



Objective Measurement of Education Investment and Assets in Rural Household Surveys

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In face to face surveys, there may be concerns about social desirability bias resulting in under-reporting of what respondents perceive as negative behaviours and over-reporting of positive behaviours. This is especially a concern in Randomised Control Trials if these biases are correlated with the likelihood of being treated. For example, those receiving a cash transfer may be more likely to report that they have invested in children's education or bought assets even if they have not.

In rural low and middle income countries, it is hard to obtain administrative data. For example, one way to objectively measure education investments may be to obtain records on school performance of children. However, it is not always possible to link children to schools, such as those in boarding and schools may not always maintain good records.

We piloted some measures for the endline survey of a [Randomised Control Trial in Kenya \(Orkin et al., 2020\)](#). Some of the measures were successful but several had to be dropped due to various issues. Below I provide details on each measure and the issues encountered in the setting.¹

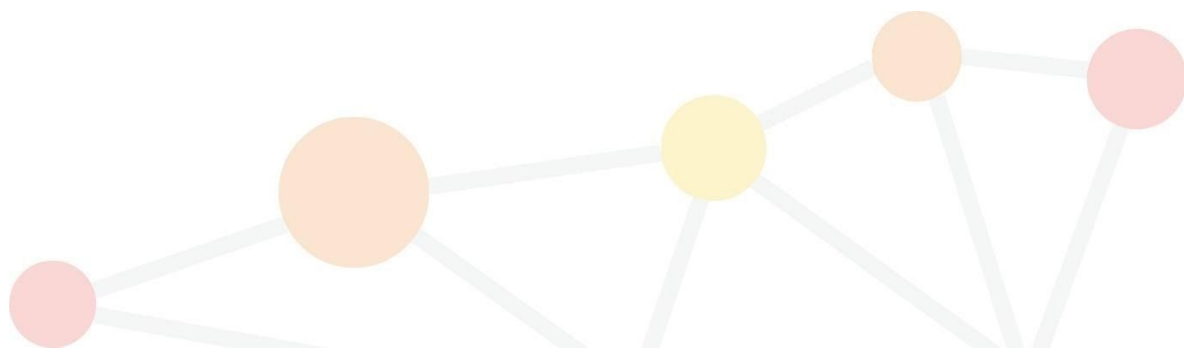
Education Investments and Outcomes

Ideally, to obtain an objective measure of the outcome of investment in children's education, all children could be tested using a standardised test such as the [ASER](#) or the [UWEZO](#) test. However, it is very costly to administer these since they are logistically challenging, requiring surveying to be done outside school hours or during holidays for children in boarding schools.

An idea that partially worked: Kenya has a nationwide exam at primary and secondary. We asked the respondents in the pilot whether their child took either the primary or the secondary test, what score/grade they got on it and then asked them to show the enumerator the certificate to verify the information. From the pilot, we understood that the respondents struggle to recall the score/grade so we narrowed down to directly asking the respondent to bring any documents they had available. The key issue we encountered with this was that the kids had often taken their certificates/result slips with them or for those who didn't pass, they never collected the documents.

An idea that failed: in order to get an objective measure of non fee investments, we piloted asking the respondent to show us any textbooks or uniforms. With textbooks, we discovered that these were often kept at school. With uniform, there was a potential bias since only those wealthy enough to have more than one would have one available at home to show even when the kid was at school.

¹ We also did anthropometrics with children under 5 and had the enumerator enter the roof, floor and wall material. As these are quite standard measures, we do not discuss them here.



Asset Verification

An idea that worked: We objectively measured the quantity of seven durable assets that were relatively easy for the enumerator to verify: cooking pots and pans, jerry cans, chairs/sofa, tables, radio, TV, poultry house. These were selected after piloting verifying a long list of assets.

Important considerations:

1. Piloting highlighted that asking the enumerator to verify assets straight after the asset module disrupted the flow of the survey since they often had to get up and walk around with the respondent to look at the assets and count them. Hence, asset verification exercise was done right at the end of the survey.
2. We included a question on where the survey was being done (at home or outside the home) and for the enumerator to be asked to do asset verification only when at home. It is important to do high frequency checks to make sure particular enumerators are not always selecting 'outside the home' in order to avoid having to verify the assets.

Verifying Livestock

We also considered verifying the livestock owned by the household but did not do this because of the following potential concerns:

1. Animals are often not at home and wander around the village.
2. It is hard to identify which animals belong to the respondent even when you walk around the village with them.

