Parents’ investments in their children’s education have large and persistent impacts on their children’s outcomes. It is thus important to understand how parents allocate these investments. Do parents invest more in children with higher academic ability or lower academic ability? In addition to being of academic interest, understanding this relationship is important for predicting policy spillovers: if parents spend more on their high-ability children, then policies that improve children’s ability will crowd-in other household spending. Although many papers have examined this relationship, causal identification is difficult, most notably because of the potential for reverse causality between investments and child characteristics.

This paper proposes and implements a new experimental method for estimating how parental investments depend on their children’s characteristics, such as academic ability. The method is based on information shocks: If one has data from an experiment that randomly delivers information to parents about their children’s academic ability, for example, I demonstrate how to exploit that exogenous “shock” to beliefs for identification. In particular, by investigating whether parental investments increase or decrease as a result of receiving information that their children’s academic ability was higher or lower than expected, one can uncover how parents’ investments depend on academic ability. Note that identification relies on parents having imperfect information about the characteristic of interest at baseline.

The paper proceeds as follows. I first outline the method. I then implement the method using data from an experiment in Malawi that delivers information on children’s school performance to 3,200 parents in Malawi. The experiment was previously analyzed in Dizon-Ross (2019); that paper aimed to understand whether information frictions impede parents’ educational investments. In contrast, this paper’s aim is to understand how parents’ investments depend on their children’s academic ability.

I first show that there is sufficient misinformation at baseline in the Dizon-Ross (2019) experiment for identification. I then apply the method to the data. My analysis shows that, at the enrollment margin, parents invest more years of schooling in their higher-performing children. Conditional on children being in school, however, richer parents appear to spend more on higher performers, whereas poorer parents do the opposite. I discuss several potential reasons for the findings, including that budget constraints vary and there are discontinuous benefits to hitting educational milestones, such as graduating secondary school or learning to read. In particular, if only richer parents think they can send their children to post-primary school, then there is high benefit for them to getting high achievers over the admission threshold, whereas for poorer parents, there may be higher returns to helping low
achievers acquire basic skills like learning to read.

This paper contributes to a large literature examining how parents’ investments depend on their children’s ability and characteristics (e.g., Behrman et al., 1994; Griliches, 1979; Datar et al., 2010; Almond and Currie, 2011; Akresh et al., 2012; Bharadwaj et al., 2013; Rosenzweig and Zhang, 2009). The results from this literature are highly mixed. Identification has been a key challenge: it is hard to find exogenous variation in children’s characteristics. Most studies use either birthweight or twin comparisons, where there are potential concerns about endogeneity or external validity (as suggested in Bharadwaj et al. (2013)), with the recent exception of Leight (2014) and Adhvaryu and Nyshadham (2016), who use climatic shocks and policy-induced variation for identification. This paper’s primary contribution is to propose and use a new, experimental method for identifying the relationship; the method has the advantage of being easily portable to other settings. The paper’s second main contribution is to examine how the investment relationship varies across both investment types and parent types. This second contribution is important since I find that the results vary substantially across both investments and parents, which could help explain why the results of the previous literature are so mixed.
References


