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## S2 Appendix Empirical data

### Empirical data and non-response

After pooling and then combining data from NLSY79 and HRS (S1 Fig) we observe an increasing proportion of individuals in poverty as the poverty threshold is raised.

Since the pooled logistic regression approach omits missing data we addressed the issue of whether non-response was itself associated with poverty status [9]. In S2 Fig we show the proportion of missing observations at age  $x + i$  based on state at age  $x$ , and the difference in non-response between each state. There is slightly lower response by those in the lower income states for all three thresholds. The (weighted) difference does not seem to be dependent on age so we assume that for our analysis here the impact on the results are minimal [10].

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