

# The causal impact of removing children from abusive and neglectful homes

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Every year, more than four million children are in contact with the child welfare system due to an investigation of parental abuse or neglect (U.S. HHS, 2016). In addition, authorities annually remove nearly 200,000 children from their homes, with half of them under the age of six (U.S. HHS, 2016; 2018). Despite this, little is known about the impacts of early childhood out-of-home placements.

Providing causal evidence has proven challenging for two reasons: Data availability is problematic, and removal is not random. First, researchers and state agencies often lack the resources to follow children over time. In addition, it is often difficult to match reports on child protective services and education outcomes. Second, it is misleading to compare removed and non-removed children. Removed children typically belong to more disadvantaged environments and are expected to have worse outcomes. The studies by Doyle (2007, 2008) are a major exception in the literature, they use an instrumental variable to study later life outcomes of older children.

## NEW EVIDENCE ON HOME REMOVAL IMPACTS

Our paper provides the first estimates on the impact of home removals during early childhood (before the age of six) on school performance. We use unique anonymized administrative records from Rhode Island that contain almost two decades of child protective service reports. The data allow us to join records associated with each child across social programs and government agencies (Hastings, 2019; Hastings *et al.* 2019).

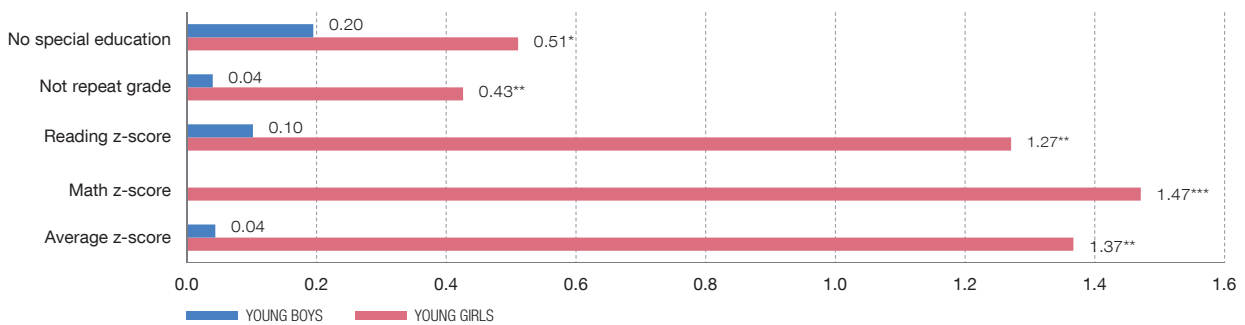
Following Doyle (2007,2008), we address threats to identification of causal effects by using investigators removal tendencies as an instrument for removal. This research design is based on two features of Rhode Island’s abuse and neglect investigation process. First investigators vary in their strictness (their likelihood to recommend out-of-home placements). Second, investigators are matched to cases using a system that effectively randomizes assignments. With this approach, we compare outcomes for children on the margin of removal (those whose placement could have been different if assigned to another investigator).

## HOME REMOVAL BOOSTS PERFORMANCE FOR GIRLS BUT DOES NOT AFFECT BOYS

Our main finding is that removal benefits young girls but does not detectable impact boys (see Figure 1). Removal significantly improves girls’ performance on standardized test

Chart 1

### IMPACT OF REMOVAL ON STANDARDIZED TEST SCORES AND OTHER SCHOOLING OUTCOMES



NOTE: This figure shows point estimate impacts of removal for young girls and young boys. The results include impacts on standardized test scores, normal grade progression, and non-participation in special education services. Significance estimates reported as \*\*\*<0.01, \*\*<0.05, \*<0.10. Larger (more positive) values indicate improvements for a given outcome. Note that the point estimate for the effects on standardized math on young boys is not reported as it is negative and not statistically significant (-0.003)

scores (grades 3-8). This effect is considerably large, equivalent to a 1.3 standard deviation increase. It is comparable in magnitude to the impacts of a high-quality early education program targeting disadvantaged children-Perry Preschool program. This program increased girls test scores by 0.8 of a standard deviation (Heckman et al. 2013).

In addition, we find that removal significantly improves other schooling outcomes for girls. For instance, removal significantly increases the likelihood of normal grade progression (no grade repetition) and non-special education services participation. These patterns are statistically consistent with test score results, suggesting that girls benefit from home removals after an investigation of abuse and neglect.

In contrast, we do not find detectable impacts on young boys. While the impacts on test scores for boys are smaller in magnitude and very imprecise, they are significantly different from the impacts observed for girls. In line with these findings, there is no evidence of significant impacts for boys in other schooling outcomes.

This relative gain for girls but not for boys is consistent with studies that find larger positive impacts for girls from schooling and social program interventions (Hastings *et al.* 2006, Kling 2006, Angrist et al. 2009, Heckman *et al.* 2013, Deming *et al.* 2014, Hoynes *et al.* 2016).

### EXPLAINING HETEROGENEOUS IMPACTS BY GENDER

As the paper shows, removed young girls and boys are not detectably less likely to be enrolled in schools as their non-removed counterparts. Perhaps surprisingly, the experiences after an intervention are similar. There are no differential pathways in terms of the types and lengths of foster care placements experienced. There are also no differences in types of schools attended, as measured by their value-added, share of black students, or share of students' special education services. We also reject gender differences in the pre-investigation characteristics of compliers. That is, there are no considerable differences in characteristics of those whose removal decision would have been different if they had been assigned to a different investigator (see Abadie, 2003, Dahl *et al.*, 2014, and Dobbie *et al.*, 2018).

Our analysis suggests that there might be gender differences in responses to removal. In the paper, we restrict the sample to siblings from the same households, since they share the same background characteristics. This analysis provides suggestive evidence that girls and boys might respond differently to the same treatment. While these results are imprecisely estimated, the point estimates for young girls are nearly identical to those from the main analysis. The point estimates for young boy siblings become consistently negative. This suggestive evidence provides support to the hypothesis that there exist differential responses by gender.

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