

Who is most affected by stepfamily formation? Exploring heterogeneous effects on children's educational outcomes in Norway

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The number of stepfamilies in Europe is rising. In Germany, the share of individuals who lived with a stepparent before the age of 18 increased from 6% among those born in the early 1970s to 11% among those born in the early 1990s (Kleinschlömer & Krapf, 2023). While there are stark differences across Europe, the share of children who experience stepfamily formation has grown over time in many countries (Andersson et al., 2017; Andersson & Philipov, 2002). In Norway in the 2000s, around 16% of children had experienced their mothers' repartnering by age 15 (Andersson et al., 2017).¹ Research on the consequences of stepfamily formation for children has produced mixed results. These inconclusive findings may reflect that the effects of stepfamily formation differ across social groups. Such potential heterogeneities can obscure both vulnerabilities and sources of resilience within families.

This study examines how the effects of stepfamily formation on children's educational outcomes vary by parents' educational level and children's gender. While many previous studies have been limited by small sample sizes that constrain group-specific analyses, we are able to take advantage of extensive Norwegian register data, which provide sufficiently large numbers of stepfamily cases for robust subgroup comparisons.

Theoretical background

When considering children's outcomes following parental separation, children tend to perform less well in school than their peers growing up in households where both parents live together continuously (McLanahan et al., 2013; Raley & Sweeney, 2020). Two basic mechanisms are proposed: (1) household resources tend to decrease, (2) stress increases, and both processes typically lead to less favourable outcomes for children (Amato, 2000). In contrast, when moving from separation to stepfamily formation, the picture becomes more complex. The same two mechanisms — resources and stress — remain central, yet they may operate in opposing directions. On the one hand, the formation of a stepfamily may introduce additional resources

¹ This share refers to children whose parents were a couple at their birth. Authors own calculations from Andersson et al. (2017, p. 1092).

into the household, such as greater financial stability, shared parental time, and enhanced emotional support, which could potentially benefit children. On the other hand, it may also generate new stressors, including adjustments to altered family routines, redefined roles, and uncertainties about family relationships, which could have adverse effects.

Previous research on children's outcomes following stepfamily formation has produced mixed evidence. Some studies report no significant differences between children living in stepfamilies and those residing with a single parent (Helgertz & Tegunimataka, 2024; Mariani et al., 2017; Song et al., 2012; Usevitch & Dufur, 2021). Others, however, find that stepfamily formation is associated with negative outcomes, particularly in terms of children's educational achievement and psychosocial adjustment (Biblarz & Raftery, 1993; Björklund et al., 2007; Fomby et al., 2021; Kalmijn, 2015). These findings lend stronger support to the increased stress perspective than to the increased resources perspective, suggesting that any potential benefits of additional household resources may be offset by the emotional and relational challenges inherent in family restructuring. Nevertheless, even within this framework, empirical results remain inconclusive.

One possible explanation is that the effects of stepfamily formation are not uniform but vary across different groups. Similar heterogeneities have also been observed in research on the consequences of parental separation (Härkönen et al., 2017) but have rarely been analysed for stepfamilies.

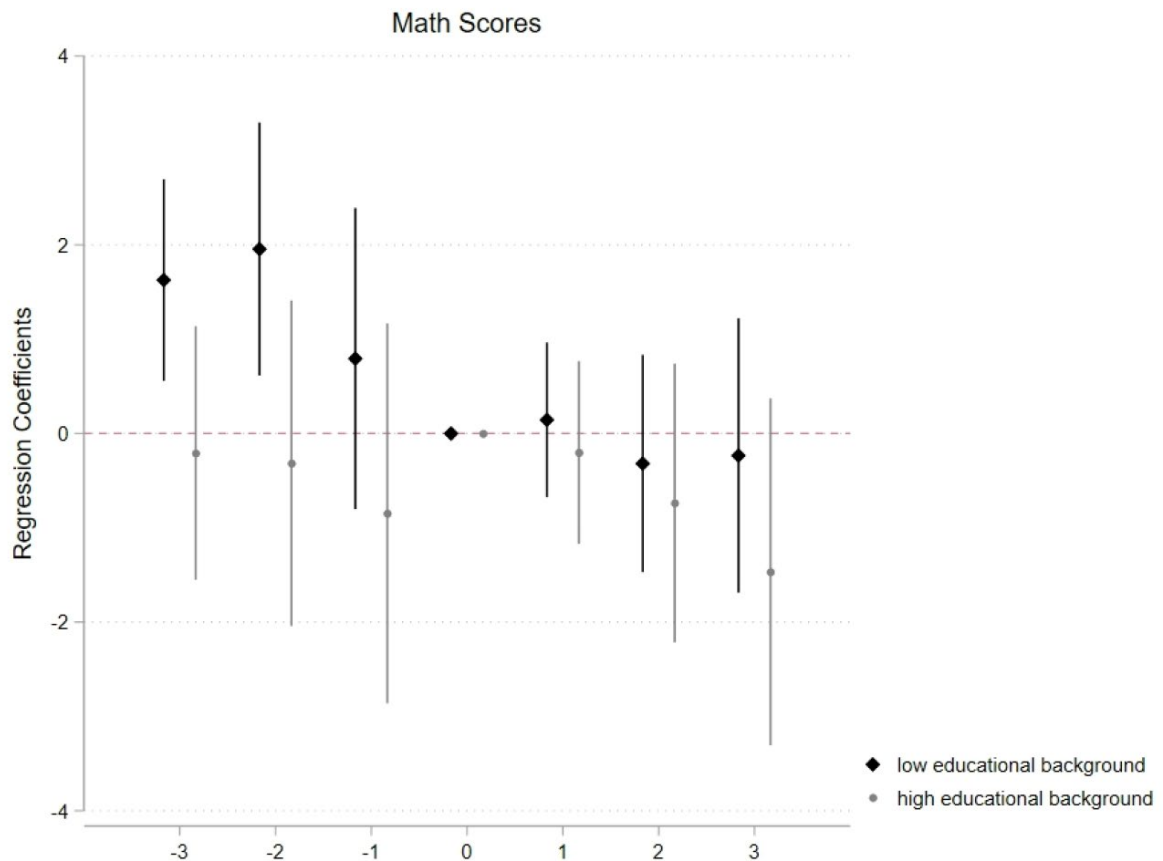
In this study, we examine how the effects of stepfamily formation vary by parents' educational level and gender. Although family resources may not act as a direct mediator of stepfamily formation, we suggest that they moderate its consequences. Highly educated parents, who tend to adopt more communicative and child-centred parenting styles (Lareau, 2002), may buffer potential stress by preparing their children for family transitions through open dialogue and explanation. In contrast, families with limited socioeconomic resources may be more vulnerable, as financial strain and higher everyday stress can reduce parents' capacity to provide emotional support. Thus, we expect that children of highly educated parents experience fewer negative effects of stepfamily formation, whereas children from less advantaged backgrounds may face greater difficulties adjusting to the new family structure.

Our second moderator of interest is gender. Previous research suggests that boys' academic performance tends to be more sensitive to changes in family circumstances (Autor et al., 2019; Legewie & DiPrete, 2012). We therefore expect that boys are more affected than girls by stepfamily formation.

Data and methods

We use Norwegian register data covering the years 2005 to 2017, which combine detailed information on family structure, parental education, and children's standardised test scores in mathematics and reading in grades 5, 8, and 9.

Figure 1: Fixed-effects regression model of stepfamily formation depending on maternal education. Regression coefficients. Outcome: Children's math scores.



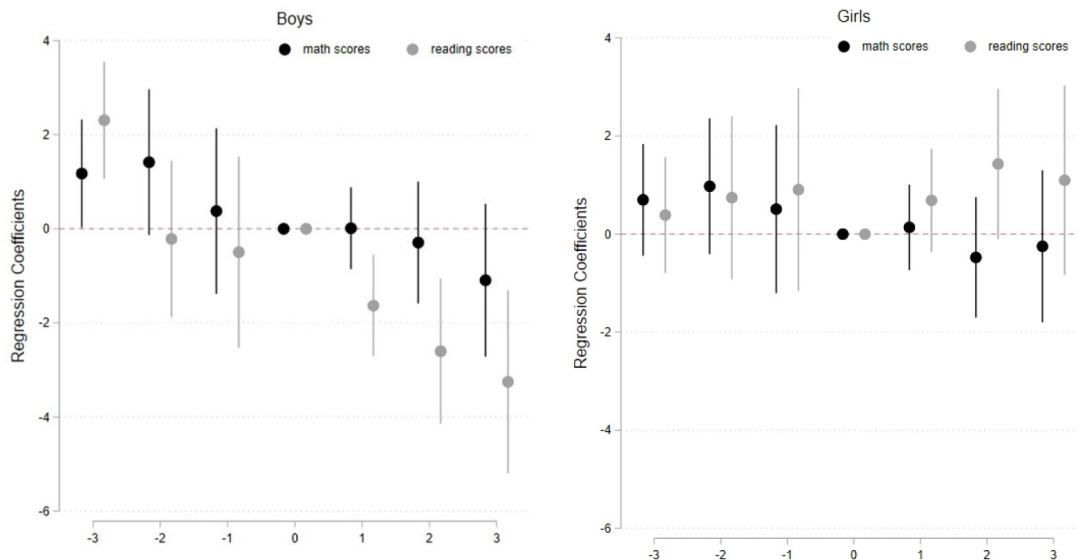
Notes: The dashed horizontal line indicates children's school performance in the year a stepfamily formed (i.e., child began living in a joint household with the new partner of the parent, which serves as the reference category). Scores for math and reading are percentile ranks and range from 0 to 100. Source: Norwegian register data. Author's own calculations.

The analytical sample includes more than 21,000 children whose mother repartnered during the observation period. We apply individual fixed-effects models to estimate within-child changes in school performance before and after stepfamily formation, thereby accounting for all time-invariant family characteristics. The large sample size allows us to examine developments in school outcomes up to three years before and after the transition. Given that educational performance is

measured at three time points only, each child contributes two or three observations to the analysis. All children lived with both biological parents in grade 5. Preliminary results indicate heterogeneity by parental education. Figure 1 shows the average trajectories in math performance around stepfamily formation. The figure shows that the decline in scores is concentrated among children of low-educated mothers, while those of highly educated mothers maintain relatively stable achievement levels. This pattern supports the interpretation that the stress associated with family restructuring is more difficult to manage in socioeconomically disadvantaged contexts.

With regard to child gender, Figure 2 shows that the small but negative effect of stepfamily formation occurs only among boys.

Figure 2: Fixed-effects regression model of stepfamily formation depending on for boys and girls. Regression coefficients. Outcome: Children’s math and reading scores.



Notes: The dashed horizontal line indicates children’s school performance in the year a stepfamily formed (i.e., child began living in a joint household with the new partner of the parent, which serves as the reference category). Scores for math and reading are percentile ranks and range from 0 to 100. Source: Norwegian register data. Author’s own calculations.

In sum, our results highlight that family transitions do not uniformly harm or benefit children. The effects of stepfamily formation appear contingent on the availability of socioeconomic and relational resources that shape how children experience and adapt to these changes. This seems to be generally more difficult for boys.

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