (Raymo et al. 2015). However, mainland China's demographic and social context also has a number of distinctive features relevant to the condition of children of divorced parents. The next section outlines these features relative to selected Western and East Asian societies.

Distinctive Features of Single Parenthood in China

Positive Educational Gradient Among Divorced Parents

In many Western societies, poverty and economic hardship have contributed to adverse living conditions for single-parent families, because divorce has been more prevalent among the lower social classes. A negative educational gradient of divorce has also been found in many East Asian societies, such as Japan, Korea, Taiwan, and Hong Kong (Chen 2012; Cheung and Park 2016; Park and Raymo 2013; Raymo, Fukuda, and Iwasawa 2013). Additionally, following a divorce, women have been more likely than men to suffer a decline in living standard. Thus, divorced single-parent families have tended to be poorer than two-parent families, especially single-mother families.

In China, however, the educational gradient of divorce has remained positive, even though divorce has been on the rise. Studies have shown that divorce in China has been more prevalent in economically developed provinces and urban areas, among couples of better family socioeconomic background, and among wives with higher educational attainment (Ma, Turunen, and Rizzi 2018; Wang and Zhou 2010; Xu, Yu, and Qiu 2015; Zeng et al. 2002). Moreover, due to different patterns of selectivity for men and women in post-divorce remarriage, divorced women of higher socioeconomic status and divorced men of lower socioeconomic status are more likely to remain unmarried following a divorce (Peng 2015). Thus, divorced single parents, and particularly divorced single mothers, are not necessarily more disadvantaged in their socioeconomic resources than married parents. Table 1 presents the demographic and socioeconomic backgrounds of children under age 18 in different types of families, according to the China Family Panel Studies. Divorced single-mother families had the highest level of parental education, the highest proportion of urban residency, and the highest household income per capita. Divorced single-father families and stepparent families share similar socioeconomic

Table 1

Demographic and Social Characteristics of Children Under Age 18 in Each Type of Family, a Pooled CFPS Sample

	Urban (%)	Parental education percentile score	Household income per capita (10,000 Yuan)	Value of household assets (10,000 Yuan)	Coresidence of grandparent(s) (%)
Intact two-parent families	42.7	42.5	1.2	42.8	36.9
Divorced single-mother families	77.4**	61.7**	1.7	41.0	45.3
Divorced single-father families	47.2	44.2	1.3	41.2	71.0**
Stepparent families	47.3	44.1	1.1	41.9	39.0

Notes: Children in single-mother, single-father, or stepparent families are those who lived or had previously lived in that type of family in any of the four waves of China Family Panel Studies (CFPS) from 2010 to 2016. Children in two-parent families are those whose families remained intact for all four waves. For intact two-parent families and stepparent families, parental education is the average of the father's and mother's education percentile scores. Grandparents can be maternal or paternal grandparents. One-tailed T tests were carried out to test the mean differences between each type of divorced family and the intact two-parent family. $^{**}p < 0.01$.

characteristics with intact families regarding urban residency, parental education, household income, and household assets.

Divorce in China, compared with the United States, is less concentrated among parents of lower socioeconomic status. It can thus be assumed that falling into poverty or severe financial difficulties is relatively uncommon for most divorced single-parent families (or at least divorced single-mother families) in China, whereas single-parent families in the United States and other societies tend to be poorer than their two-parent counterparts. Accordingly, divorced families in China may not experience significant constraints on their financial investment in their children's education.

Availability of Grandparents' Support

Intergenerational coresidence and the intrafamilial exchange of resources and support between adult children and their elderly parents are still very common in China, although they appear to have declined in other East Asian societies (Raymo et al. 2015). Approximately one third of the Chinese population still lives in multigenerational households (Xu, Li, and Yu 2014). Intergenerational transfers of monetary resources and childcare support from elderly parents to adult children have actually strengthened

in recent years. About half of children under age 16 have been cared for by their grandparents at some point (Xu 2017). Further, the bond between those born after 1980 under the "one-child policy" and their parents is much stronger than in previous generations. Married individuals born after 1980 are heavily dependent on their parents for financial support and childcare, not only because they may be the only children in their families, but also because public childcare resources are very limited (Yan 2013).

Unlike in Korea, where resources from the extended family have been less likely to go to divorced single parents than to widowed single parents (Park 2007), divorced single parents in China still receive substantial childcare support from their own parents. In some cases, the grandparents on the paternal and maternal sides have even fought over custody of a grandchild after the couple has divorced (Yan 2013). As shown in Table 1, the presence of grandparents was more prevalent among divorced single-parent families than among intact families and stepparent families. In particular, grandparents were present in over 71 percent of divorced single-father families.

In China, there are no comprehensive family policies to provide childcare resources for single parents; alimony is often low and dependent on negotiations between divorced couples (Xu 2003; Yu 2013). Grandparents' childcare and financial support thus have a major role in child rearing in divorced families. Past research has found that grandparents' support is particularly helpful in offsetting the negative effects on grandchildren of hardship experienced by their immediate family members (Jæger 2012). The role of grandparents is particularly prominent in China. In rural families, the education of coresident grandparents has been found to have as large a direct effect on grandchildren's educational attainment as parental education (Zeng and Xie 2014). For rural left-behind children in particular, grandparenting is an effective substitute for parenting in preventing children from engaging in delinquent behaviors (Chen and Jiang 2019). Therefore, one can infer that the negative effect of parental divorce on a child's wellbeing may be buffered in China by the higher level of financial or childcare support from grandparents.

Prevalence of Paternal Custody

In contrast to the United States and many other countries, where single-mother families have been more prevalent, the demographic composition of post-divorce family structure in China has been dominated by single-father families (Table 2), similar to Korea before 1990. However, the prevalence of paternal custody in China has mainly resulted from its patriarchal culture rather than the law, as in Korea at past.

Table 2

The Distribution of Post-Divorce Living Arrangements by Gender of Parent and Child (%), IPUMS 1 Percent Chinese Census in 1982, 1990, and 2000 and CFPS 2010

Post-divorce living arrangement	1982	1990	2000	2010
Son with single mother	13.9	15.9	16.4	15.0
Daughter with single mother	15.3	17.7	19.0	22.2
Son with single father	41.0	37.5	35.8	35.3
Daughter with single father	29.8	29.0	28.8	27.5
Total	100.0	100.1	100.0	100.0
N	12,372	20,962	37,911	153

Past research on other East Asian societies has documented better educational outcomes among children in single-mother families than in single-father families, either due to selectivity or gender differences in parenting (Cheung and Park 2016; Park 2008). It is possible that similar differences exist in child outcomes in divorced single-parent families in China with regard to the parent's gender.

Social Sanctions against Divorce

Although divorce has become more prevalent, mainstream Chinese society still frowns on divorce among couples with children, and it values two-parent families. Across the waves of the China Family Panel Studies, about 85.0 percent of parent respondents consistently agreed that "divorce is always harmful to children." The 2012 International Social Survey Program revealed that, among respondents from thirty-eight countries, China showed the lowest level of agreement with the statement "One parent can bring up a child as well as two parents together." Social sanctions against divorce and single parenthood could greatly stress divorcees and their children. A survey in Shanghai reported that 20 percent of divorced single parents felt that they were the object of ridicule and scorn because of their divorces. This feeling was stronger for single mothers. About one fourth of children from divorced families reported being looked down upon by teachers, classmates, or peers (Xu 2003). Given these observations, divorced parents and children in China may be more likely to experience higher levels of distress than parents and children in Western societies, where divorce is more commonly accepted.

Moreover, the rise of divorce in China has come about so dramatically that family norms and public attitudes toward it may not have changed as

rapidly as changes to marriage and family structure. Many people grew up when divorce rates were low and may never have experienced or observed one. These individuals may lack the knowledge or understanding to cope with conflict related to their own divorce. As a result, their marriage is more likely to end with long-lasting conflict and hostility. In one study (Xu et al. 1987), 110 divorced couples in Shanghai were interviewed; only 7 said that during marital conflict, they avoided fighting or quarreling in front of their children. The parents who did fight claimed that their children were too young to be affected by such conflict. The adverse home environment resulting from frequent marital conflict could be more detrimental to a child's development than divorce per se. Ironically, many Chinese parents tend to underestimate the harm caused by marital conflict on their child's psychological wellbeing. In the China Family Panel Studies, around 60 percent of respondents agreed that "parents should not divorce for the sake of their children, even if their marriage is unhappy." Therefore, it is worth comparing the effect of parental divorce with that of parental conflict to better understand the consequences of divorce in China.

To sum up, the distinctive demographic and sociocultural features of divorce in China may mitigate the disadvantaged child outcomes associated with divorced single parenthood, while others may exacerbate them. The positive selection of divorced single parents in terms of socioeconomic status and the availability of grandparent supports can buffer against a child's downward social mobility, but the social sanction against divorce may worsen the child's wellbeing, particularly his/her subjective wellbeing. In view of the above, this study proffers two competing hypotheses relevant to China. First, if a buffering factor is present, whether the higher socioeconomic status of the original family or the availability of grandparental support, the educational or psychological disadvantages for children associated with divorced single-parent families will be limited (Hypothesis 1). However, if social discrimination against divorce and single parenthood is dominant, children in divorced single-parent families will still suffer considerably as a result of parental divorce, particularly in terms of their subjective wellbeing (Hypothesis 2).

The prevalence of paternal custody and traditional gender roles in child rearing imply gendered parental differences in divorced single parenthood that are worth exploring further. Based on findings from other East Asian societies, this study hypothesizes that in China, living with a divorced single mother will be less detrimental to children than living with a divorced single father (Hypothesis 3).

In addition, the cultural preference for two-parent families means that the harm to children from frequent parental conflicts in intact families may go unrecognized. Given the low level of public awareness of the harm caused by parental conflict to children in China, this study hypothesizes

that children within intact but conflict-ridden families may not perform better than those whose parents are divorced (Hypothesis 4).

Data and Methods

The data for this study come from the 2010 baseline wave of the China Family Panel Studies (CFPS) and the full-scale follow-up waves from 2012, 2014, and 2016. The CFPS is a nearly nationwide, comprehensive, longitudinal social survey conducted in mainland China. It used multistage probability proportional to size sampling with implicit stratification to draw a baseline sample of 19,986 households from twenty-five provinces (excluding Tibet, Qinghai, Ningxia, Xinjiang, Inner Mongolia, Hainan, Hong Kong, Macau and Taiwan). 14,960 households were interviewed and 57,155 eligible family members, including adults and children, will be tracked throughout their lives (Xie and Hu 2014).

The CFPS collected rich data related to family structure, marriage history, and social change in addition to children's development and education. These give it an unparalleled advantage over other large data projects in China in terms of the purpose of the current research. During the baseline wave, the CFPS collected the marital history of every adult respondent. Changes in marital status, including the cause and timing, were recorded with each successive wave. Information was obtained on whether a respondent was divorced or widowed, and whether he or she had remarried by the time of the interview. In the CFPS (and in this study), divorce is defined as an individual's self-reported status as "divorced." Although "divorced" is generally a legal status, it can also be a de facto status because legal separation does not exist in China.

Second, the CFPS collected detailed information on family relationships. Information on parents was matched to information on their children to yield data on various types of family structures. Based on information on each parent's marital status (i.e., divorced or still married) and coresidence status (i.e., coresident with the child or not), three types of families were identified: the two-parent family, single-mother family, and single-father family. In addition, using information on previous experience of divorce and on biological parent-child relationships among previously divorced and remarried members, the stepparent family (a stepparent and previously divorced biological parent) was distinguished as a type of family separate from the intact two-parent family.

Third, the CFPS collected rich data from children ages 0 to 15, from which I construct variables for child outcomes. Information on children under the age of 10 was collected from their primary caregivers. Children ages 10 and above were interviewed directly; proxy answers were also obtained from their primary caregivers. However, some measures of child

outcomes were only available in alternate-year surveys or for children at specific ages, or those enrolled in school. Given this limitation, the available answers from the four waves have been pooled to obtain a cross-sectional sample. For children who were involved in multiple waves of interviews, I use only data from the most recent wave without missing values for the outcome and family type measures. This ensures that any given child is included only once in the analysis. The sample of children ages 10 to 15 and enrolled in school is further restricted, because children below the age of 10 and those not enrolled in school were not relevant to many questions.

The dependent variables in this study consist of a series of outcomes related to children's academic performance and subjective wellbeing.

I construct three measures of a child's academic performance from the CFPS. The first is the child's own perception of his/her academic excellence. Children were asked the following questions: "How would you rate your academic performance?" ("extremely dissatisfied"=1 to "extremely satisfied"=5); "How much academic pressure do you put on yourself?" (the original scale ranged from "no pressure"=1 to "a lot of pressure"=5, but in this study the order is reversed, ranging from "a lot of pressure"=1 to "no pressure"=5); and "How good a student do you think you are?" ("very bad"=1 to "excellent"=5). Factor analysis is used to extract a self-rated academic performance index from the three items, with a higher score indicating better academic performance and lower academic pressure. Parents or other caregivers may have different views on the child's academic performance from the child's own views. I construct the second measure based on the caregiver's evaluation of child's academic performance. During the interview, the primary caregiver of a child (usually a parent) was asked to give separate ratings on a 4-point scale of the child's average grades in Chinese language and mathematics. The scale ranged from "poor" (=1) to "excellent" (=4). I apply factor analysis to extract a single factor score to indicate the child's academic performance based on the caregiver's evaluation. Note that the accuracy of reports of a child's academic performance by children and their caregivers could be affected by social desirability bias because they might have wanted to leave a good impression on interviewers. In this situation, an assessment by the institution, school, or teachers could be a more objective measure of educational performance. The CFPS surveys in 2010 and 2014 included a set of vocabulary and mathematics tests for respondents ages 10 and older that were administered during the interview. The test questions were from textbooks used in primary and secondary schools. I use the CFPS test scores as the third measure of a child's academic performance, which should be more objective than self-reports by children or proxy reports by caregivers. The scores from the CFPS vocabulary and math tests are combined into a single score using factor analysis. Nevertheless, the academic measures of

the CFPS still have shortcomings. Children interviewed in the household survey attended a wide range of schools and were in different grades. Their academic performance may be less comparable than if they were compared with classmates in the same school. To check the robustness of the results from the CFPS, I replicate the analysis with a sample of students in grade 8 from the 2014–2015 China Education Panel Survey (CEPS)[1] in the appendix. This survey had a school-based sampling design and collected students' mid-term exam scores in Chinese language, mathematics, and English during the fall 2014 semester. However, as the CEPS interviewed only one grade cohort, collected only one set of exam scores, and contained relatively weak measures of family structure, it is used here only as a supplementary data source. Most of the analyses are based on the CFPS.

Another dimension of outcomes in this study is the child's subjective wellbeing, including levels of happiness and confidence, and risk of depression. Children were asked how happy they were and how confident they were about their future. The responses to both questions were recorded on a 5-point scale, with a higher score indicating a happier or more confident outlook. The risk of depression was measured using the Kessler 6 Rating Scale. The data were collected in 2010 and/or 2014. The values of the three measures of child's subjective wellbeing are all standardized to a score with a mean of 0 and standard deviation of 1 to adjust the mean differences across waves.

The key independent variable in this study is type of family structure. Children's families were initially classified into four types: intact two-biological-parent family, divorced single-mother family, divorced single-father family, and stepfamily consisting of a stepparent and remarried biological parent following a divorce. Children from the last three types of families experienced parental divorce. As mentioned earlier, Chinese parents often maintain an unhappy marriage for the sake of the child. A conflict-ridden intact family, however, may not provide a rich environment for the child's development. The heterogeneities between conflict-ridden intact families and conflict-free intact families could result in underestimation of children's performance in intact families. Therefore, I further distinguish conflict-ridden intact families from conflict-free intact families, using the child-reported information about the frequency of quarrels between parents during the past month. If quarrels between parents happened, the intact family is labeled a "conflict-ridden intact family"; otherwise, it is a "conflict-free intact family." Thus there are ultimately five types of family compared in this study: the conflict-free intact family, conflict-ridden intact family, divorced single-mother family, divorced single-father family, and stepparent family. The conflict-free intact family is used as a reference group. There are other types of families in the data, such as widowed single-parent families, but they are too few to be included in the analysis.

To account for the demographic features of families in China, family socioeconomic background and the presence of grandparents are controlled. Family socioeconomic background is measured by parental education, household income per capita, migrant statuses of parents and child, and rural-urban residency. For parental education, education percentile score, a continuous variable ranging from 0 to 100 is used to measure an individual's educational attainment relative to the general population. Education percentile scores are computed for each birth-year cohort and for men and women separately, to adjust for upward trends in educational attainment due to educational expansion and reduced gender inequality. The information used to construct the variable comes from the Chinese Censuses of 1982, 2000, and 2010, and the 2015 1 percent mini-census survey. For two-parent families, the average education percentile score is calculated from the scores of both parents. For single-parent families, the variable is solely based on score of the single parent living with the child. Household economic status is measured by logged household income per capita. Following the pooled sample of children from the four waves, the level of income in the subsequent wave is adjusted to baseline level in 2010 by rural and urban provincial Consumer Price Index. There is a substantial proportion of left-behind children in two-parent families due to internal migration. That is, one or both parents migrated to seek urban employment, leaving the children and other family members (usually the wife and elderly parents) at the place of origin. A binary variable is used to measure the split household living arrangement due to parental migration. It is coded 1 if either parent migrated, and 0 if both parents were living with the child or if it was a single-parent family. The migrant status of children is also controlled. It is coded 1 if the child is a migrant and coded 0 if the child is local. Coresidency with grandparents is measured by whether any paternal or maternal grandparents were living with the family (1 = yes, 0 = no).

Other control variables in the models include the child's sex (male = 1, female = 0), age, and current grade in school. Because the education system in China usually involves 6 years of primary school, 3 years of junior high school, and 3 years of senior high school, grade is measured as an interval variable ranging from 1 to 12.

Because the study uses a pooled child sample from the four waves of the CFPS, the sample size varies across dependent variables. Table A1 in the appendix describes the distribution of independent variables for each analytical sample.

Regression analysis is used to examine the outcome differences between children in different types of families. In the first step, I construct a reduced form of the regression model to compare group differences in academic performance and subjective wellbeing between the three types of divorced family, conflict-ridden intact families, and conflict-free intact

families, without controlling for any covariates. In the next step, the child's age, grade, sex, and migrant status, the parents' education percentile scores, the absence of a married parent, logged household income per capita, rural-urban residency, and coresidency with grandparents are added to the model to see if these variables explain any variation in children's outcomes among different types of families.

Results

Child Outcome Differences Between Divorced Families and Conflict-Free Intact Families

The differences in children's academic performance among the five types of families are compared and reported in Table 3. Columns 2 to 4 report the outcome gaps between each type of divorced family and conflict-free intact family. The estimates consist of the outcome gaps across family type regardless of the children's and families' background differences. In general, the results show few disadvantages for children from divorced families, except that caregivers of stepparent families tended to rate the average grade of children's Chinese and math performance lower. Children of single-mother families even reported better self-evaluated academic performance and performed better on the CFPS tests compared with children from conflict-free intact families.

When the child's characteristics, socioeconomic background, and coresidency of grandparents are controlled for, however, the positive effect of single motherhood on some academic outcomes disappears and more outcomes are negatively associated with single fatherhood, as reported in Columns 6 to 8 of Table 3. Among families with similar social backgrounds and multigenerational living arrangements, children living with divorced single mothers are still found to have no significant disadvantage in academics when compared to children in conflict-free intact families with similar family backgrounds and living arrangements. Compared with children from conflict-free intact families, children living with divorced single fathers reported significantly lower self-rated academic performance and received lower scores on the CFPS tests. Children in stepparent families are consistently found not to differ significantly from children in intact families in terms of either self-rated academic performance or CFPS scores, except for significantly lower caregiver-evaluated academic performance. As mentioned earlier, the CFPS did not provide school-based evaluation of children's academic performance. To check the robustness of the results, I replicate the analysis on the basis of the CEPS, and obtain consistent findings. Table A2 in the appendix shows no significant differences in school-based exam scores between children from single-mother families and from conflict-free intact families. The exam scores were

Table 3

OLS Regression Estimates of the Relationship between Family Type and Child Academic Performance, Children Ages 10–15, CFPS

	Without covariates				With covariates: Child + Family				
	Single-mother	Single-father	Step	Conflict	Single-mother	Single-father	Step	Conflict	N
Self-evaluated academic performance	0.322*	−0.089	0.098	−0.050	−0.041	−0.303 **	−0.102	−0.077*	5,856
	(0.132)	(0.100)	(0.068)	(0.033)	(0.135)	(0.101)	(0.071)	(0.033)	
Caregiver-evaluated academic performance	0.181	−0.055	−0.152*	−0.016	−0.081	−0.130	−0.225**	−0.061	5,408
	(0.168)	(0.116)	(0.076)	(0.033)	(0.162)	(0.112)	(0.075)	(0.032)	
CFPS vocabulary and math test score	0.499**	−0.243	−0.109	−0.155**	0.182	−0.244**	−0.011	−0.067**	4,376
	(0.189)	(0.125)	(0.089)	(0.034)	(0.143)	(0.095)	(0.068)	(0.026)	

Notes: $^{**}p < 0.01$, $^{*}p < 0.05$. Numbers in parentheses are standard errors. Dependent variables were constructed from factor analysis. "Step" refers to stepparent families with a stepparent and a previously divorced, remarried biological parent. "Conflict" refers to conflict-ridden intact families. The reference group is conflict-free intact families. Control variables for "Child" include the child's sex, birth year, and school grade. Control variables for "Family" include parental education in percentile scores, logged household income per capita, migrant statuses of parents and child, rural-urban residency, and coresidence with grandparents. The estimates for the control variables are not given in the table.
OLS = ordinary least squares.

significantly lower for children from single-father families and stepparent families.

Regarding child's subjective wellbeing, Table 4 shows that children from divorced single-father families were less happy and less confident, but their risk of depression was not significantly higher than that of children in conflict-free intact families. Children from stepparent families reported they were less happy but not less confident or more depressed than children from conflict-free intact families. There were no significant differences in subjective wellbeing between children from single-mother families and conflict-free intact families.

Child Outcomes in Conflict-Ridden Intact Families

Tables 3 and 4 also compare the academic performance and subjective wellbeing of children in intact families with and without parental conflicts. We can observe that children in conflict-ridden intact families tended to perform less well in academics than children in conflict-free intact families (columns 5 and 9 of Table 3). The replication of the analysis using the CEPS yields similar findings: children whose parents did not get along well performed less well in school exams (Table A2). Regarding subjective wellbeing, we can see that in intact families in which the parents quarreled often, children were less happy, less confident, and more depressed than children in conflict-free intact families (columns 5 and 9 of Table 4).

Are children in conflict-ridden intact families still better off than children in divorced families? Table 5 reports the results of testing effect differences on academic and subjective wellbeing between divorced single-father families, stepparent families, and conflict-ridden intact families. It shows that the self-evaluated academic performance of children from divorced single-father families was lower than that of conflict-ridden intact families, and caregiver-evaluated academic performance of children from stepparent families was lower than that of conflict-ridden intact families. No differences in the CFPS test results are found between divorced families and conflict-ridden intact families. Although children from divorced single-parent families, stepparent families, and conflict-ridden intact families tended to have lower happiness or confidence levels than children from conflict-free intact families, there were no differences between children of divorced families and conflict-ridden intact families in happiness or confidence. However, children of conflict-ridden intact families exhibited significantly higher risk of depression than children from stepparent families. This means that children living in a conflict-ridden but intact family were no better off in terms of subjective wellbeing than those in divorced single-father families or stepfamilies.

Table 4

OLS Regression Estimates of the Relationship Between Family Type and Child Subjective Wellbeing, Children Ages 10–15, CFPS

	Without covariates				With covariates: Child + Family				
	Single-mother	Single-father	Step	Conflict	Single-mother	Single-father	Step	Conflict	N
Happiness	−0.132	−0.373**	−0.200*	−0.199**	−0.254	−0.409**	−0.203**	−0.220**	5,636
	(0.162)	(0.110)	(0.078)	(0.030)	(0.162)	(0.109)	(0.078)	(0.030)	
Confidence	−0.202	−0.268*	0.059	−0.097**	−0.302	−0.309*	0.069	−0.111**	4,652
	(0.176)	(0.123)	(0.091)	(0.034)	(0.177)	(0.123)	(0.092)	(0.034)	
Depression	0.002	0.124	−0.057	0.409**	0.109	0.174	−0.074	0.425**	4,400
	(0.193)	(0.125)	(0.092)	(0.035)	(0.193)	(0.125)	(0.093)	(0.035)	

Notes: $^{**}p < 0.01$, $^{*}p < 0.05$. Numbers in parentheses are standard errors. The happiness, confidence, and depression scores were standardized with mean at 0 and standard deviation at 1. "Step" refers to stepparent families with a stepparent and a previously divorced, remarried biological parent. "Conflict" refers to conflict-ridden intact families. The reference group is conflict-free intact families. Control variables for "Child" include the child's sex, birth year, and school grade. Control variables for "Family" include parental education in percentile scores, logged household income per capita, migrant statuses of parents and child, rural-urban residency, and coresidence with grandparents. The estimates for the control variables are not given in the table.
OLS = ordinary least squares.

Table 5

Tests for the Differences Between Single-Father families, Stepparent Families, and Conflict-Ridden Intact Families

Dependent variables		Single-father vs. Conflict	Step vs. Conflict
Self-evaluated academic performance	F(1, 5842)	4.740	0.110
	Prob > F	0.030	0.745
Caregiver-evaluated academic performance	F(1, 5394)	0.370	4.320
	Prob > F	0.546	0.038
CFPS vocabulary and math test score	F(1, 4362)	3.370	0.630
	Prob > F	0.066	0.429
Happiness	F(1, 5622)	2.880	0.040
	Prob > F	0.090	0.835
Confidence	F(1, 4638)	2.490	3.570
	Prob > F	0.115	0.059
Depression	F(1, 4386)	3.830	26.570
	Prob > F	0.050	0.000

Notes: "Step" refers to stepparent families with a stepparent and a previously divorced, remarried biological parent. "Conflict" refers to conflict-ridden intact families.

In summary, adverse outcomes are mainly associated with divorced single-father families, stepparent families, and conflict-ridden intact families, but not divorced single-mother families. Children in single-mother families did not significantly differ from children in conflict-free intact families in academic performance or subjective wellbeing. In contrast, children from single-father families were disadvantaged in education and subjective well-being when compared with children from conflict-free intact families. The contrast between single-mother families and single-father families indicates that the gender of the single parent matters. Another question thus arises: why is single fatherhood associated with certain negative outcomes while single motherhood is not? Some supplementary analyses below provide a possible explanation.

Supplementary Analyses: Gender Differences in Single Parenthood

Better family socioeconomic background and the availability of intergenerational support among single parents partly explain both the positive outcomes associated with single motherhood and the less negative

Table 6

Major Caregivers for Children during the Day or Night by Family Type, Children Ages 10–15, CFPS

Family type	Parents as major caregivers (%)	Grandparents as major caregivers (%)
Intact two-parent families	49.7	14.8
Single-mother families	54.3	28.6
Single-father families	32.5	45.0
Stepparent families	41.3	30.7

outcomes associated with single fatherhood. However, my previous analysis already controlled (or at least partly controlled) for variations in the single parent's social status and the coresidency of grandparents. According to Cheung and Park's study in Hong Kong, parental involvement might be another explanation for parental gender differences.

A supplementary analysis using information on childcare arrangements is presented in Table 6. It shows the involvement rate of parents and grandparents in childcare for each type of family. We can see that the involvement rate of single mothers was not lower than that of married parents, and the childcare involvement rate of grandparents in single-mother families was also higher than that in intact families. Conversely, in single-father families, the involvement rate of grandparents was the highest, but the involvement of the parent (the father) in childcare was the lowest among the four types of families.

Another supplementary analysis in Table 7 explores the differences in educational expenses, pocket money, and parental involvement between each type of families. Educational expense is the amount of money the family invested in the child's education during the last 12 months. Pocket money is the monthly allowance that the child received from his/her family for daily small consumption. Both educational expenses and pocket money are standardized to a score with a mean of 0 and a standard deviation of 1. The score of parental involvement is constructed from five items using factor analysis: "How often do parents talk things over with you?" "How often do parents ask about what happened to you at school?" "How often do parents check your homework?" "How often do parents help you with your schoolwork?" and "How often do parents attend parent-teacher meetings at school?" Original responses ranged from "Never" (=1) to "Always" (=5). We can see from Table 7 that single-mother families invested no less than conflict-free intact families in their children's education and pocket money. Their involvement level was also not significantly lower than that of parents in conflict-free intact families. In contrast, children living with single fathers had more pocket money than children in

Table 7

OLS Regression Estimates of the Relationship between Family Type and Family Investment/Parental Involvement, Children Ages 10–15, CFPS

	Without covariates				With covariates: Child + Family				
	single-mother	single-father	step	conflict	single-mother	single-father	Step	conflict	N
Educational expenses	0.371*	−0.073	0.067	0.005	0.085	−0.117	0.062	0.003	5,313
	(0.149)	(0.097)	(0.066)	(0.028)	(0.140)	(0.092)	(0.063)	(0.027)	
Pocket money	0.261	0.412**	−0.013	−0.076*	0.135	0.414**	0.051	−0.039	5,669
	(0.202)	(0.131)	(0.090)	(0.037)	(0.196)	(0.127)	(0.088)	(0.036)	
Parent involvement	0.024	−0.266	0.062	−0.098**	−0.253	−0.415**	0.073	−0.121**	2,539
	(0.257)	(0.136)	(0.098)	(0.037)	(0.249)	(0.133)	(0.096)	(0.036)	

Notes: $^{**}p < 0.01$, $^{*}p < 0.05$. Numbers in parentheses are standard errors. Educational expenses and pocket money were standardized with mean at 0 and standard deviation at 1. Parental involvement score was constructed from factor analysis. "Step" refers to stepparent families with a stepparent and a previously divorced, remarried biological parent. "Conflict" refers to conflict-ridden intact families. The reference group is conflict-free intact families. Control variables for "Child" include the child's sex, birth year, and school grade. Control variables for "Family" include parental education in percentile scores, logged household income per capita, migrant statuses of parents and child, rural-urban residency, and coresidence with grandparents. The estimates for the control variables are not given in the table.
OLS = ordinary least squares.

conflict-free intact families, and benefited from similar levels of educational expenses, but their fathers' involvement level was significantly lower. It is possible that single fathers used money as a substitute for time spent on childcare or involvement to show that they were fulfilling their parental responsibilities.

Discussion and Conclusion

China provides a different social context from the West for understanding the impact of family structure on inequality in child rearing. Positive selection due to the socioeconomic status of divorced parents and the prevalence of grandparents' involvement in childcare may mitigate the negative impact of parental divorce on a child's wellbeing. However, the social stigma related to divorce, the stressful, conflict-ridden divorce process, and the lack of public assistance for single-parent families may exacerbate the suffering of children with divorced parents.

Empirical evidence on the impact of parental divorce on a child's wellbeing remains limited in China. Past studies of single parenthood in Asian societies have documented a smaller academic gap between children in single-parent and two-parent families in some Asian societies than in the United States (Park 2007). The changes taking place in family structure and behavior in China are similar to those occurring in other Asian societies (Raymo et al. 2015). However, China still differs from other Asian societies in the positive educational gradient among divorced individuals, the level of grandparent involvement in childcare, and post-divorce custody arrangements. The evidence from China presented here contributes to the literature on the consequences of divorce for children of divorced single parents.

When scholars in China began to discuss the consequences of parental divorce for children, they mainly referred to findings from the United States and thus assumed the outcomes to be negative. Only a handful of studies conducted in the 1990s have empirically investigated the effects of parental divorce on children in China. However, most have used small convenience samples, samples of juvenile delinquents, or samples drawn from children of divorced families without a reference group of two-parent families. Only a few studies have used a proper research design, notably Liu et al. (2000) and Dong, Wang, and Ollendick (2002), but none have considered post-divorce family structures and living arrangements. They have emphasized the stigma and pressure associated with divorced families but overlooked the demographic features of divorced single-parent families in China that might serve as buffering mechanisms.

This study is the first to examine the effect of parental divorce and divorced single parenthood on the academic performance and subjective

wellbeing of children ages 10 to 15 using a nationally representative sample from China. It found that parental divorce had some detrimental effects on a child's wellbeing, despite positive selection in terms of parental socioeconomic background and availability of childcare support from grandparents. In other words, children in divorced single-parent families did not necessarily lag behind the overall child population, but they were more disadvantaged compared to peers who were also well-off but were being raised within two-parent families. Given the limited negative findings on outcomes for children from divorced single-parent families and stepfamilies, we can infer that parental divorce and divorced single parenthood are less detrimental to a child's outcomes in China than in the United States and other Western societies.

A large variation in child outcomes between divorced single-mother families and divorced single-father families was found in this study. Children living with divorced single mothers hardly displayed any disadvantages when compared to children from intact families, and they seemed to have some advantages in academics when their family background was not considered. Children living with divorced single fathers, in contrast, had poorer academic performance and subjective wellbeing. Cheung and Park's (2016) earlier study in Hong Kong argued that the differential effects of single motherhood and single fatherhood should be partly attributed to poorer parent-child interactions in single-father families. These findings of this study largely support Cheung and Park's hypothesis on the role of parental involvement, although mainland China is very different from Hong Kong in terms of the gender selection of custody arrangements and the socioeconomic selection of divorced single parents. The supplementary analyses of childcare arrangements, financial investment, and parental involvement confirmed that divorced single fathers have tended to leave the responsibility for childcare to the child's grandparents and to do less parenting themselves. Conversely, the absence of a spouse and the presence of the child's grandparents did not necessarily reduce the involvement of divorced single mothers in childcare and child's education. The findings on parental gender differences exemplify the role of traditional cultural norms of the gendered division of labor in post-divorce child rearing. Chinese men tend to focus on their economic responsibilities, while leaving responsibilities on childcare to women. As a result, they are likely to have difficulty in fulfilling their parental responsibilities in the absence of a spouse.

Another important finding of this study was the detrimental effect of interparental discord in intact two-parent families. Child outcomes were found to be negatively associated with families in which parents frequently quarreled. It is still very common for people in China to think that maintaining an unhappy marriage is in children's best interests. However, as was found in the CFPS data, exposure to frequent parental discord can be

as damaging to a child's subjective wellbeing as parental divorce per se. This finding may be informative for some Chinese parents.

This study has several data limitations. First, the sample size of divorced single-parent and stepparent families was small, which could result in larger standard errors for the estimated effects of family structure. It is possible that the absence of a negative effect for single motherhood in the CFPS data was due to the small sample of children from divorced families and the large standard errors for the estimates. However, it can be argued that the direction of the estimated effects of single parenthood and step parenthood on some of the outcome variables was positive rather than negative.

Second, given that only a few children experienced parental divorce over the four waves, and not all child outcomes were collected with every wave and for every respondent, this study was unable to answer how a transition from an intact two-parent family to a divorced single-parent or stepparent family affected the within-individual changes in wellbeing outcomes. This study only examined whether children with divorced parents were more disadvantaged than others. It did not answer the question of whether children's wellbeing worsened after a parental divorce.

Third, although the study's hypotheses were based on the distinctive demographic features of Chinese families, which have been neglected in most previous studies, these features were considered only as macrolevel contextual factors. Little attention was paid to how they mediate the effects of parental divorce on child outcomes. Researchers should look for other opportunities to identify the relative contribution of each buffering or exacerbating mechanism.

Fourth, the study cannot exclude selection bias concerning how parents make decisions about divorce. Chinese parents generally have high expectations for their children, feel a strong sense of responsibility for their children's education (Stevenson and Stigler 1992), and tend to put their children's interests at the forefront of their marriage. They are less likely to divorce if they have a child, especially a son, or if their child is young (Xu, Yu, and Qiu 2015). This may imply strong endogeneity between a parent's decision to divorce and the child's wellbeing: the decision to divorce or to delay a divorce may in part depend on how a parent evaluates the resilience of the child. If the parent senses that divorce will be very detrimental to the child's future or that the child is not ready to endure a divorce, the idea of divorce may be abandoned or delayed until the child has grown up. Nevertheless, the unobserved heterogeneity of the centrality of children to couples' marriages cannot be captured in this study.

Finally, given the sample design of the CFPS, we can only observe children's development between ages 10 and 15, without knowing their development over the long run. Researchers have found evidence for the long-term negative consequences of parental divorce in the United States and other Western societies, including lower educational attainment,

likelihood of receiving welfare benefits, poorer mental health or psychological wellbeing, earlier sexual activity, earlier parenthood, increased chance of having children outside of marriage, and higher risk of divorce (Bhrolcháin et al. 2000; Sigle-Rushton, Hobcraft, and Kiernan 2005; Wolfinger 2003; Dronkers and Härkönen 2008). The long-term adverse outcomes may result from the accumulation of early disadvantages, and also from changed attitudes toward marriage and family due to parental divorce. Future research should follow the changes of children as they reach adulthood to identify the long-term effects of parental divorce and single parenthood on intergenerational mobility and family formation in China.

Note

1. For more information on the CEPS, please visit its website: http://ceps.ruc.edu.cn/.

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References

Amato, Paul R. 2000. "The Consequences of Divorce for Adults and Children." *Journal of Marriage and Family* 62(4):1269–1287. doi:10.1111/j.1741-3737.2000.01269.x.

Amato, Paul R., and Bruce Keith. 1991. "Parental Divorce and the Well-Being of Children: A Meta-Analysis." *Psychological Bulletin* 110(1):26–46. doi:10.1037/0033-2909.110.1.26.

Amato, Paul R., and Christopher J. Anthony. 2014. "Estimating the Effects of Parental Divorce and Death with Fixed Effects Models." *Journal of Marriage and Family* 76(2):370–386. doi:10.1111/jomf.12100.

Amato, Paul R., and Jacob E. Cheadle. 2008. "Parental Divorce, Marital Conflict and Children's Behavior Problems: A Comparison of Adopted and Biological Children." *Social Forces* 86(3):1139–1161. doi:10.1353/sof.0.0025.

Andreß, Hans-Jürgen, Barbara Borgloh, Miriam Bröckel, Marco Giesselmann, and Dina Hummelsheim. 2006. "The Economic Consequences of Partnership Dissolution: A Comparative Analysis of Panel Studies from Belgium, Germany,

Great Britain, Italy, and Sweden." *European Sociological Review* 22(5):533–560. doi:10.1093/esr/jcl012.

Anthony, Christopher J., James Clyde Di Perna, and Paul R. Amato. 2014. "Divorce, Approaches to Learning, and Children's Academic Achievement: A Longitudinal Analysis of Mediated and Moderated Effects." *Journal of School Psychology* 52(3):249–261. doi:10.1016/j.jsp.2014.03.003.

Bhrolcháin, Máire Ní, Roma, Chappell, Ian Diamond, and Catherine Jameson. 2000. "Parental Divorce and Outcomes for Children: Evidence and Interpretation." *European Sociological Review* 16(1):67–91. doi:10.1093/esr/16.1.67.

Borgers, Natacha, Jaap Dronkers, and Bernard M.S. Van Praag. 1996. "The Effects of Different Forms of Two- and Single-Parent Families on the Well-Being of Their Children in Dutch Secondary Education." *Social Psychology of Education* 1(2):147–169. doi:10.1007/BF02334730.

Brand, Jennie E., Ravaris Moore, Xi Song, and Yu Xie. 2019. "Parental Divorce Is Not Uniformly Disruptive to Children's Educational Attainment." *Proceedings of the National Academy of Sciences* 116(15):7266–7271. doi:10.1073/pnas.1813049116.

Chen, Wan-Chi. 2012. "The Changing Pattern of Educational Differentials in Divorce in the Context of Gender Egalitarianization: The Case of Taiwan." *Population Research and Policy Review* 31(6):831–853. doi:10.1007/s11113-012-9250-9.

Chen, Xiaojin, and Xin Jiang. 2019. "Are Grandparents Better Caretakers? Parental Migration, Caretaking Arrangements, Children's Self-Control, and Delinquency in Rural China." *Crime & Delinquency* 65(8):1123–1148. doi:10.1177/0011128718788051.

Cheung, Adam Ka-Lok, and Hyunjoon Park. 2016. "Single Parenthood, Parental Involvement and Students' Educational Outcomes in Hong Kong." *Marriage & Family Review* 52(1-2):15–40. doi:10.1080/01494929.2015.1073650.

Dong, Qi, Yangping Wang, and Thomas H. Ollendick. 2002. "Consequences of Divorce on the Adjustment of Children in China." *Journal of Clinical Child & Adolescent Psychology* 31(1):101–110. doi:10.1207/S15374424JCCP3101_12.

Downey, Douglas B., James W. Ainsworth-Darnell, and Mikaela J. Dufur. 1998. "Sex of Parent and Children's Well-Being in Single-Parent Households." *Journal of Marriage and the Family* 60(4):878–893. doi:10.2307/353631.

Dronkers, Jaap, and Juho Härkönen. 2008. "The Intergenerational Transmission of Divorce in Cross-National Perspective: Results from the Fertility and Family Surveys." *Population Studies* 62(3):273–288. doi:10.1080/00324720802320475.

Duncan, Greg J., and Saul D. Hoffman. 1985. "A Reconsideration of the Economic Consequences of Marital Dissolution." *Demography* 22(4):485–497. doi:10.2307/2061584.

Fei, Xiao-Tong. 1998. *Xiangtu Zhongguo, Shengyu Zhidu*. Beijing: Peking University Press [in Chinese].

Havermans, Nele, Sarah Botterman, and Koen Matthijs. 2014. "Family Resources as Mediators in the Relation between Divorce and Children's School Engagement." *The Social Science Journal* 51(4):564–579. doi:10.1016/j.soscij.2014.04.001.

Jæger, Mads Meier. 2012. "The Extended Family and Children's Educational Success." *American Sociological Review* 77(6):903–922. doi:10.1177/0003122412464040.

Kim, Hyun Sik. 2011. "Consequences of Parental Divorce for Child Development." *American Sociological Review* 76(3):487–511. doi:10.1177/0003122411407748.

King, Valarie, and Juliana M. Sobolewski. 2006. "Nonresident Fathers' Contributions to Adolescent Well-Being." *Journal of Marriage and Family* 68(3): 537–557. doi:10.1111/j.1741-3737.2006.00274.x.

Lesthaeghe, Ron. 2014. "The Second Demographic Transition: A Concise Overview of Its Development." *Proceedings of the National Academy of Sciences* 111(51):18112–18115. doi:10.1073/pnas.1420441111.

Liu, Xianchen, Chuanqin Guo, Masako Okawa, Jing Zhai, Yan Li, Makoto Uchiyama, Jenae M. Neiderhiser, and Hiroshi Kurita. 2000. "Behavioral and Emotional Problems in Chinese Children of Divorced Parents." *Journal of the American Academy of Child & Adolescent Psychiatry* 39(7):896–903. doi:10.1097/00004583-200007000-00019.

Ma, Li, Jani Turunen, and Ester Rizzi. 2018. "Divorce Chinese Style." *Journal of Marriage and Family* 80(5):1287–1297. doi:10.1111/jomf.12484.

McLanahan, Sara, and Christine Percheski. 2008. "Family Structure and the Reproduction of Inequalities." *Annual Review of Sociology* 34(1):257–276. doi:10.1146/annurev.soc.34.040507.134549.

Ministry of Civil Affairs of the People's Republic of China. 2018. "Statistical Bulletin on the Development of Social Service in 2017." Accessed April 5, 2019. http://www.mca.gov.cn/article/sj/tjgb/.

Pan, En-Ling. 2014. "Timing of Parental Divorce, Marriage Expectations, and Romance in Taiwan." *Journal of Comparative Family Studies* 45(1):77–92. doi:10.3138/jcfs.45.1.77.

Park, Hyunjoon. 2007. "Single Parenthood and Children's Reading Performance in Asia." *Journal of Marriage and Family* 69(3):863–877. doi:10.1111/j.1741-3737.2007.00410.x.

Park, Hyunjoon. 2008. "Effects of Single Parenthood on Educational Aspiration and Student Disengagement in Korea." *Demographic Research* 18(13):377–408. doi:10.4054/DemRes.2008.18.13.

Park, Hyunjoon, and James. M. Raymo. 2013. "Divorce in Korea: Trends and Educational Differentials." *Journal of Marriage and Family* 75(1):110–126. doi:10.1111/j.1741-3737.2012.01024.x.

Peng, Dasong. 2015. "Personal Resource, Family Factors and Remarriage—Analysis Based on CFPS2010 Data." *Sociological Research* 4:118–142. [in Chinese].

Pong, Suet-ling, Jaap Dronkers, and Gillian Hampden-Thompson. 2003. "Family Policies and Children's School Achievement in Single- versus Two-Parent Families." *Journal of Marriage and Family* 65(3):681–699. doi:10.1111/j.1741-3737.2003.00681.x.

Raymo, James M., Hyunjoon Park, Yu Xie, and Wei-jun Jean Yeung. 2015. "Marriage and Family in East Asia: Continuity and Change." *Annual Review of Sociology* 41(1):471–492. doi:10.1146/annurev-soc-073014-112428.

Raymo, James M., Setsuya Fukuda, and Miho Iwasawa. 2013. "Educational Differences in Divorce in Japan." *Demographic Research* 28:177–206. doi:10.4054/DemRes.2013.28.6.

Sigle-Rushton, Wendy, John Hobcraft, and Kathleen Kiernan. 2005. "Parental Divorce and Subsequent Disadvantage: A Cross-Cohort Comparison." *Demography* 42(3):427–446. doi:10.1353/dem.2005.0026.

Smock, Pamela J., Wendy D. Manning, and Sanjiv Gupta. 1999. "The Effect of Marriage and Divorce on Women's Economic Well-Being." *American Sociological Review* 64(6):794–812. doi:10.2307/2657403.

Steele, Fiona, Wendy Sigle-Rushton, and Øystein Kravdal. 2009. "Consequences of Family Disruption on Children's Educational Outcomes in Norway." *Demography* 46(3):553–574. doi:10.1353/dem.0.0063.

Stevenson, Harold W., and James W. Stigler. 1992. *The Learning Gap: Why Our Schools are Failing and What We can Learn From Japanese and Chinese Education*. New York, NY: Summit Books.
Strohschein, Lisa. 2005. "Parental Divorce and Child Mental Health Trajectories." *Journal of Marriage and Family* 67(5):1286–1300. doi:10.1111/j.1741-3737.2005.00217.x.
Wang, Qingbin, and Qin Zhou. 2010. "China's Divorce and Remarriage Rates: Trends and Regional Disparities." *Journal of Divorce & Remarriage* 51(4): 257–267. doi:10.1080/10502551003597949.
Weitzman, Lenore J. 1985. *The Divorce Revolution: The Unexpected Social and Economic Consequences for Women and Children in America*. New York, NY: Free Press.
Wolfinger, Nicholas H. 2003. "Parental Divorce and Offspring Marriage: Early or Late?" *Social Forces* 82(1):337–353. doi:10.1353/sof.2003.0108.
Xie, Yu, and Jingwei Hu. 2014. "An Introduction to the China Family Panel Studies (CFPS)." *Chinese Sociological Review* 47:3–29. doi:10.2753/CSA2162-0555470101.
Xu, Anqi. 2003. "Social Assistance to Disadvantaged Single Parents." *Jiangsu Social Sciences* 3:63–72. [in Chinese].
Xu, Anqi, Youzhu, Wang, Kaiwu Zhou, and Guomei Xia. 1987. "A Survey on School-Age Children with Parental Divorce." *Sociological Research* 3:68–71. [in Chinese].
Xu, Qi. 2017. "More than Upbringing: Parents' Support and the Effect on Filial Duty." *Chinese Journal of Sociology* 37(2):216–240. [in Chinese].
Xu, Qi, Jianxin, Li, and Xuejun Yu. 2014. "Continuity and Change in Chinese Marriage and the Family: Evidence from CFPS." *Chinese Sociological Review* 47(1):30–56. doi:10.2753/CSA2162-0555470102.
Xu, Qi, Jianning Yu, and Zeqi Qiu. 2015. "The Impact of Children on Divorce Risk." *The Journal of Chinese Sociology* 2(1):1–20. doi:10.1186/s40711-015-0003-0.
Yan, Yunxiang. 2013. "Parent-Driven Divorce and Individualisation among Urban Chinese Youth." *International Social Science Journal* 64(213–214): 317–330. doi:10.1111/issj.12048.
Yu, Jin. 2013. "Divorce Conflict, Divorce Freedom, and the Application of the Principle of the Best Interests of the Child in China." *China Youth Study* 10: 74–77. [in Chinese].
Zeng, Yi, Danan Gu, Paul T. Schultz, and Deming Wang. 2002. "Association of Divorce with Socio-Demographic Covariates in China, 1955–1985: Event History Analysis Based on Data Collected in Shanghai, Hebei, and Shaanxi." *Demographic Research* 7:407–432. doi:10.4054/DemRes.2002.7.11.
Zeng, Zhen, and Yu Xie. 2014. "The Effects of Grandparents on Children's Schooling: Evidence from Rural China." *Demography* 51(2):599–617. doi:10.1007/s13524-013-0275-4.

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Appendix

Table A1

Statistical Description of Independent Variables by Pooled Sample of Children Ages 10–15 from Four Waves of the CFPS

		Self-evaluated academic performance	Caregiver-evaluated academic performance	CFPS vocabulary and math test score	Happiness	Confidence	Depression
Single-mother families	MEAN	0.01	0.01	0.01	0.01	0.01	0.01
	S.D.	0.10	0.08	0.07	0.08	0.08	0.07
Single-father families	MEAN	0.02	0.01	0.01	0.01	0.01	0.01
	S.D.	0.13	0.11	0.11	0.11	0.11	0.11
Stepparent families	MEAN	0.04	0.03	0.02	0.03	0.02	0.02
	S.D.	0.20	0.17	0.15	0.16	0.15	0.15
Conflict-ridden intact families	MEAN	0.21	0.22	0.21	0.23	0.22	0.21
	S.D.	0.41	0.41	0.40	0.42	0.41	0.40
Male (female = 0)	MEAN	0.52	0.52	0.52	0.52	0.52	0.52
	S.D.	0.50	0.50	0.50	0.50	0.50	0.50
Age	MEAN	12.69	13.17	12.79	12.79	13.16	12.81
	S.D.	2.87	1.66	1.66	1.82	1.71	1.66
Grade	MEAN	6.52	6.75	6.35	6.35	6.71	6.34
	S.D.	2.15	1.87	1.84	2.02	1.95	1.87
Urban residence (rural = 0)	MEAN	0.44	0.42	0.40	0.41	0.41	0.40

(*continued*)

AppendixTable A1 Continued.

		Self-evaluated academic performance	Caregiver-evaluated academic performance	CFPS vocabulary and math test score	Happiness	Confidence	Depression
	S.D.	0.50	0.49	0.49	0.49	0.49	0.49
Migrant child (local child = 0)	MEAN	0.06	0.06	0.05	0.06	0.05	0.05
	S.D.	0.23	0.23	0.21	0.23	0.22	0.21
Parent migrated (both parents stay = 0)	MEAN	0.20	0.21	0.20	0.21	0.21	0.20
	S.D.	0.40	0.41	0.40	0.41	0.41	0.40
Educational percentile score of parent(s)	MEAN	41.38	41.38	41.17	41.19	41.18	41.04
	S.D.	23.76	23.72	24.09	23.76	24.10	24.12
Logged household income per capita	MEAN	8.42	8.74	8.53	8.65	8.57	8.53
	S.D.	1.86	1.09	1.11	1.15	1.16	1.11
Coresidency with grandparent(s)	MEAN	0.38	0.35	0.33	0.35	0.33	0.33
(not coreside = 0)	S.D.	0.48	0.48	0.47	0.48	0.47	0.47
N		5,856	5,408	4,376	5,636	4,652	4,400
Missing data rate of covariates (%)		4.09	12.5	9.21	8.83	9.88	9.80

Note: The unit response rates for the child sample in the CFPS 2010, 2012, 2014 and 2016 were 86.7 percent, 88.8 percent, 84.5 percent, and 73.3 percent, respectively. S.D.=standard deviation

Table A2

Hierarchical Linear Regression Estimates of Relationship Between Family Type and Child's Academic Performance, Students in Grade 8, CEPS

	Without covariates				With covariates: Child + Family				N
	Single-mother	Single-father	Step	Conflict	Single-mother	Single-father	Step	Conflict	(Clusters)
School exam performance	−0.058	−0.244**	−0.135*	−0.101**	−0.123	−0.222**	−0.164*	−0.091**	8274
	(0.069)	(0.074)	(0.068)	(0.034)	(0.067)	(0.073)	(0.067)	(0.034)	(292)

Notes: $^{**}p < 0.01$, $^{*}p < 0.05$. Numbers in parentheses are standard errors. A single score indicating school exam performance was constructed from school exam scores in Chinese language, math, and English using factor analysis. "Step" refers to stepparent families with a stepparent and a previously divorced, remarried biological parent. "Conflict" refers to conflict-ridden intact families. The reference group is conflict-free intact families. In the CEPS, parental conflict was measured by the question "Did your parents get along well?" (1 = got along well; 0 = did not get along well). The control variables for "Child" include the child's sex and birth year. The control variables for "Family" include average parental years of education, father's EGP occupation categories, logged household income per capita, migrant statuses of parents and child, rural-urban residency, and coresidence with grandparents. The estimates for the control variables are not given in the table.