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Absent fathers, absent siblings: two sides of lone parenthood for children

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Abstract

Children in lone parent families typically experience not only parental absence but also sibling absence: they are more likely to be sole offspring or to have fewer siblings than children of stable unions. Previous research has looked at these factors separately and suggests that they might work in opposite directions: negative effects on children's development of parental absence (i.e. reduced supply of parenting) might be counter-balanced by positive effects of having fewer siblings (i.e. reduced demand for parenting). These patterns also have implications for social inequalities: union instability is more common among lower SES families and its fertility-limiting effects are also likely to be similarly stratified. This would tend to modify the historic association between lower SES and higher fertility, with resulting compositional effects on the population of vulnerable children. This paper explores these issues using data on nine year-old children and their families drawn from the *Growing Up in Ireland* survey. The findings confirm the sibling absence effect of union instability, the social gradient in that effect and tendency of sibling absence to counterbalance the negative parenting effect of union instability. The conclusion reached is that parental absence and lower sibling numbers should be recognised as two sides of lone parenthood for children and should both be taken into account in assessing the impact of lone parenthood on children.

Key words: lone parenthood, fathers, siblings, children, Ireland

Word count: 8,571

Introduction

In a sociological study of early school-leavers living in social housing carried out in Limerick city in Ireland in the mid-1960s, one of the striking features of the lives of those studied was how large their families were: over half lived in families with seven or more children, and the normal pattern was that both parents were present in the household (Ryan 1966: 21). Forty years later, another study profiled the living conditions of social housing tenants in the same city and painted a very different picture: 62 per cent of the families with children were lone-parent families, and among lone parents in Ireland in general at that time, the typical family had one or two children (McCafferty and Canny 2005, Housing Unit 2001). The contrast in family circumstances between the two populations thus illustrates a sharp change that had occurred within forty years in the typical poor family: the large two-parent family was replaced by the small one-parent family as the characteristic high poverty family type, and where poor families traditionally had been larger than average they now had become smaller than average (Walsh 1968, Russell *et al.* 2010). Very large families had persisted longer in Ireland than in other western countries so the transition to small lone parent families happened later and more quickly than in other countries (Lunn et al. 2009), yet the underlying movement, extended over a longer period, was a common experience of many western countries in the 20th century.

Some aspects of this change have been well tracked in research: smaller family size and more unstable unions are routinely recognized as core features of family transformation in the modern world (Therborn 2004). There is also evidence of an interaction between these trends: against the contemporary backdrop of low overall fertility, union instability tends to further limit family size in that women who have a pre-marital birth or union breakdown have fewer children than those whose child-bearing occurs within stable unions (Lillard and Waite 1993, Coppola and Di Cesare 2008, Thomson *et al.* 2009). Our concern is with an aspect of these developments that has not previously been examined, namely, their combined significance for child well-being, both at the individual and population levels and taking account of their possible counter-balancing effects. On the one hand, a large body of research on the effects of union instability and lone parenthood on children has tended to conclude that when

confounding factors are controlled for, the effects are negative but modest (Amato 2000, Chapple 2009). On the other hand, a separate strand of research has examined the effect of family size on children and generally finds that having fewer siblings is better for children, particularly by reducing the number of higher order children among whom negative effects of large family size effects are most evident (Steelman et al. 2002).

There has been little attempt to link these two strands of research together. Judith Blake's landmark work on the effects of family size on children in the US in the 1980s made passing reference to the decline in family size and the rise in family instability as possible counterbalancing trends for children's well-being (Blake 1989: 285). This possibility, to our knowledge, has not been followed up and provides one motivation for the present paper. In addition, there are implications for social inequalities between families: union instability tends to concentrate among lower SES families (Perelli-Harris et al. 2010, McLanahan and Percheski 2008) so that its fertility-liming effects are likely to be similarly stratified. As in the case of Limerick city mentioned above, the combination of high instability and low fertility may cause the typical poor family today to be distinctively small and thus may moderate if not entirely eliminate the association between lower SES and larger family size that prevailed in western countries for much of the twentieth century (Skirbekk 2008). This in turn could have consequences for the social composition of the child population in that, while lone parenthood may increase children's vulnerability, its fertility-limiting effect would tend to ratchet downwards the share of the child population at risk. The overall possibility being raised here, then, is that we need to take account of both the parenting and the fertility effects of lone parenthood to obtain a balanced assessment of its implications for child well-being.

The purpose of this paper is to explore these issues using data on a sample of nine year-old children and their families in Ireland. The data are drawn from the *Growing Up in Ireland* survey, a two-cohort national longitudinal study of children initiated in 2007 from which the first wave of data on the older cohort (nine year-olds) is used here. This source contains a wealth of information on the family circumstances and developmental outcomes of children. The outcome we focus on here is the child's cognitive development at age nine, as measured by a standardised test of the child's reading achievement. Importantly for our purposes, the data also include retrospective information on the history of the relationship between the child's parents so that a

cross-time measure of the stability of the parental relationship which goes beyond the usual one-parent/two-parent dichotomy can be devised.

Using these data, we examine three issues in turn. The first is the possible limiting effect of union instability on number of children in the family and whether children in lone parent families have fewer siblings than those in stable two-parent unions. The second issue is variation in these patterns by SES and whether a higher risk of union instability among lower SES groups may have a fertility limiting effect which modifies the traditional association between lower SES and higher fertility. Finally we assess the significance of these factors for children's cognitive development. The key question here is whether, for children in lone parent families, father absence and sibling absence may have counter-balancing effects and thus modify the negative connotations of lone parenthood for children which arise when the focus is on its parenting effects alone. Following a review of relevant research literature and an account of the data and measures, we deal with each of these issues in turn in the following sections.

Previous research

Four strands of research are relevant to our concerns here. The first deals with the effect of family instability on child well-being. There is now a large international literature on this topic, much of it prompted by the rise of lone parenthood and the parental (especially paternal) absence it gives rise to. The focus of this work is on the reduced *supply* of parenting that is thought to accompany family instability and the consequences that result for children. Amato's (2000) meta-analysis identified 67 studies in the 1990s on the effects of marital breakdown on children in the United States alone, while Chapple's (2009) meta-analysis of the effects of lone parenthood encompassed 122 studies from outside the United States in the 1990s and the 2000s. These meta-analyses found that the effects of family instability on child well-being, net of confounding factors, typically are modest and are smallest in well-designed studies with good controls for confounding effects (Chapple 2009: 29-30). The more cautious scholars hesitate to claim that *any* causal effect from family instability *per se* has been firmly established since complete controls for unmeasured influences are unlikely to have been achieved (OECD 2009: 141, Chapple 2009: 56).

The second strand of research derives from an older tradition of scholarship on family size as an influence on children and relates to the demand side of parenting. Fertility decline from the late 19th century onwards was initially a middle and upper class trend. As lower class families were slower to follow suit, the early decades of fertility decline generated a steep social gradient in numbers of children born per family (Skirbekk 2008) and led social scientists to focus on widening family size differences across social classes as a social issue. Some worried that large families among the poor exacerbated their poverty while others pursued eugenic questions about the impact of the high fertility of the lower classes on the composition and quality of the population. In psychology, for example, researchers asked whether the mix of large family size and lower scores on intelligence tests among lower class families would lead to a drop in the average intellectual level of the population (for a review, see Anastasi 1956).

Eugenic concerns have long since faded from the social sciences and the fall in fertility across the social spectrum has caused the large family to drop off the radar of public concern (though see Bradshaw et al. 2006). Academic reviews of the circumstances of children and families now typically pay little attention to family size or sibling numbers as significant issues (see, e.g., OECD 2009, 2011). Nevertheless, a lively stream of research continues to explore the links between number of siblings and life-course outcomes for children (Steelman et al. 2002, Downey 2001). This research has so often highlighted the negative effects of larger family size on children, especially in the United States, that these effects have been said to be 'virtually unequivocal' and 'inarguable' (Steelman et al. 2002: 248), though some studies have failed to find any significant impact (e.g. Angrist et al. 2010). Some researchers have argued that birth order is a stronger influence on child outcomes than family size, arguing that younger siblings bear the brunt of the disadvantages associated with additional children. Recent studies using rich data on 19 year old Norwegian males as part of screening for military service provide the strongest evidence yet in favour of the birth order rather than the family size effect (Black *et al*., 2005, 2011; Bjerkedal *et al.* 2007).

Variants of the 'resource dilution' hypothesis are most often drawn on to explain family size effects on children, though there is no clear theoretical perspective on how birth order might work in this regard. This hypothesis in effect argues that additional children increase the total demand for parenting and because supply is inelastic reduce

the parental resources that can be devoted to each child, thus leading to poorer outcomes for all children in the family (Blake 1989, Downey 2001, Steelman et al. 2002; see also the quantity-quality trade-off advanced in Becker's work on fertility – Becker and Lewis 1973).

While researchers usually examine family structure and family size as distinct influences on child outcomes, a third body of work examines how these factors affect each other. This work generally finds that union instability reduces fertility: couples who have a child before forming a stable union or whose union breaks down tend to have fewer children than couples in stable unions (Guzzo and Hayford 2010, Thomson et al. 2009, Coppola and Di Cesare 2008, Henz and Thomson 2005). The basic point here, as Thomson et al. (2009: 11) put it, is that 'unions produce births … [and] the longer women spend out of unions during their childbearing years, the lower their expected fertility'. The quality of the union and the partners' expectations as to whether it will endure may also exert an influence (Balbo et al. 2011; Rijken and Thomson 2011). Since the demand for parenting that children represent is in part a function of their number, these fertility-limiting effects can be said to work as an automatic mechanism which, at the family level, links the decline in supply of parenting arising from family instability to a compensating decline in demand, thus helping to preserve some balance in supply and demand for parenting within families. A complication which has attracted much attention is the possible boosting effect of step-family formation on fertility – whether the additional children women produce in second or subsequent unions recuperates the loss of fertility arising in their earlier unstable union (e.g. Henz 2002, Li 2006, Thomson et al. 2009). From our perspective, however, the key point is that lone parenthood itself, while it persists, has a limiting effect on fertility and reduces sibling numbers among children in lone parent families, even though exit from lone parenthood among those who form step-families may tend to off-set that effect through additional child-bearing.

A final body of research of interest to us here deals with social inequalities in all the patterns just outlined. As noted earlier, the independent causal significance of lone parenthood for child well-being is unclear but there is greater consensus on its role as a mediator of parental social background: an elevated risk of family instability is a common correlate of lower SES and is now often identified as an important mechanism by which parental social disadvantage is transmitted to children (Perelli-Harris et al.

2010, McLanahan and Percheski 2008). A related concern is the possible contribution of social differentiation in the incidence of family instability to the 'diverging destinies' of children – a higher risk of fatherlessness among children in lower-class families may amplify their disadvantage and widen the gulf with children in families higher up the social scale among whom the risk of breakup between parents in lower (McLanahan 2004 Waldfogel et al. 2010, Kiernan et al. 2011). However, this literature does not take account of the fertility-limiting effect of lone parenthood nor explore whether lower sibling numbers among children in lone parent families may be a positive factor which cuts across the effect of father absence. Nor does it explore the possible impact on the social composition of the child population of the smaller families found among disadvantaged lone parents.

This research background suggests, then, that lone parenthood has effects on supply of parenting which may be bad for children and offsetting effects on demand for parenting, operating through reduced fertility, which may be good. It also suggests that both these effects may be socially stratified in similar ways and if viewed together may cause us to modify our usual understanding of the impact of lone parenthood on children. We now turn to a test of these possibilities among the families of nine year-olds in Ireland.

Data and variables

The *Growing Up in Ireland* survey is a two-cohort longitudinal study of children in Ireland initiated in 2007-08. The two cohorts were aged nine months (infant cohort) and nine years (child cohort) at the survey initiation. The present paper uses data from wave 1 of the child cohort and thus refers to children who were aged nine years in 2007-08 (sample size is 8,568 children). The sample was generated from the relevant age-grades in 910 primary schools which were selected on a probability-proportional-to-size basis from the 3,200 primary schools in the country. The response rate from sampled schools was 82% and from sampled children within schools was 57%. Data were weighted to conform to population parameters (for a general report on the nine year-old cohort, see Williams *et al.* 2009; on survey design, see Murray *et al.* 2011).

Key Variables

As outlined earlier, the key variables of concern to us here are family stability, the number and birth order of children in the family, and children's cognitive development at age nine as measured by reading achievement.

Family stability: Family stability and father absence are often captured by means of a one-parent/two-parent dichotomy. Here we take advantage of retrospective items in Wave 1 of the GUI survey on the history of the parents' relationship over the child's lifetime in order to devise a six-category indicator of family stability based on status of the parents' union both currently and over time (Table 1). In a large majority of families, the study child has lived with both natural parents since birth. Among these, our typology of family stability distinguishes between those with married and cohabiting parents, in light of evidence that cohabitation is typically a less stable relationship than marriage (Perelli-Harris et al. 2010, Liefbroer and Dourleijn 2006). However, for families where the parents' union has broken up, small Ns cause us not to distinguish between married and cohabiting break-ups and to classify both as 'two parents to one parent'. Step-families (that is, where one of the partners in the union is not the biological parent of the study child) are classified as a separate category, but here again, because of small Ns, we do not distinguish between step families with married and cohabiting partners. The category 'one parent to two parents' refers to families where the mother was solo at birth but later partnered with the study child's natural father, while 'one parent since birth' refers to families where the caregiving parent has not lived with the other parent of the study child nor with any other long-term partner since the child's birth.

Number and birth order of children: Wave 1 of data collection on the GUI nine year-old sample counted the number of children in the household, referring to the study child plus siblings or half-siblings (of any age) currently living in the household. We use the count and age data on these children to measure number and birth order of siblings. The data do not include siblings who have left the family home, on whom complete information was collected only in wave 2 of the survey and was not available for the present analysis. The data therefore understate sibling numbers and birth order in large families or in families with older parents where siblings are likely to have left the family home. Since the proportion of nine year-olds who would have older siblings already departed from the family home is likely to be limited, we judged that the data on sibling

numbers and birth order were adequate for present purposes. In exploratory versions of models developed below, number of children and birth order of study child were both included as predictor variables but because of high correlations between them results were difficult to interpret. We therefore report only those models which include number of children and omit birth order.

Child's reading achievement: This is based on the Drumcondra Reading Test, a standardised age-graded national reading test for Ireland designed to reflect the primary school English curriculum (Educational Research Centre, 2013). The test included in the Growing up in Ireland study covers the vocabulary part of the test and does not include reading comprehension as to reduce the burden on participants (Growing up in Ireland Team, 2010). Included in the data were percentage correct, number of correct answers and a standardised score taking account of the level the student took the test. The latter was used for this paper and scores were normalised to a mean of 100 and standard deviation of 15.

Covariates

Covariates have been selected to capture aspects of family SES background that, as far as possible, are exogenous to family formation and operate in advance of or in the early stages of entry into family life as well as in the present. Parental education is a particularly useful in this regard as it is usually completed before family formation begins and changes little thereafter. Here, we use a three-fold classification of education levels, with low education defined as incomplete second level, medium as complete second level and high as tertiary. While low education may sometimes be caused by early childbearing and thus be endogenous, instances of this pattern are unusual in Ireland in view of the low rate of childbearing among teenagers of school-going age. In 1997-98, the period when the nine year-olds in the present study were born, some 2.5% of births were to mothers aged 18 years or younger (authors' calculations from Eurostat population database). This proportion would represent an approximate upper bound of mothers whose low educational attainment was affected by early childbearing, though this is not to say that in all these cases pregnancy and childbearing preceded rather than followed exit from schooling.) Parental education is thus reasonably effective in capturing the family's socioeconomic status when the child was born as well as when he

or she is nine years old, in contrast with other SES indicators such as occupation or income which are likely to change as family building proceeds. One limitation is that while non-resident fathers were included in design of the GUI, the level of contact and response from these fathers was too low to provide usable data. As a result data on father's education was missing for 22% of fathers in a non-random way, and for that reason most of our analyses below make use of mother's education only.

Another useful exogenous variable is a recall item which asked mothers if at the age of 16 their household had difficulty in making ends meet. Responses were scaled from 1=very easily to 6=with great difficulty. A mother's ethnicity variable is classified into three categories: White, Black and Asian or other.

A final variable we draw on is mother's age at birth of her first child which emerged as an important intermediate influence in family formation. Since, as we shall see below, the relationship of this variable with family formation is non-linear, it is included in OLS models in log form.

Results

Table 1 presents descriptive statistics for the six categories of family stability. A key feature revealed by these data is the differences in the number of children across the different family types and the evidence this yields of the sibling absence effect of union instability referred to earlier. At one end of the spectrum, the most stable unions – two continuously married parents – have a mean of 3.0 children, with 5% having one child. At the other end, families with the most limited unions – those continuously headed by a lone parent – have 1.9 children, with 43% having one child. Continuously cohabiting couples, which as already noted have been found to be a less stable form of union than marriage, also have fewer children than continuously married couples (2.5 children, with 17% having one child). Step-families too have fewer children (mean 2.4, with 24% having only one child). In the latter cases, the fertility recuperation effect of step-family formation noted earlier could cause the fertility gap with standard married couple families to narrow in the future, especially in view of the relatively young current age (mean 33 years) of the mothers involved.

Table 1 here

A second notable difference between the family types which is evident from the descriptive data is the divergence in mothers' timing of family formation as revealed by their mean age at birth of first child. The pattern here is that mothers in more stable unions start family formation at older ages but still have more children while mothers in less stable unions start younger and have fewer children, a somewhat counter-intuitive pattern. For example, continuously married mothers (3.0 children) have mean age at first birth of 28 years, in contrast to continuous lone parents (1.9 children) who have mean age at first birth of 23 years. The latter mothers are young enough to 'recuperate' at least some of their so-far lower fertility in a subsequent union, along lines just mentioned for step families. Nonetheless, even if those mothers do form a new union in the future, the significant fact from a parenting resources perspective is that current nine year-olds in these families have already reached their present age with fewer siblings than nine year-olds in other family types. Any additional siblings which their mothers may add in the future will be so spaced by age that they will have limited significance for resource sharing: the added demand on parenting they will represent will endure for a shorter portion of the existing nine year-olds' period of childhood dependency than is the case for nine year-olds in other family types who already have more siblings. Thus, irrespective of their mothers' future childbearing, a degree of sibling absence has already been a feature of the lives of children in lone parent families and at most can be only partially altered in the future.

Social gradients in family formation and family stability

A feature of the patterns just outlined is that mothers who begin family formation at an early age are more likely to experience union instability. Since this is an important aspect of social differentiation between family types, the dynamics of what is involved and the linkages with SES are worth investigating further. For this purpose, we require data on the mother's SES prior to or in the early stages of family formation. As outlined earlier, the relevant variables mother's education, mother's ethnicity and whether at age 16 mothers were in households that had difficulties in making ends meet.

Using logistic regression models, we first examine the direct impact of these SES variables along with mother's age at first birth on the risk of continuous lone parenthood and separated/ divorced lone parenthood (Table 2).

Table 2 here

The results show that the dominant influence on risk of continuous lone parenthood (Model 1) is exerted by early start to family formation: compared to those whose first birth is in the modal 26-29 age band, those who have a teenage first birth are fourteen times more likely to be continuous lone parents, while those with a first birth in the 20-22 age band are nine times more likely to do so. Being in the low education category also has a small direct effect, with a 1.4 times greater likelihood than the best educated of being continuous lone parents. Separated or divorced lone parenthood has a somewhat different social profile in that it shows no direct link with education and a weaker link with early start to family formation (Model 2). Having a teenage first birth shows no link with this family outcome, which is likely to be an anomaly of small Ns since this category would consist of what in Ireland would be rare instances of pregnancy and marriage in the teenage years. A first birth in the early 20s does show a significant link: those with first births in the age bands 20-22 and 23-25 are 1.7 times and 2 times more likely than the reference category to experience separated or divorced lone parenthood.

In light of the significance of age at first birth for family instability just outlined, it is of interest to know whether this factor is itself differentiated by mother's SES. Table 3 presents an OLS model of mother's SES effects on age at first birth which shows that such differentiation is quite pronounced: controlling for mother's ethnicity, mothers with low education have their first birth on average more than three years younger than those with high education, while if in addition they were in economically strained households at age 16, they are likely to have had their first birth a further year younger. These patterns, viewed in conjunction with those already revealed in Table 2, suggest that mother's SES background is linked with risk of family instability not through direct effects but mainly via an indirect effect operating through early family formation: lower SES mothers are more likely to have an early age at first birth which in turn greatly

increases the risk of experiencing continuous lone parenthood and is also linked, though less strongly so, to risk of separated or divorced lone parenthood.

Table 3 here

We now consider how all these factors feed through into family size. Table 4 presents OLS models for number of children in the family, looking in the first instance at all families (Model 1) and then separately at two parent families (Model 2) and lone parent families (Model 3). In Model 1, the results show the *direct* links between mother's SES and number of children are only slightly in the direction that might be expected: those with low education are likely to have a slightly larger average family size than those with high education but those with medium education have slightly fewer children and coming from an economically strained background at age 16 also reduces the number of children slightly. Confirming the descriptive patterns outlined earlier, the strongest direct influence is family instability rather than mother's SES: continuous lone parents have 1.3 fewer children than two-parent married families, while the other family types have between 0.5 and 0.72 fewer children than two-parent married families. In addition, however, mother's age at first birth has a direct effect which is substantial and negative: all other things being equal, mothers who start their families later have fewer children. This result is of some interest since it suggests that the direct effect of age of first birth on number of children works in the opposite direction to its indirect effect operating through family instability noted earlier. Early first birth, which occurs primarily among lower SES mothers, is strongly associated with family instability which in turn is strongly linked to more limited family size but within each category of family instability, early first birth is associated with larger family size.

This contradictory pattern of effects points to a double trajectory of family formation among women who have their first child at an early age: some do so as un-partnered lone mothers and have few children and others do so within a stable union and have more children than average. Both these trajectories tend to originate among lower SES mothers, since early child-bearing is strongly predicted by low educational attainment and economic strain among mothers while in their teenage years. The implication, therefore, is that while a higher risk of lone parenthood can be counted as a 'new'

manifestation of family patterns among lower SES families, the 'old' manifestation represented by an early start to family formation within stable unions leading to a larger number of children has not entirely disappeared.

Table 4 here

In Model 2 in Table 4, which refers to two-parent families only, father's education is also available as a control variable, as outlined earlier. Here again, the patterns are broadly similar to those for all families in that the family stability variable (which compares the effects of cohabiting and step family types versus two-parent married families) along with the mother's age at first birth are the dominant influences and the parental education variables show only weak direct effects. In Model 3, which relates to the lone parent families, the family stability variable compares continuous lone parents with those who have experienced a relationship breakdown and confirms the stronger fertility limiting effect of the former. It also shows that education has a substantial direct effect: all other things being equal, lone parents with low education have 0.64 more children than lone parents with high education.

The analysis so far has answered two of three questions posed in this paper. First, it has confirmed a limiting effect of family instability on family size and a sibling absence effect of lone parenthood. Nine year-olds who are the children of continuous lone parents, in particular, have substantially fewer siblings on average and are more likely to be sole children than nine year-olds in two-parent married families. Second, the analysis has shown that these effects are differentiated by SES, though in complex and indirect ways. Lower SES mothers are more likely to have a first birth in their teenage years or early twenties which in turn increases the risk of family instability and ultimately has a limiting effect on family size. On the other hand, among 'early start' mothers who form stable unions the effect of early childbearing is to increase ultimate family size. These dual trajectories mean that family instability attenuates the historic association between lower SES and larger family size but it does not eliminate it completely.

Effects on children's cognitive development

We now turn to the third issue this paper is concerned with, namely, the effect of these patterns on children's cognitive development as measured by reading achievement at age nine. The particular focus here is on whether the parenting effects and fertility effects of family instability on children's reading achievement tend to offset each other.

Table 5 presents a series of OLS models which addresses these issues. In Models 1 and 2, the association with family instability and family size are looked at separately, without any controls for either variable. The results show that both these variables on their own are linked to reading achievement in an unsurprising way, though less strongly than might be expected. Children in two-parent married families have the highest reading achievement by a modest margin, as do children in smaller families, though the latter effect arises only in a contrast with children in families of four or more children. However, since as noted earlier the least stable families have the fewest children, we would expect these effects to cut across each other. This is confirmed in Model 3 which looks at their joint effects, though again without other control variables. In this model, the coefficients for both variables become larger: for each family type, more siblings consistently reduce reading achievement among nine year-olds, while for each family size, weaker family stability also consistently reduces reading achievement. Thus, to take the extreme case in regard to both family instability and small family size, nine year-olds in continuous lone parent families suffer a negative effect from the limited parenting resources available to them (the parenting supply effect) but gain a compensating positive effect from having fewer siblings (the parenting demand effect).

Table 5 here

The final element in this picture is revealed in Model 4 in Table 5, which includes socio-economic control variables. The notable feature of this model is that both the family stability and family size effects largely cease to be significant, save for a small negative effect of family size above five children. Mother's education takes over as the dominant influence on children's reading achievement and the log of mother's age at first birth also has a substantial effect. Since as we saw earlier, mother's age at first birth is itself also linked to mother's education, the direct negative effect of low education

among mothers revealed in Model 4 is added to by the indirect effect operating through early age of first birth revealed earlier. The implication, then, is that while the parenting and fertility effects of family instability are real and do tend to offset each other, they do not act as primary causes but rather as mediating effects of mother's SES background. This is not to downplay their interest since the key feature highlighted here is their tendency to cancel each other out and thus neutralise the role of family instability as a mechanism for transmitting parental social disadvantage to children. In other words, these results show that low mother's SES has a negative influence on children's reading achievement but also that family instability on its own is not an important transmitter of that influence since its parenting and fertility dimensions work in opposite directions and on balance produce an effect which sums to something close to zero.

Discussion and Conclusion

Lying behind much of the research on the instability of families in present-day western countries is a view that, for children, two parents are usually better than one. When one parent leaves the family home, or if the two parents never live together, the common concern is that the supply of parenting to children is diminished or is delivered in a more disjointed and less effective way than it would be if two parents and their children were living together. This view is often qualified by reference to the reduced quality of parenting that can arise where there is conflict between parents and where benefits to family relationships can result from one parent moving out. The mix of losses and gains on the supply side of the parenting equation that these aspects of family instability give rise to has been the main focus of research in this field for many years.

This paper has drawn attention to an additional less widely noticed consequence of family instability – its limiting effect on the *demand* for parenting that arises from the reduced number of children that partners in unstable unions typically produce. When a parent (usually the father) absents himself from the family home, he takes not only his parenting capacity with him but also his generative capacity – he and his former partner are unlikely to have any more children. They thus have fewer children among whom their parenting resources must be shared than do parents who stay together. At the family level, therefore, union instability embodies a limiting mechanism which holds down family size and thereby counteracts the dilution of parenting resources among

offspring. It thus helps maintain some equilibrium in the supply-demand balance of parenting resources within families. In the Irish data examined in this paper, these patterns are clearly in evidence, particularly in that children in continuous lone parent families where the supply of parenting is most diminished are more likely than children in any other family type to be sole offspring or have few siblings. Similarly, in all family types that fall short of the stability represented by continuous married parenthood, children have fewer siblings than children of continuously married parents. A paradox of these patterns in the Irish case is that early childbearing among mothers (that is, having a first birth in the teenage years or early twenties), which traditionally would have led to large family sizes, is now linked to a heightened risk of family instability and thus to lower-than-average family size.

The paper has also drawn attention to the implications of these mechanisms for social inequality in view of the concentration of family instability among lower SES families. For much of the twentieth century, families with the least resources tended to have the most children, but now families with the least resources also tend to have the highest levels of instability and that has reduced their relative fertility. This development has not entirely reversed the fertility effect of early childbearing since early start mothers who form stable unions proceed to have above-average numbers of children. Nevertheless, the present-day interplay of low SES, early childbearing, family instability and limited fertility revealed here for Ireland is a mechanism which produces what might be thought of as a modern form of Malthusian prudential restraint or indeed a fulfilment of a quasi-eugenicist wish that those of the most limited resources should have the fewest children. It thus is an element of family dynamics which warrants more notice than it receives.

The final issue dealt with in the paper is a test of the possible offsetting nature of the parenting and fertility effects of family instability for children's cognitive development. The results show that these effects are modest but work in opposite directions. Children in lone parent families lose out slightly because of the fractured relationship between their parents but they also benefit slightly from having fewer siblings or being more likely to be sole offspring than children in married parent families. Further analysis showed that these effects were not primary causes but merely mediated the influence of mother's SES background. Nevertheless they remain of interest because even as

mediating influences they do not work in one direction but rather pull against each other and tend to cancel each other out. There is evidence here, then, that family instability in itself may contribute less to the 'diverging destinies' of children than is sometimes supposed.

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Table 1. Descriptive statistics

Family stability	%	N	Mean age of mother (s.d)	Mean age of mother at 1st birth (s.d)	Mean no. children (s.d)	% with one child	Mother's mean education[2] (s.d)
Married parents since birth	75.3	5609	40 (4.8)	28 (4.7)	3 (1.1)	5%	3.3 (1.3)
Cohabiting parents since birth	2.0	147	36 (5.8)	26 (5.8)	2.5 (1.2)	17%	2.7 (1.2)
Step-family	3.6	266	33 (5.5)	23 (4.0)	2.4 (1.1)	24%	3.0 (1.1)
One parent to two parents	3.0	221	33 (5.5)	23 (4.9)	2.8 (1.2)	7%	3.0 (1.2)
Two parents to one parent	9.3	694	38 (5.5)	26 (5.3)	2.6 (1.2)	16%	3.1 (1.2)
One parent since birth	6.8	508	33 (6.1)	23 (5.9)	1.9 (1.1)	43%	2.8 (1.2)
All	100	7446[1]	39 (5.6)	27 (5.2)	2.9 (1.2)	9%	3.3 (1.3)

[1] Information on status of the relationship at the birth is missing for 661 cases.

[2] Six-point ISCED-based scale : 1= none or primary, 2= lower secondary, 3= higher secondary, 4= non degree, 5= degree, 6= post-grad.

Table 2. Logistic regression models of lone parenthood (vs. two married parents since birth)

	Model 1: Continuous lone parent	Model 2: Separated/divorced lone parent
	Odds ratio	*Odds ratio*
Mother's education		
High (ref)	–	–
Medium	1.1	0.9
Low	1.4***	1.1
Mother's age at first birth		
<20	13.8***	1.3
20-22	9.1***	1.7***
23-25	2.2***	2.0***
26-29 (ref)	–	–
30+	1.5*	0.9
Mother's ethnicity		
White (ref)	–	–
African or other black	0.6	3.1***
Asian or mixed race	0.6	1.8**
Mother' economic strain at age 16[1]	0.9	0.9
N	7613	7613
Nagelkerke R^2	0.17	0.03

[1] Dummy of household had difficulty in making ends meet (1-3 on six-point scale)

Table 3. OLS model of mother's age at first birth (all families)

	B (SE)	β
Mother's education		
High (ref)	–	–
Medium	-1.2 (.14)	-.12***
Low	-3.1 (.15)	-.27***
Mother's economic strain at age 16 (continuous)[1]	-.94 (.14)	-.08***
Mother's ethnicity		
White (ref)	–	–
African or other black	-2.6 (.53)	-.06***
Asian or mixed	-2.1 (.47)	-.05***
Constant	27.42 (.19)	
N	7627	
R^2	.071	

[1] *Difficulty in making ends meet in household: 1=with great difficulty to 6 = very easily*

Table 4: OLS models of number of children in household

	Model 1: All Families		Model 2: Two Parent Families		Model 3: One Parent Families	
	B (SE)	β	B (SE)	β	B (SE)	β
Mother's education						
High	ref.	ref.	ref.	ref.	ref.	ref.
Medium	-.08 (.03)	-.03**	-.09 (.04)	-.04**	.14 (.08)	.06***
Low	.11 (.03)	.04**	-.07 (.04)	-.03	.64 (.08)	.26***
Mother's age at first birth (log)	-1.44 (.07)	-.25***	-1.7(.09)	-.27***	-.92(.15)	-.18***
Family stability						
Married parents since birth	ref.	ref.	ref.	ref.		
Cohabiting parents since birth	-.73 (.09)	-.09***	-.78 (.10)	-.10***		
Step-family	-.90 (.07)	-.14***	-.90 (.08)	-.14***		
One parent to two parents	-.53 (.08)	-.08***	-.62 (.08)	-.10***		
Two parents to one parent	-.50 (.05)	-.12***			ref.	ref.
One parent continuous	-1.30 (.05)	-.29***			-.84 (.07)	-.36***
Mother's ethnicity						
White	ref.	ref.	ref.	ref.	ref.	ref.
African or other black	.62 (.12)	.06***	.56 (.17)	.04***	.74 (.22)	.09***
Asian or mixed race	-.25 (.10)	-.03***	-.21 (.11)	.02	-.48 (.21)	-.06*
Mother's ec. strain at age 16[1]	-.03 (.01)	-.03**	-.02 (.01)	-.02	-.05 (.02)	-.05*
Father's education						
High			ref.	ref.		
Medium			-.11 (.04)	-.05**		
Low			-.03 (.04)	-.01		
Constant	7.90 (.24)		8.65 (.25)		5.52 (.45)	
N	7380		5830		1193	
R^2	.127		.087		.194	

[1] Difficulty in making ends meet in household: 1=with great difficulty to 6 = very easily

Table 5. OLS models of children's reading achievement at age nine

	Model 1 Family Stability only		Model 2 Family Size Only		Model 3 Family Stability, Family Size		Model 3 Add Socio-Demographics	
	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
Family stability								
Married parents since birth	ref.	ref.			ref.	ref.	ref.	ref.
Cohabiting since birth	-4.6 (1.3)	-.04***			-5.2 (1.3)	-.05***	-1.5 (1.2)	-.01
Step-family	-4.9 (.95)	-.06***			-5.6 (.95)	-.07***	-1.7 (.96)	-.02
One parent to two parents	-3.1 (1.0)	-.04**			-3.4 (1.0)	-.04***	.53 (1.0)	.01
Two parent to one parent	2.5 (.60)	-.05***			-2.9 (.61)	-.06***	.24 (.61)	.01
One parent since birth	-5.0 (.70)	-.08***			-6.3 (.74)	-.11***	-.12 (.79)	-.00
Family size								
One child			ref.	ref.	ref.	ref.	Ref.	Ref.
Two Children			.31(.62)	.01	-1.7 (.68)	-.05**	-.80 (.68)	-.03
Three Children			.52 (.62)	.02	-1.7 (.69)	-.06**	-.22 (.69)	-.01
Four children			-1.7 (.67)	-.04**	-3.9 (.74)	-.10***	-1.2 (.75)	-.02
Five children			-4.7 (.89)	-.07***	-6.9 (.97)	-.10***	-2.8 (.98)	-.04**
Six or more			-7.2 (1.2)	-.08***	-8.8 (1.3)	-.09***	-3.1 (1.3)	-.03**
Mother's education								
High							Ref	Ref
Medium							-4.1 (.41)	-.14***
Low							-7.4 (.47)	-.22***
Mother's age at 1st birth (log)							13.6 (.99)	.17***
Mother's disadvantage at 16							.16 (.13)	.01
Mother's ethnicity								
White							Ref	Ref
Black							-1.9 (.16)	-.01
Asian or mixed race							-3.7 (1.3)	-.03**
On or below the poverty line=1							-3.3 (.46)	-.09***
English not spoken at home =1							-5.9 (.15)	-.05***
Constant	101.4 (.20)		100.7 (.54)		104.03 (.64)		62.45 (3.4)	
N	7262		7908		7262		6728	
R^2	.013		.013		.026		.126	