Developing Educational and Vocational Aspirations through International Child Sponsorship:
Evidence from Kenya, Indonesia, and Mexico

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Abstract: The role that aspirations play among the poor in facilitating movement out of poverty is a subject of increasing research in development economics. Previous work (Wydick, Glewwe, and Rutledge, 2013 and 2017) finds positive impacts from international child sponsorship on educational attainment, employment, and adult income. This research seeks to ascertain whether some of this positive impact may be due to elevating aspirations among sponsored children. Using an age-eligibility rule applied during program rollout to identify causal effects, we study whether international child sponsorship increases educational and vocational aspirations among a sample of 2,022 currently-sponsored children in Kenya, Indonesia, and Mexico. We find that sponsorship increased indices of self-esteem by 0.24σ, optimism by 0.26σ, and expected education by 0.43 years. There are also positive but mostly insignificant effects on vocational aspirations, and a significant increase in an overall aspirations index of 0.29σ.

1. Introduction

Child sponsorship programs transfer resources from sponsors in wealthy countries to children in developing countries, helping to provide them access to healthcare, nutritious meals, tuition, and school uniforms. Using a program age-eligibility rule as an identifying instrument in a survey of 10,144 adults in six countries, Wydick, Glewwe, and Rutledge (2013, 2017) find large and statistically significant impacts from Compassion International's child sponsorship program on adult life outcomes. These findings include a 12-18 percentage point increase in secondary school completion over a baseline rate of 44.5 percent, an increase in the probability of white collar employment of 6.6 percentage points over a baseline rate of 18.7 percent, and an increase in monthly income of $13-17 over a baseline of $75.

Our purpose in this paper is to ascertain whether these substantial impacts on adult life outcomes from child sponsorship may be at least partially mediated through development of aspirations and other psychological attributes during the period of sponsorship. Here we investigate the impacts of the Compassion International child sponsorship program on educational aspirations, self-esteem, optimism, and an overall index of aspirations using a new data set of *currently* sponsored children from a survey of 2,022 children in Kenya, Indonesia and Mexico.

 The emphasis of many child sponsorship programs, such as that operated by Compassion, is not merely on the relief of *external* constraints such as better access to nutrition, enhanced healthcare, and paying for schooling expenses, but also on the relief of *internal* constraints. These internal constraints of the poor, which may be strongly manifested in children, involve feelings of hopelessness (Duflo, 2012, Glewwe et al., 2017, Lybbert and Wydick, 2018), lack of empowerment (Sen, 1999), low aspirations (Dalton, Ghosal and Mani, 2016), a diminished sense of self-efficacy (Wuepper and Lybbert, 2017), and low self-esteem (Dercon and Krishnan, 2009). Like many international child sponsorship programs, the Compassion intervention places a heavy emphasis on the development of socio-emotional skills and on children's educational and vocational aspirations.

Using a similar identification strategy based on program eligibility rules, our combined results across three countries demonstrate that the Compassion intervention exhibits positive and significant impacts on these psychological attributes of sponsored children. Specifically, we find that the program increased an index of self-esteem by 0.24 standard deviations (henceforth denoted by σ) and an optimism index by 0.26σ. It also caused educational aspirations to increase by 0.43 years. While

the estimated impacts are positive on vocational aspirations, they are mostly insignificant. On the other hand, we find a statistically significant increase of 0.29σ on a comprehensive index of aspirations. In terms of statistical significance, results are strongest for self-esteem, vocational hopes and expectations, educational expectations, and the aspirations index in Kenya, and for optimism in Indonesia. However, point estimates are largest for educational expectations and the aspirations index in Mexico.

It is possible, of course, that the relief of external constraints due to child sponsorship programs is solely responsible for the improved adult outcomes, and that changes in children's psychological traits due to the program are ancillary to the process. If we were to find no impact on children's psychology from child sponsorship, we could have ruled out impacts of the program on child psychological traits as a causal channel for the positive impacts found on adult life outcomes. But the evidence that we present in this paper suggests that the impact of the intervention on children's psychological development may be a causal channel that leads to positive impacts on adult life outcomes. Furthermore, a companion paper to this one, from an experiment using digitally-coded children's self-portraits from 526 children in Indonesia (Glewwe, Ross and Wydick, 2017), finds positive impacts from sponsorship on hopefulness, self-efficacy, and happiness. Collectively, we view these results as necessary (but not sufficient) evidence that elevated childhood aspirations have a causal positive impact on adult life outcomes.

A growing literature in behavioral economics explores the relationship between self-esteem and economic outcomes. Bénabou and Tirole (2003), for example, show that empowering and encouraging an individual can raise self-esteem, which may in turn raise achievement. Darolia and Wydick (2011) find that actions such as parental praise designed to foster an increase in self-esteem result in academic achievement in university undergraduates above what natural ability alone would produce. Krishnan and Krutikova (2013) find that an intensive, multi-year after-school program in India that focused on non-cognitive skill formation increased self-esteem, which is in turn correlated with better school performance and higher earnings.

Another important strand of the literature has sought to understand the role of internal constraints among the poor (Mani et al., 2013; Haushofer and Fehr, 2014; Laajaj, 2017), especially in the areas of self-esteem and aspirations, and its effect on economic development. Much recent theoretical work in development economics has shown how low aspirations can lead to development traps (Ray, 2006; Dalton, Ghosal, and Mani, 2016; Genicot and Ray, 2017). Ray (2006), for example,

discusses how failed aspirations and poverty are reciprocally linked in a self-sustaining trap. Genicot and Ray (2017) demonstrate how aspirations failures can lead to a divergence in investment and thus growing income inequality.

Recent field experiments have also explored the importance of psychological variables for development. Using a randomized field experiment in South Africa, Bertrand et al. (2010) test the role of psychological factors in credit and saving decisions, while Duflo, Kremer, and Robinson (2011) explore nudges and fertilizer take-up among Kenyan farmers using models of procrastination from the economics and psychology literature. Several recent empirical studies have also explored the role of aspirations in development (Bernard, Dercon, and Taffesse, 2011; Beaman et al., 2012; Dercon and Singh, 2013; Bernard et al., 2014; Macours and Vakis, 2014; Pasquier-Doumer and Brandon, 2015; Janzen et al., 2017; Kosec and Mo, 2017). The paper most closely related to ours is the study by Chiapa, Garrido, and Prina (2012), who use a difference-in-differences approach to evaluate the impacts of Mexico's PROGRESA program on parents' educational aspirations for their children. They find that the aspirations of parents for their children's education increased by almost half of a school year among high-exposure households, and that there is a positive correlation between parental aspirations and their children's educational attainment. However, they do not investigate the aspirations of the children themselves.

We seek to contribute to this emerging literature on the importance of aspirations for economic development. When positive impacts of child sponsorship on adult life outcomes became apparent during the course of our study on adult life outcomes (Wydick, Glewwe and Rutledge, 2013, 2017), we began exploring the role of aspirations development in *currently* sponsored children. Small-scale pilot surveys in Bolivia, India and Kenya[1] revealed positive correlations between child sponsorship status and higher educational and vocational aspirations (Ross 2010). This led us to implement studies in Kenya, Indonesia, and Mexico that were larger and, more importantly, permitted us to choose village sponsorship projects that had been rolled out sufficiently recently to allow for estimation of causal impacts via an age-eligibility-rule instrument similar to that used by Wydick, Glewwe and Rutledge (2013, 2017).

Our analysis of survey data from Kenya, Indonesia, and Mexico utilizes this age-eligibility instrument to compare four groups of children: (1) Sponsored children, (2) Siblings of sponsored

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[1] The pilot sample from Kenya is separate from the sample used for the analysis in this paper.

children, (3) Children in waitlist households (Indonesia only) and a random sample of non-sponsored households in Compassion communities (Mexico only), and (4) A random sample of households with children in communities without sponsorship programs (Mexico only).

2. Description of Survey and Fieldwork

2.1 Description of the Compassion Program

Compassion is a faith-based Christian organization that currently supports over 1.3 million children in 26 countries, making it the third largest child sponsorship organization worldwide. Wydick, Glewwe, and Rutledge (2013) estimate that 9.14 million children are sponsored through various sponsorship organizations worldwide, and that this represents a transfer of approximately $3.4 billion dollars annually. These programs have been in existence for decades and typically involve a monthly payment of around $25-$40 that funds the provision of healthcare, education, clothing, food, and other support for the sponsored child and/or the community in which he or she lives. Additionally, they foster a relationship between the child and the sponsor through the exchange of letters, photos, and gifts. For a more detailed description of the Compassion program, see Wydick, Glewwe, and Rutledge (2013).[2]

In this study we focus on the aspects of the Compassion program that seek to develop children's self-esteem and aspirations. These aspects, which make child sponsorship different from programs that provide only educational inputs, include the exchange of letters with sponsors, through which sponsors often provide encouragement to children and expose them to a world outside of their village. In addition, Compassion staff in the field place a significant emphasis on self-esteem building, character development, and raising self-expectations in their direct work with sponsored children. Aspirations may also increase through the support network of Compassion alumni, who may directly or indirectly influence currently sponsored children through their own achievements in schooling and their career paths.

2.2 Survey Fieldwork

Our studies of children in Kenyan, Indonesian, and Mexican communities, which compare psychological variables such as self-esteem and life aspirations between sponsored and non-

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[2] One minor difference between the Compassion projects in this study and those implemented in the 1990s, which were the focus of the Wydick, Glewwe and Rutlidge (2013) study, is that in most countries the age-eligibility rule has been gradually lowered from 12 to 9 years of age.

sponsored children in the same community or in neighboring communities, were designed to exploit the above-mentioned age-eligibility rule to identify the causal impact of sponsorship on the psychological characteristics of children. Thus, the sites were selected for fieldwork based on the year of program implementation in order to gain maximum advantage for our age-eligibility-rule estimation strategy. Table 1 provides information on how the study was implemented in 15 communities across the three study countries. In each of the study sites, a survey questionnaire (see Table A1 for the one used in Mexico) was used to obtain basic information about the respondent such as age, gender, level of formal schooling, religion, sponsorship information, and family characteristics such as the occupation of each parent. In addition to this basic information, the survey questionnaire also included a series of questions designed to elicit each child's expectations for occupation and level of education, as well as a battery of questions intended to measure self-esteem (Rosenberg, 1965) and optimism. The survey was administered to the children individually by enumerators who were university students or recent graduates; these enumerators were not affiliated with the Compassion program.[3] It was made clear to the child that the studies were confidential, independent of Compassion, and no one from Compassion or anyone else would know any of their responses. Most interviews took place in the children's schools and homes, away from any potential influences such as teachers, parents, and Compassion staff.

2.2.1 Kenya

The study in Kenya was carried out in three villages from May to July of 2011. These villages were randomly sampled from a list of all villages within a three-hour journey by car from Nairobi that had a Compassion program that was first implemented between 2002 and 2004. One program started in May of 2003, and two in December of 2003.

The survey sample consisted of three groups: currently sponsored children, the next oldest non-sponsored sibling and the next youngest non-sponsored sibling. No children were surveyed from families in Kenya that did not have sponsored children. Within each of the three villages, 110 children were randomly sampled from the population of currently sponsored children between the ages of 12 and 16, for a total of 330 currently sponsored children. Of these, we successfully surveyed 326

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[3] Since Compassion's implementing church partners often had a large role in the communities of these villages, and we hired enumerators that knew the members of the village well, a couple of the hired enumerators may have had some informal volunteer role in the church, but none had any affiliation with the Compassion program.

(98.8%). Once we located the sponsored child, we then interviewed the next oldest and the next youngest siblings. There were 237 of these siblings between the ages of 10 and 18. In total, the survey was administered to 570 children: 333 that were sponsored, 154 next older non-sponsored siblings and 83 next younger non-sponsored siblings, all with the same mother and father within a household.

2.2.2 Indonesia

Researchers carried out the Indonesia fieldwork in four Compassion project sites in the capital of Jakarta from May to July of 2012. Two of these projects started in February 2003 and two in February 2007. An important difference between the Indonesia data and the Kenya data is that the non-sponsored children in the Indonesia study also include children from non-treated households who were on a Compassion sponsorship waitlist for entry into the program at the time of survey, as well as those children's siblings. The age range of the children in the Indonesia sample is also wider than that of the children in the Kenya sample.

Due to Compassion's age eligibility rule, children on the waitlist were between three and nine years old at the time of survey. Each of the sites provided a list of sponsored children and waitlisted children from which subjects were randomly chosen for the study. Each randomly chosen child from these lists was instructed to bring one sibling with him or her to the research site.[4] In Indonesia, which had an upper limit of two sponsored children per family, data were gathered from 288 sponsored children, 113 non-sponsored siblings of sponsored children, 79 waitlisted children, and 47 children who were siblings of waitlisted children.

2.2.3 Mexico

Our final survey for this study was undertaken in Mexico. The fieldwork in Mexico was carried out in eight villages from June to July of 2017 in the Mexican states of Oaxaca and Chiapas. Four of these villages had a sponsorship program. The villages were randomly selected from a list of all rural project sites in the states of Oaxaca and Chiapas that were reachable given logistical constraints. Three of the sponsored villages were in the state of Chiapas, and one in Oaxaca. One program started in each year between the years of 2011 to 2014. For each of these four villages, a nearby community with similar characteristics but without a Compassion program was chosen. All

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[4] The sibling could be either sponsored or unsponsored, but had to be within the relevant age range; 83.4% of children brought a proximate sibling in birth order. Because of eligibility rules, in 57.7% of cases the sibling was either not a sponsored child or on the waitlist.

non-Compassion communities were outside of the catchment area for the nearby Compassion program.

An important difference between the Mexican data and the data collected in the other two countries is that in addition to surveying households with and without a sponsored child within the community that Compassion operated, we also surveyed children in a neighboring community without any sponsored children. Thus, each village that Compassion operated had a designated "control" community with which we compare sponsored children, their siblings, and non-sponsored households in Compassion communities.[5]

Within the four villages with a sponsorship program we had three different groups of children: sponsored children, the next oldest and youngest non-sponsored siblings of the sponsored children, and children from randomly selected households without any sponsored children. As an additional control group, we surveyed a random sample of households within nearby villages without a Compassion program that had children between the ages of 10 and 18. Our sample in Mexico, where the Compassion program had an upper limit of three sponsored children per family, consists of 335 sponsored children, 148 non-sponsored siblings, 273 children from non-sponsored households in sponsorship communities, and 217 children in nearby communities without a Compassion program.

3. Empirical Strategy

3.1 Establishing Causality

There are three possible sources of bias when comparing the outcomes of sponsored children to those of non-sponsored children. First, it is possible that program placement could be endogenous to community characteristics, each of which may consist of different ethnic groups and/or different Christian denominations as implementing church partners. Second, Compassion states that they aim to choose the neediest households to participate in the program, implying that impacts may be underestimated if one does not account for differences between households within the targeted community. Third, Compassion's attempts to serve the neediest children within its targeted communities may also cause it to serve the neediest children within a given household, also

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[5] Another difference is that the non-sponsored households were a random sample of all non-sponsored households instead of from waitlist households (which were the comparison households for Indonesia), as the waitlists in Mexico were generally very short.

potentially leading to an underestimation of impacts if estimations do not account for differences between the potential outcomes across children within a household.

We address the first two of these potential sources of bias by using ordinary least-squares (OLS) incorporating fixed effects at the community level and then subsequently at the household level. Specifically, we estimate the following two equations:

$$y_{ijv} = \alpha_v + \gamma T_i + \boldsymbol{\beta'X}_{ij} + \pi C_j + \theta S_j + e_{ijv} \qquad (1)$$

$$y_{ijv} = \alpha_j + \gamma T_i + \boldsymbol{\beta'X}_i + e_{ijv} \qquad (1')$$

where y_{ijv} is an outcome for child i in household j living in community v, T_i is a dummy variable for current sponsorship of child i,[6] α_v is a community fixed effect and α_j is a household fixed effect. $\boldsymbol{X}_{ij}$ is a vector of control variables that includes age, gender, birth order, parents' occupation, dwelling quality, and family size, and $\boldsymbol{X}_i$ is a vector of control variables that includes only those that vary among children within households (age, gender and birth order). C_j is a dummy variable indicating a household with a sponsored child (which applies only to Indonesia and Mexico, where both sponsored and non-sponsored households are surveyed), and S_j is a dummy variable indicating whether the household resides in the village with a Compassion sponsorship program (which applies only to Mexico). Within the Mexico sample, the community fixed effect α_v refers to community-pair fixed effects, which allows for the S_j dummy to vary within this fixed effect.

We account for endogenous selection of households thus in two ways. First, when estimating equation (1) we control for observable differences between sponsored households and the three comparison groups of non-sponsored households: (a) waitlist households in the same community in Indonesia, (b) a random sample of non-sponsored households in the same community in Mexico and (c) a random sample of households in a neighboring community with similar characteristics but without the program in Mexico. Second, in (1') we use household fixed-effects estimates, which account for both observed and unobserved heterogeneity in household characteristics. In summary, estimates of (1) using community fixed effects control for unobserved differences between communities and observed differences between households, and estimates of (1') control for unobserved differences between both communities and households.

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[6] To avoid clutter, the j and v subscripts are not shown for T_i, and similar parsimony in subscripts is applied to the X, C and S variables.

Yet, as noted above, there remains the third potential source of bias: endogeneity in the selection of children within a particular household. We account for endogenous selection of children within households by using instrumental variables that predict which siblings are selected by their parents to participate in the program. More specifically, and consistent with Wydick, Glewwe, and Rutledge (2013, 2017), we find that because of Compassion's age-eligibility rule, the age of a child at the time of program roll-out is strongly correlated with sponsorship status, making it a natural instrument for sponsorship. Here our instrumental variables are a vector of dummy variables that indicate a child's age at program rollout.

For these instrumental variable estimations, the first-stage equations are:

$$T_{ijv} = \alpha_v + \boldsymbol{\varphi}'\boldsymbol{X}_{ij} + \boldsymbol{\lambda}'\boldsymbol{Z}_i + \delta C_j + \gamma S_j + u_{ijv} \tag{2}$$

$$T_{ijv} = \alpha_j + \boldsymbol{\varphi}'\boldsymbol{X}_i + \boldsymbol{\lambda}'\boldsymbol{Z}_i + u_{ijv} \tag{2'}$$

where α_v, α_j, T_i, $\boldsymbol{X}_{ij}$, $\boldsymbol{X}_i$, C_j, and S_j are the same as in equations (1) and (1'), and $\boldsymbol{Z}_i$ is a vector of dummy variables that indicate a child's age (in years) when the program rolled out in community j. More specifically, there are separate dummy variables for each year of age for children 9 and younger when the program rolled out, going back to -3 years (i.e., children born 3 years after the program was rolled out), and a dummy variable for children ten years and older when the program was rolled out (all of whom were ineligible for the program).[7]

Figure 1 shows the probability that a child in a sponsored household was sponsored as a function of his or her age at the time the program was introduced in his or her community. It is clear that children from about age 3 to age 9 when the program was introduced in the area were more likely to be sponsored than their siblings, especially those siblings who were 10 years old or older when the program started. Regression estimates of equations (2) and (2') yield the probability of being selected for sponsorship within each household. Table 2 presents results from this first stage estimation of (2') using this vector of dummy variables, as well as household fixed effects, age at time of survey, birth order, and gender, to predict the probability of sponsorship separately for each of our study countries in columns 1-3 and for the pooled sample in column 4. The F-statistic for our excluded instruments,

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[7] Due to differing age ranges of respondents at the time of the surveys, the youngest respondents in the Kenyan survey analysis were age 2 at the time of program rollout and age 3 in Mexico, while in the Indonesian analysis the youngest were 5 years from being born (-5) at time of program rollout. In the Indonesian analysis, -4 and -5 are grouped with -3 since there were very few respondents that fell into the former two categories (7 and 1, respectively).

the vector of age at program rollout dummy variables, ranges from 8.1 to 75.4 for each country in columns 1-3 and is 36.7 for the pooled sample in column 4.

The second-stage equations are:

$$y_{ijv} = \alpha_j + \gamma \hat{T}_i + \boldsymbol{\beta}' \boldsymbol{X}_{ij} + \pi C_j + \theta S_j + e_{ijv} \qquad (3)$$

$$y_{ijv} = \alpha_j + \gamma \hat{T}_i + \boldsymbol{\beta}' \boldsymbol{X}_i + e_{ijv}, \qquad (3')$$

where $\hat{T}_{ij}$ is the instrumented probability of being a sponsored child, and y_{ijv}, α_v, α_j, $\boldsymbol{X}_{ij}$, $\boldsymbol{X}_i$, C_j, and S_j are the same as in equations (1), (1'), (2), and (2'). Assuming that age at program rollout is orthogonal to y_{ijv}, after conditioning on current age, sibling order, gender, and other characteristics, IV estimations remove bias due to intra-household selection among age-eligible children. We use standard errors clustered at the household level for all estimates. We weight each country equally in our pooled estimations; each observation within a country is weighted equally.

3.2 Summary Indexes

Our survey questionnaire provides multiple measures of children's psychological well-being. One potential problem with using each of these measures in separate regressions is that, even if the impact of sponsorship on all of these outcomes of interest were equal to zero, one is still likely to find a "significant" impact if one runs regressions for a large number of outcome variables. We address this problem of multiple inference by utilizing the summary indices proposed by Anderson (2008). Summary index tests are robust to over-testing and provide a statistical test for whether a program has a "general effect." They also have higher statistical power than tests of individual variables. Outcomes within an *a priori* grouping are demeaned and normalized,[8] and then each element is weighted using the elements of the variable's corresponding row from the inverse of the covariance matrix that includes all variables within the relevant family.[9] Weighting each variable by the sum of its corresponding row (or column) entries of the inverse covariance matrix gives variables that contain more unique information a higher weight in the summary index.

We construct three summary indices from the sampled children's responses to psycho-social questions: self-esteem, optimism, and aspirations. The first uses the standard questions from the Rosenberg (1965) Self-Esteem scale, the second uses questions from the General Social Survey, and

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[8] In our analysis, this grouping is done at the village level.
[9] Note that this is an efficient generalized least squares estimator (Anderson 2008).

the aspirations index is generated based on responses to questions on hopes for adult occupation, expectations for adult occupation, and expected educational attainment.

4. Empirical Results

Table 3 presents summary statistics, separately for Kenya, Indonesia, and Mexico. Since the summary indices are demeaned and normalized within communities (or community pairs for Mexico), these values are not exactly equal to zero, but are very close. Some notable differences include the fact that respondents in the Kenya sample are much more likely to hope for and expect a white collar job (0.900 and 0.818, respectively, vs. 0.552 and 0.557 in Indonesia and 0.677 and 0.648 in Mexico), and those in Indonesia are about 3 years younger than those in the other two countries.

Table 4 presents simple *t*-tests (with robust standard errors clustered at the household level). Sponsored children are 0.16σ higher on the optimism index, 4.2 percentage points more likely to hope for a white collar job, expect to achieve 0.42 more years of education and are 0.14σ higher on the aspirations index. Sponsored children are 0.9 years younger on average, had smaller families, have mothers that are less likely to work in a white collar job and fathers that are more likely to work in such jobs.

4.1 Kenya

Table A3 presents results estimating equation (1) for the sample in Kenya using four different specifications (summary statistics for Kenya are shown in Table A2). Panel A controls for community fixed effects, while Panel B adds controls for age at the time of the survey, gender, birth order, dwelling quality, and parent's occupation. Panels C and D mirror Panels A and B except that they use household fixed effects and thus the controls do not include dwelling quality and parent's occupation as those do not vary within households. All standard errors are clustered at the household level.

Our preferred OLS specification, with household fixed effects and demographic controls in Panel D of Table A3, is repeated in Panel A of Table 5. It shows that sponsored children are 0.28σ higher on the self-esteem index and are 5.8 percentage points more likely to hope for – and 7.2 percentage points more likely to expect to obtain – a white collar job.

Table A4 presents four different 2SLS specifications for Kenya including different combinations of community and household fixed effects and control variables. Our preferred specification, which includes household fixed effects and individual controls, is presented in Panel A of Table 6. Sponsorship led to an increase in the self-esteem index of 0.34σ. The impact of sponsorship on optimism is essentially zero, which is consistent with the OLS estimates. Sponsored children are 11.4 percentage points more likely to hope for a white collar job (column 3), and 9.1 percentage points more likely to expect a white collar job (column 4). Sponsored children expect to achieve 0.27 additional years of education (column 5), and sponsorship increased children's aggregate educational and vocational aspirations by 0.37σ (column 6). This provides evidence of enhanced self-esteem and aspirations of sponsored children relative to their non-sponsored siblings in Kenya.

4.2 Indonesia

Our preferred OLS and 2SLS specifications for Indonesia, with household fixed effects and demographic controls, are presented in Panel B of Tables 5 and 6, respectively.[10] The coefficients on sponsorship, which represent the difference between sponsored children and their non-sponsored siblings, are generally small in magnitude and statistically insignificant for the OLS estimates, but consistently positive for the 2SLS. This is not surprising given Compassion's mandate to select the neediest children; to the extent that these disadvantages are not observed in the data, it is likely that OLS estimations would be biased downward. The 2SLS estimates yield sufficient precision to identify a 0.51σ increase in the optimism index in Panel B of Table 6.

We also present results summing the coefficients for sponsored child (γ) and sponsored household (π) in Panels A and B of Table A8 to facilitate comparison of sponsored children to children in waitlisted households. Here, we find that sponsored children are 0.31σ to 0.42σ higher on the optimism index and expect to achieve 0.55 to 0.72 years more of education than respondents in waitlisted households. The coefficients on the sponsored household, which compares non-sponsored siblings to those on the waitlist, is sometimes positive and sometimes negative for the outcomes, but

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[10] The OLS specification with household fixed effects includes only sponsored households since sponsorship does not vary within waitlist households. Summary statistics are given in Tables A5 and A6, and additional OLS and 2SLS specifications are presented in Tables A7 and A8.

only one of these (a positive impact) is statistically significant, and only at the 10 percent level. This suggests that, assuming no spillovers onto waitlisted households, there are little or no spillovers onto non-sponsored siblings within sponsored households.

4.3 Mexico

Results from our preferred OLS and 2SLS specifications, with household fixed effects and demographic controls, are presented in Panel C of Tables 5 and 6, respectively.[11] The OLS specifications indicate that the differences between sponsored children and their siblings are positive, except for expectation to obtain a white collar job, but are statistically indistinguishable from zero. In the 2SLS specifications, the coefficients on sponsorship are statistically insignificant for each of the six outcomes, with three positive (expect white collar job, years of education expected, aspirations index) and three negative (self-esteem index, optimism index, hope for white collar job).

We present results summing the coefficients on sponsored child (γ) and sponsored household (π) with and without sponsored site (θ) in Panels A and B of Table A12 to facilitate comparison to children in non-sponsored households. For our specification with demographic controls (Panel B), we find that sponsored children, when compared with children in control villages, are 0.25σ higher on the optimism index, but we do not find any significant differences between sponsored children and children in non-sponsored households within the same community. The coefficients on sponsored household, which compares non-sponsored siblings to those in non-sponsored households within their community, is positive for all outcomes and statistically significant for the self-esteem index, suggesting that any within-household spillovers are positive. The coefficients on sponsored site, which compares non-sponsored households in Compassion villages with non-sponsored households in control villages, are positive in all specifications but never statistically different from zero, providing no evidence of intra-village spillovers onto non-sponsored households.

4.4 Combined Survey Results

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[11] The OLS specifications with household fixed effects includes only sponsored households since sponsorship does not vary within non-sponsored households. Summary statistics are given in Tables A9 and A10, and additional OLS and 2SLS specifications are presented in Tables A11 and A12.

Our main results come from the estimations which pool the data from all three countries; OLS estimations are in Table 7, and IV estimations are in Table 8. In both tables, Panel A presents results with community-level fixed effects and no demographic controls, Panel B presents results with community-level fixed effects and demographic controls, Panel C shows results with household-level fixed effects and no demographic controls, and Panel D shows our preferred specification, which employs both household-level fixed effects and demographic controls. We discuss these results separately for each of the dependent variables.

Our results for self-esteem (Column 1) show consistently positive point estimates across the eight panels in Tables 7 and 8. The key parameter of interest in Panels A and B is the joint effect of $\gamma + \pi + \theta$, which estimates the effect of sponsorship on sponsored children accounting for the fact that they belong to sponsored households and communities; it is statistically significant in two of the four estimations. These point estimates on self-esteem range from impacts of 0.04σ to 0.17σ. Turning to our preferred specification in Panel D (household-level fixed effects with demographic controls), the child sponsorship intervention has significant impacts on self-esteem, with an impact of 0.11σ for OLS and 0.26σ for IV. For a program that emphasizes the holistic nurture of children and their socio-emotional skills, this result is not surprising and clearly reflects an outcome to which substantial resources are devoted according to the descriptions and goals of the intervention in each Compassion project.

Our results show positive point estimates for impact on children's optimism (Column 2) in each of the eight panels in Tables 7 and 8, and in five of these eight panels estimates are strongly statistically significant, generally at $p < 0.01$. Relative to the results for self-esteem, point estimates are generally lower for optimism in our estimations using household-level fixed effects, but our most preferred estimate in Panel D of Table 8 (IV estimations using household-level fixed effects) is strongly significant and shows a program impact of 0.26σ.

Impacts on hope and expectations for a white-collar job are more modest, ranging from 0.04σ to 0.09σ for "hope to have a white-collar job as an adult"; although they are all positive and statistically significant in five of the eight panels, our most preferred specification in Panel D of Table 8 is not statistically significant. Point estimates for "expect to have a white-collar job as an adult" range from 0.01σ to 0.07σ and are significant in only two of the eight panels, and our most preferred

specification in Panel D of Table 8 is statistically insignificant. Thus we find at most modest evidence that the Compassion program results in higher hopes and expectation among currently sponsored children of a higher-paying white-collar job as an adult.

Estimations in Wydick, Glewwe, and Rutledge (2013) show positive impacts on completed years of schooling (for adults who were sponsored when they were children) that range from 1.03 to 1.46 years. An interesting question is whether aspirations for schooling among currently sponsored children match the impacts found in our earlier study of formerly sponsored adults. Estimates across the eight panels of increased aspirations for schooling range from 0.13 to 0.44 years of added schooling, not as high as the actual impacts measured from adult life outcomes of formerly sponsored children, but statistically significant in two of our eight panels, including our most preferred specification in Panel D of Table 8 which yields an estimate of an added 0.44 years of aspired years of schooling relative to non-sponsored children.

One interpretation of this result is that even a smaller level of aspired education for children may be valuable, in that aspirations for education tend to build on themselves. Aspirations for the highest levels of education tend to occur among those who have achieved high levels of education already. As a result, a simple aspiration as a child to complete secondary school may lead to higher aspirations to attend university, but only subsequently; the university aspiration may not manifest itself until the more modest aspiration of secondary school completion is realized.

Our comprehensive aspirations index in the final columns of Tables 7 and 8 shows positive point estimates in every estimation, and is statistically significant in 7 out of the 8 panels, ranging from 0.10σ to an impact of 0.29σ in our most preferred estimation in Panel D of Table 8. This is not surprising; even though many of our point estimates show relatively modest impacts, *every* point estimate for our psychological impact measures is positive in every panel of Tables 7 and 8. The combination of uniformly positive point estimates with many of our estimates achieving statistical significance leads us to conclude that the Compassion child sponsorship intervention significantly increased positive psychological measures on average across all the participants in our samples from these three countries.

While the results are most statistically significant for Kenya, point estimates across all of our different measures and specifications were generally positive in Indonesia and Mexico, although with

slightly lower point estimates in some cases and generally lower in statistical significance. That the results were strongest in Kenya is not surprising given that Kenya displayed some of the strongest impacts on education and other adult life outcomes among the six countries studied in Wydick, Glewwe, and Rutledge (2013, 2017). This may reflect that in countries where existing conditions are more difficult, and life outcomes are lower in education and employment, international child sponsorship will have larger impacts.

4.5 Robustness

We carried out three robustness checks on our estimations, which are presented in Table 9. The specification used is identical to that in Panel D of Table 8, that is, 2SLS with household fixed effects and controls for age, gender, and birth order. The first check, in Panel A, aggregates our indices using a method devised by Kling, Liebman, and Katz (2007). These are similar to the Anderson indices but instead they weight each characteristic in each index equally. The results are very similar to those in Panel D of Table 8.[12]

In Panel B we check for possible endogenous selection of siblings in Indonesia by restricting the sample in Indonesia to households with one or no siblings. The concern in Indonesia is that the children asked to select a sibling to bring to the session may not have chosen a random sibling; focusing on children with one or no siblings avoids this potential for selection bias. The results are similar to our main specification for the self-esteem index, years of education expected, and the aspirations index. While our optimism index is no longer statistically significant, we now find a significantly positive impact on hope for a white collar job of 8.5 percentage points.

In Panel C, we exclude those non-sponsored children that are older than the oldest sponsored child surveyed and those younger than the youngest sponsored child surveyed within each country. This ensures that the counterfactual non-sponsored children have the same age range as the sponsored children. The results for this subsample are broadly similar to those in our main specification, although more imprecisely estimated due to the reduced sample size.

5. Conclusion

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[12] This applies only to the three indices in columns 1, 2 and 6. The results on occupation hopes, expectations and education expectations in columns 3-5 remain unchanged since those variables are not indices.

This paper seeks to explain the underlying mechanisms for the large and significant impacts on life outcomes found from international child sponsorship (Wydick, Glewwe, and Rutledge, 2013 and 2017). While the program we study, Compassion International, provides many of the traditional interventions to promote child health and education, a strong focus of Compassion's program is on building the self-esteem and aspirations of sponsored children regarding educational and vocational outcomes. We test whether the program has an impact in these areas to investigate the possibility of a causal link between the development of aspirations among the poor and the realization of significant long-term impacts from economic development programs.

Our analysis indicates that Compassion's child sponsorship program has large causal effects yielding higher self-esteem, optimism, overall aspirations, and higher self-expectations for education, along with weaker but still generally positive effects on expectations for employment. The instrumental variable results provide estimates of the impact of the program that avoid the potential for bias due to intra-household selection among age-eligible children. A final result of interest is that we find no evidence for positive or negative spillovers onto non-sponsored siblings or onto children in non-sponsored households within the same community; it is particularly encouraging that there is no evidence that the psycho-social benefits received by sponsored children come at the expense of negative psycho-social impacts on non-sponsored children (e.g. because they feel "left out" of the program).

If a causal link between aspirations and economic outcomes can be established, it would have significant implications for the way in which both researchers and practitioners think about how virtuous cycles of economic development occur among the poor in developing countries. Development economics has long concerned itself with the relief of *external* constraints. Seen from the broader perspective of behavioral and development economics, our study suggests that when evaluating the impacts of programs it is also important to consider the alleviation of *internal* constraints, the psychological factors that can lead to persistent poverty through low self-esteem, low aspirations, and feelings of hopelessness. If these two types of interventions are complements, a combined intervention with children may have a much greater impact than either would on its own. Greater understanding of factors such as enhanced aspirations and self-esteem could lead to more effective international aid programs for children and a clearer understanding of why some programs have stronger impacts than others.

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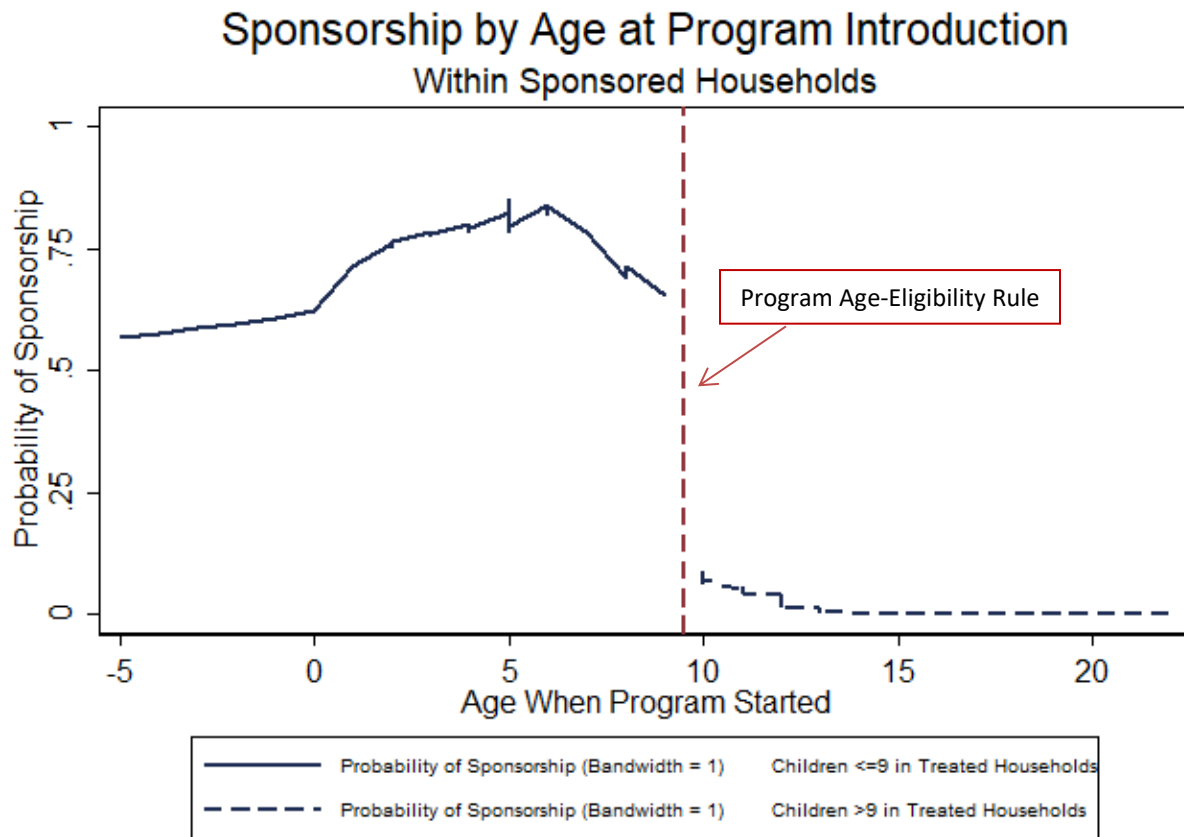
Figure 1. Discontinuity in sponsorship by age at time of program introduction

Note: Presents results from a locally weighted regression of age at program introduction on sponsorship across all three countries for those in treated households separately above and below the age-eligibility cutoff. Children had to be 9 years of age or younger at time of program introduction to be eligible for sponsorship. Sample size is 1,408.

Table 1. Characteristics of Study Communities

County	Treatment Communities (year of program rollout)	Control Communities	Sample Size	Time of Fieldwork
Kenya	Rironi (2003), Isinya (2003), Njoro (2003)	None	570	May-July 2011
Indonesia	Jakarta (two communities in 2003 and two in 2007)	None	526	May-July 2012
Mexico	San Sebastian (2012), Cintalapa (2011), Nuevo San Juan Chamula (2014), Maravilla Tenejapan (2013)	San Mateo Río Hondo, Villamorelos, Nuevo Huixtán, Francisco Madero	926	June-July 2017

Table 2. First Stage Regressions (Dependent Variable = Sponsored Child)

Age at Prog. Intro.	(1) Kenya	(2) Indonesia	(3) Mexico	(4) Pooled
-3		0.159		-0.340*
		(0.288)		(0.202)
-2		0.436		-0.021
		(0.269)		(0.184)
-1		0.194		-0.255
		(0.284)		(0.209)
0		0.660***		0.252
		(0.226)		(0.154)
1		0.610***		0.193
		(0.221)		(0.156)
2	-0.271	0.729***		0.198
	(0.243)	(0.200)		(0.127)
3	0.012	0.818***	0.671*	0.389***
	(0.256)	(0.173)	(0.344)	(0.120)
4	0.652***	0.930***	0.381**	0.718***
	(0.194)	(0.153)	(0.186)	(0.105)
5	0.807***	0.893***	0.385**	0.786***
	(0.144)	(0.151)	(0.151)	(0.090)
6	0.859***	0.922***	0.412***	0.828***
	(0.129)	(0.157)	(0.123)	(0.082)
7	0.360***	0.985***	0.385***	0.514***
	(0.114)	(0.130)	(0.103)	(0.073)
8	0.185*	0.840***	0.503***	0.449***
	(0.097)	(0.122)	(0.087)	(0.061)
9	-0.048	0.387**	0.313***	0.217***
	(0.104)	(0.164)	(0.078)	(0.058)
Households	207	260	236	703
Observations	455	520	531	1506
F-Statistic	75.38	28.43	8.07	36.73

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. This is a linear probability model, with additional controls for household fixed effects, gender, age, and birth order. The excluded group is all children ten years or older at the time of program introduction in community.

Table 3. Summary Statistics by Country

Country	Kenya	Indonesia	Mexico	Pooled
Self Esteem Index	-0.003	-0.001	-0.003	-0.002
	(0.874)	(1.088)	(0.995)	(0.989)
Optimism index	0.000	0.000	-0.002	-0.000
	(0.952)	(1.026)	(0.962)	(0.980)
Hope for White Collar Job	0.900	0.552	0.677	0.715
	(0.300)	(0.498)	(0.468)	(0.451)
Expect White Collar Job	0.818	0.557	0.648	0.675
	(0.387)	(0.497)	(0.478)	(0.468)
Years of Education Expected	15.449	14.992	14.306	14.920
	(1.320)	(2.200)	(2.455)	(2.099)
Aspirations Index	0.000	0.009	-0.010	-0.001
	(0.977)	(0.992)	(0.983)	(0.983)
Age	13.721	10.798	13.343	12.620
	(1.976)	(3.428)	(2.414)	(2.973)
Male	0.544	0.466	0.470	0.493
	(0.499)	(0.499)	(0.499)	(0.500)
Birth Order	3.249	2.225	2.519	2.665
	(2.129)	(1.251)	(1.801)	(1.816)
Family Size	4.788	3.528	3.894	4.071
	(2.221)	(1.326)	(2.024)	(1.968)
Mother has white collar job	0.372	0.880	0.846	0.699
	(0.484)	(0.325)	(0.362)	(0.459)
Father has white collar job	0.237	0.264	0.103	0.201
	(0.426)	(0.441)	(0.304)	(0.401)
Dwelling Index	0.000	0.000	-0.000	-0.000
	(0.999)	(0.983)	(1.000)	(0.994)
Observations	570	526	926	2022

Note: Means with standard deviations in parentheses.

Table 4. Differences between Sponsored and Non-Sponsored Across All Countries

	Mean, All (std. dev.)	Mean, Sponsored (std. dev.)	Mean, Non-Sponsored (std. dev.)	Difference, *t*-test (std. error)
Self Esteem Index	-0.002	0.032	-0.036	0.068
	(0.989)	(0.965)	(1.011)	(0.043)
Optimism index	-0.000	0.080	-0.080	0.160***
	(0.980)	(0.947)	(1.006)	(0.043)
Hope for White Collar Job (%)	0.715	0.736	0.694	0.042**
	(0.451)	(0.441)	(0.461)	(0.021)
Expect White Collar Job (%)	0.675	0.690	0.661	0.029
	(0.468)	(0.463)	(0.474)	(0.022)
Years of Education Expected	14.920	15.130	14.711	0.419***
	(2.099)	(1.892)	(2.268)	(0.089)
Aspirations Index	-0.001	0.068	-0.069	0.136***
	(0.983)	(0.933)	(1.027)	(0.046)
Age	12.620	12.168	13.070	-0.902***
	(2.973)	(2.126)	(3.568)	(0.143)
Male	0.493	0.494	0.492	0.002
	(0.500)	(0.500)	(0.500)	(0.023)
Birth Order	2.665	2.640	2.691	-0.052
	(1.816)	(1.835)	(1.797)	(0.069)
Family Size	4.071	3.950	4.192	-0.241***
	(1.968)	(1.947)	(1.982)	(0.072)
Mother has white collar job	0.710	0.686	0.734	-0.049***
	(0.454)	(0.465)	(0.442)	(0.017)
Father has white collar job	0.189	0.208	0.171	0.037**
	(0.392)	(0.406)	(0.376)	(0.018)
Dwelling Index	-0.000	-0.024	0.023	-0.047
	(0.994)	(1.013)	(0.974)	(0.041)

Note: Full sample = 2,022: 956 sponsored children, 1,066 non-sponsored children. All *t*-tests include robust standard errors clustered at household level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 5. OLS Estimations by Country

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope for White Collar Job	(4) Expect White Collar Job	(5) Years of Education Expected	(6) Aspirations Index
Panel A: Kenya						
Sponsored	0.279***	0.035	0.058**	0.072*	0.112	0.148
	(0.077)	(0.092)	(0.029)	(0.037)	(0.110)	(0.090)
Households	207	207	207	207	207	207
Observations	455	455	455	455	455	455
Panel B: Indonesia						
Sponsored	-0.086	0.055	0.033	-0.057	0.232	0.066
	(0.129)	(0.126)	(0.049)	(0.058)	(0.281)	(0.123)
Households	198	198	198	197	198	196
Observations	395	395	361	386	394	354
Panel C: Mexico						
Sponsored	0.003	0.171	0.045	-0.015	0.136	0.076
	(0.182)	(0.173)	(0.083)	(0.086)	(0.499)	(0.179)
Household	128	128	128	128	128	128
Observations	290	290	288	289	289	290

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Controls for household fixed effects and age, gender and birth order. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education. Sample includes only sponsored households.

Table 6. 2SLS Estimations by Country

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope for White Collar Job	(4) Expect White Collar Job	(5) Years of Education Expected	(6) Aspirations Index
Panel A: Kenya						
Sponsored	0.336***	-0.001	0.114***	0.091*	0.267*	0.368***
	(0.105)	(0.120)	(0.038)	(0.053)	(0.149)	(0.122)
Households	207	207	207	207	207	207
Observations	455	455	455	455	455	455
Panel B: Indonesia						
Sponsored	0.138	0.512***	0.057	0.005	0.529	0.225
	(0.205)	(0.196)	(0.083)	(0.087)	(0.414)	(0.214)
Households	259	259	212	250	258	206
Observations	518	518	424	500	516	412
Panel C: Mexico						
Sponsored	-0.004	-0.280	-0.102	0.052	1.539	0.402
	(0.381)	(0.387)	(0.199)	(0.192)	(1.035)	(0.413)
Households	231	231	229	228	230	231
Observations	519	519	514	513	516	519

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Controls for household fixed effects and age, gender and birth order Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education. *F* statistics of the excluded instruments are 80.1 in Panel A, 17.5 to 28.5 in Panel B and 8.1 to 9.0 in Panel C.

Table 7. Pooled OLS Estimations for All Countries (Kenya, Indonesia and Mexico)

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope White Collar Job	(4) Expect White Collar Job	(5) Education Expected	(6) Aspirations Index
Panel A: Community Fixed Effects, No Demographic Controls						
Sponsored (γ)	0.043	0.087	0.028	0.018	0.224**	0.139**
	(0.055)	(0.056)	(0.024)	(0.027)	(0.102)	(0.058)
Sponsored Household (π)	0.062	0.168**	-0.011	-0.002	0.059	-0.003
	(0.081)	(0.078)	(0.038)	(0.037)	(0.183)	(0.085)
Sponsored Site (θ)	0.007	0.049	0.060	0.048	-0.114	0.016
	(0.088)	(0.085)	(0.042)	(0.044)	(0.212)	(0.091)
$\gamma + \pi$	0.105	0.255***	0.017	0.017	0.283*	0.135*
	(0.067)	(0.066)	(0.034)	(0.033)	(0.162)	(0.073)
$\gamma + \pi + \theta$	0.112	0.304***	0.077*	0.064	0.169	0.152*
	(0.083)	(0.081)	(0.039)	(0.040)	(0.190)	(0.081)
Households	1215	1215	1208	1211	1208	1210
Observations	2010	2010	1953	1994	2000	1952
Panel B: Community Fixed Effects with Demographic Controls						
Sponsored (γ)	0.112**	0.159***	0.020	0.009	0.206*	0.107*
	(0.055)	(0.058)	(0.023)	(0.026)	(0.108)	(0.058)
Sponsored Household (π)	-0.010	0.082	-0.011	0.002	0.098	0.027
	(0.079)	(0.076)	(0.035)	(0.036)	(0.181)	(0.080)
Sponsored Site (θ)	0.072	0.104	0.062	0.047	-0.017	0.034
	(0.086)	(0.083)	(0.041)	(0.042)	(0.212)	(0.089)
$\gamma + \pi$	0.102	0.241***	0.009	0.011	0.304*	0.133*
	(0.065)	(0.064)	(0.031)	(0.031)	(0.159)	(0.068)
$\gamma + \pi + \theta$	0.174**	0.346***	0.071*	0.058	0.287	0.167**
	(0.082)	(0.081)	(0.038)	(0.039)	(0.190)	(0.079)
Households	1054	1054	1049	1051	1049	1049
Observations	1793	1793	1738	1778	1786	1735
Panel C: Household Fixed Effects, No Demographic Controls						
Sponsored	0.068	0.008	0.040	0.023	0.134	0.125*
	(0.058)	(0.063)	(0.026)	(0.030)	(0.112)	(0.066)
Households	533	533	533	532	533	531
Observations	1140	1140	1104	1130	1138	1099
Panel D: Household Fixed Effects with Demographic Controls						
Sponsored	0.108*	0.053	0.036	0.014	0.147	0.102
	(0.061)	(0.066)	(0.025)	(0.029)	(0.123)	(0.068)
Households	533	533	533	532	533	531
Observations	1140	1140	1104	1130	1138	1099

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Demographic controls includes age, gender, and birth order in panels B and D. Panel B additionally controls for family size, dwelling quality, and parent occupation. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education. Sponsored household is only for Indonesia and Mexico. Sponsored site is only for Mexico.

Table 8. Pooled 2SLS Estimations for All Countries (Kenya, Indonesia and Mexico)

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope White Collar Job	(4) Expect White Collar Job	(5) Education Expected	(6) Aspirations Index
Panel A: Community Fixed Effects, No Demographic Controls						
Sponsored (γ)	-0.235**	0.018	0.092*	0.058	0.325	0.387***
	(0.116)	(0.112)	(0.052)	(0.053)	(0.222)	(0.121)
Sponsored Household (π)	0.268**	0.219**	-0.059	-0.031	-0.016	-0.189
	(0.112)	(0.107)	(0.052)	(0.052)	(0.238)	(0.120)
Sponsored site (θ)	0.011	0.050	0.059	0.047	-0.115	0.013
	(0.087)	(0.085)	(0.042)	(0.044)	(0.211)	(0.091)
$\gamma + \pi$	0.034	0.237***	0.033	0.027	0.309	0.198***
	(0.071)	(0.070)	(0.036)	(0.034)	(0.167)	(0.076)
$\gamma + \pi + \theta$	0.044	0.287***	0.092**	0.074*	0.194	0.211**
	(0.085)	(0.084)	(0.041)	(0.042)	(0.196)	(0.084)
Households	1215	1215	1208	1211	1208	1210
Observations	2010	2010	1953	1994	2000	1952
Panel B: Community Fixed Effects with Demographic Controls						
Sponsored (γ)	0.041	0.348***	0.105*	0.068	0.703***	0.466***
	(0.124)	(0.122)	(0.056)	(0.058)	(0.259)	(0.130)
Sponsored Household (π)	0.045	-0.063	-0.076	-0.043	-0.286	-0.249**
	(0.116)	(0.113)	(0.052)	(0.054)	(0.256)	(0.123)
Sponsored site (θ)	0.071	0.106	0.063	0.047	-0.012	0.035
	(0.085)	(0.083)	(0.041)	(0.042)	(0.211)	(0.089)
$\gamma + \pi$	0.086	0.285***	0.029	0.025	0.418**	0.217***
	(0.070)	(0.068)	(0.034)	(0.033)	(0.167)	(0.072)
$\gamma + \pi + \theta$	0.157*	0.391***	0.092**	0.072*	0.406**	0.253***
	(0.085)	(0.084)	(0.041)	(0.041)	(0.198)	(0.084)
Households	1215	1215	1208	1211	1208	1210
Observations	2010	2010	1953	1994	2000	1952
Panel C: Household Fixed Effects, No Demographic Controls						
Sponsored	0.084	0.051	0.078*	0.053	0.281	0.279**
	(0.100)	(0.099)	(0.045)	(0.050)	(0.201)	(0.111)
Households	697	697	648	685	695	644
Observations	1492	1492	1393	1468	1487	1386
Panel D: Household Fixed Effects with Demographic Controls						
Sponsored	0.255**	0.259**	0.077	0.046	0.437*	0.292**
	(0.110)	(0.109)	(0.048)	(0.052)	(0.236)	(0.119)
Households	697	697	648	685	695	644
Observations	1492	1492	1393	1468	1487	1386

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Demographic controls includes age, gender, and birth order in panels B and D. Panel B additionally controls for family size. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education. Excluded instruments for sponsorship in first stage of two stage least squares estimations are dummy variables for age at sponsorship program introduction. F-statistic of the excluded instruments range from the following: panel A: 52.6 to 57.9, panel B: 33.1 to 36.0, panel C: 49.2 to 55.0, panel D: 30.4 to 36.5. Sponsored household is only for Indonesia and Mexico. Sponsored site is only for Mexico.

Table 9. Robustness Checks (pooled results)

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope for White Collar Job	(4) Expect White Collar Job	(5) Years of Education Expected	(6) Aspirations Index
Panel A: Kling, Liebman, and Katz (2007) indices						
Sponsored	0.243**	0.283***	0.077	0.046	0.437*	0.256**
	(0.107)	(0.109)	(0.048)	(0.052)	(0.236)	(0.116)
Households	697	697	648	685	695	696
Observations	1492	1492	1393	1468	1487	1490
Panel B: Restrict Indonesia sample to families with only 1 or 2 children						
Sponsored	0.286***	0.017	0.085**	0.075	0.395*	0.299**
	(0.109)	(0.124)	(0.042)	(0.054)	(0.239)	(0.120)
Households	488	488	480	484	487	482
Observations	1074	1074	1057	1066	1071	1062
Panel C: Drop non-sponsored children without sponsored child age support						
Sponsored	0.181	0.202*	0.060	0.043	0.348	0.237*
	(0.118)	(0.118)	(0.050)	(0.055)	(0.255)	(0.124)
Households	648	648	603	637	647	599
Observations	1381	1381	1290	1359	1378	1283

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Controls for household fixed effects and age, gender and birth order. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education. *F* statistics for the excluded instrument are 30.4 to 36.5 in Panel A, 32.0 to 32.6 in Panel B and 24.8 to 29.1 in Panel C. Panel C drops non-sponsored observations outside of the age range of sponsored children within each country.

APPENDIX

Table A1: Survey Instrument

Household ID:	**Village:**		**Enumerator:**		
Name:			**Compassion Number:**		
Gender:	M		F		
Age:			**Month/year of birth:**		
Year in School or highest class level achieved:					
Is the child attending boarding school?	Yes		No		
Sponsored?	Yes		No		
Does this child have a Sibling that is Sponsored?	No		Yes, and this child is **older than sponsored sibling**	Yes, and this child is **younger than sponsored sibling**	
Birth Order: (1 is oldest)			**Total Number of Children in Family:**		
Religion:	Evangelical/ Protestant		Catholic	Other	None

BELOW IS A LIST OF STATEMENTS DEALING WITH YOUR GENERAL FEELINGS ABOUT YOURSELF. IF YOU **STRONGLY AGREE**, CIRCLE **SA**. IF YOU **AGREE** WITH THE STATEMENT, CIRCLE **A**. IF YOU **DISAGREE**, CIRCLE **D**. IF YOU **STRONGLY DISAGREE**, CIRCLE **SD**.

Self-Esteem:	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**
I feel that I'm a person of worth, on an equal plane with others.	SA	A	D	SD
I am able to do things as well as most other people.	SA	A	D	SD
I feel I do not have much to be proud of.	SA	A	D	SD
On the whole, I am satisfied with myself.	SA	A	D	SD
At times I think I am no good at all.	SA	A	D	SD
Hopefulness about future:				
I feel like the future holds good things for me.	SA	A	D	SD
I feel that when I am older I will have a good job with a good income.	SA	A	D	SD
I feel that my life as an adult will be better for me than it was for my parents.	SA	A	D	SD
that you can have in the future?				

Reference Points: (skip 22&23 if not sponsored)					
What level of education does your mother expect you to achieve?	Primary School (Primaria)	Secondary School (Secundaria)	Technical Studies	High School (Preparatoria)	University (Universidad)
What level of education does your father expect you to achieve?	Primary School (Primaria)	Secondary School (Secundaria)	Technical Studies	High School (Preparatoria)	University (Universidad)
What level of education do your siblings expect you to achieve?	Primary School (Primaria)	Secondary School (Secundaria)	Technical Studies	High School (Preparatoria)	University (Universidad)
What level of education do your peers expect you to achieve?	Primary School (Primaria)	Secondary School (Secundaria)	Technical Studies	High School (Preparatoria)	University (Universidad)
What level of education does the staff at Compassion expect you to achieve?	Primary School (Primaria)	Secondary School (Secundaria)	Technical Studies	High School (Preparatoria)	University (Universidad)
What level of education does your foreign sponsor expect you to achieve?	Primary School (Primaria)	Secondary School (Secundaria)	Technical Studies	High School (Preparatoria)	University (Universidad)
What level of education do you expect that your peers will achieve?	Primary School (Primaria)	Secondary School (Secundaria)	Technical Studies	High School (Preparatoria)	University (Universidad)
What level of education would you say is sufficient in order for one to be successful today?	Primary School (Primaria)	Secondary School (Secundaria)	Technical Studies	High School (Preparatoria)	University (Universidad)
What level of education do you realistically expect that you will achieve?	Primary School (Primaria)	Secondary School (Secundaria)	Technical Studies	High School (Preparatoria)	University (Universidad)
Would you be satisfied with the same occupation as your father or mother?	Yes	No			
What kind of job do you **realistically expect** to have in the future?					
If you run into challenges or bad luck pursuing your first choice occupation, what other occupations would you consider?					
What age is a good age to get married?					
How many children is a good number of children to have?					

The questions below are only if the child is currently sponsored through Compassion				
How old were you when you first became sponsored?				
What grade in school where you when you first became sponsored?				
In what country does your sponsor live?				
What occupation does your sponsor have?				
How many times a year do you receive letters or gifts from your sponsor?				
Household Characteristics: Answer once per household				
Father's highest education level completed				
Mother's highest education level completed				
Father's Occupation				
Mother's Occupation				
Dwelling Roof Material	Plastic, Cardboard or Asbesto	Wood	Iron Sheet	
	Cement	Brick		
Dwelling Floor Material	Dirt	Wood	Cement	Tile
Dwelling Wall Material	Thatched	Mud blocks	Plastering	
	Concrete	Wood	Iron Sheet	
	Part Wood, Part Iron Sheet	Part Stone, Part Wood	Part Stone, Part Iron Sheet	Stone
Electricity in dwelling?	Yes	No		
Toilet in dwelling?	Yes	No		
Sewage in dwelling?	Yes	No		
Car in dwelling ?	Yes	No		
Motrocycle in dwelling?	Yes	No		
Television in dwelling?	Yes	No		
Computer in dwelling?	Yes	No		
Internet in dwelling?	Yes	No		
Fridge in dwelling?	Yes	No		

Table A2. Summary Statistics for Kenya

	Mean, All (std. dev.)	Mean, Sponsored (std. dev.)	Mean, Non-Sponsored (std. dev.)	Difference, *t*-test (std. error)
Self Esteem Index	-0.003	0.093	-0.137	0.230***
	(0.874)	(0.833)	(0.913)	(0.068)
Optimism index	0.000	0.054	-0.076	0.129*
	(0.952)	(0.895)	(1.025)	(0.076)
Hope for White Collar Job (%)	0.900	0.919	0.873	0.046*
	(0.300)	(0.273)	(0.333)	(0.027)
Expect White Collar Job (%)	0.818	0.850	0.772	0.078**
	(0.387)	(0.358)	(0.420)	(0.035)
Years of Education Expected	15.449	15.574	15.274	0.299***
	(1.320)	(0.956)	(1.691)	(0.111)
Aspirations Index	0.000	0.103	-0.145	0.248***
	(0.977)	(0.897)	(1.064)	(0.086)
Age	13.721	13.366	14.219	-0.853***
	(1.976)	(1.204)	(2.635)	(0.161)
Male	0.544	0.547	0.540	0.006
	(0.499)	(0.499)	(0.499)	(0.042)
Birth Order	3.249	3.150	3.388	-0.238**
	(2.129)	(2.180)	(2.051)	(0.105)
Family Size	4.788	4.471	5.232	-0.761***
	(2.221)	(2.247)	(2.110)	(0.103)
Mother's Job	0.404	0.414	0.388	0.026
	(0.491)	(0.493)	(0.488)	(0.025)
Father's Job	0.211	0.216	0.203	0.014
	(0.408)	(0.412)	(0.403)	(0.021)
Dwelling Index	0.000	0.035	-0.049	0.084*
	(0.999)	(1.035)	(0.948)	(0.050)

Note: Full sample = 570: 333 sponsored children, 237 non-sponsored siblings of sponsored children. All *t*-tests include robust standard errors clustered at household level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A3. OLS Estimations for Kenya

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope for White Collar Job	(4) Expect White Collar Job	(5) Years of Education Expected	(6) Aspirations Index
Panel A: Community Fixed Effects, No Demographic Controls						
Sponsored	0.230***	0.130*	0.048*	0.080**	0.322***	0.248***
	(0.068)	(0.077)	(0.027)	(0.035)	(0.109)	(0.087)
Households	322	322	322	322	322	322
Observations	570	570	570	570	570	570
Panel B: Community Fixed Effects with Demographic Controls						
Sponsored	0.272***	0.117	0.044	0.076**	0.191*	0.186**
	(0.073)	(0.081)	(0.027)	(0.034)	(0.098)	(0.083)
Households	322	322	322	322	322	322
Observations	570	570	570	570	570	570
Panel C: Household Fixed Effects, No Demographic Controls						
Sponsored	0.239***	0.004	0.066**	0.082**	0.203*	0.203**
	(0.069)	(0.087)	(0.028)	(0.037)	(0.108)	(0.090)
Households	207	207	207	207	207	207
Observations	455	455	455	455	455	455
Panel D: Household Fixed Effects with Demographic Controls						
Sponsored	0.279***	0.035	0.058**	0.072*	0.112	0.148
	(0.077)	(0.092)	(0.029)	(0.037)	(0.110)	(0.090)
Households	207	207	207	207	207	207
Observations	455	455	455	455	455	455

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Demographic controls includes age, gender, and birth order in panels B and D. Panel B additionally controls for family size and parent's education. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education.

Table A4. 2SLS Estimations for Kenya

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope for White Collar Job	(4) Expect White Collar Job	(5) Years of Education Expected	(6) Aspirations Index
Panel A: Community Fixed Effects, No Demographic Controls						
Sponsored	0.166	-0.001	0.120***	0.129**	0.377**	0.539***
	(0.109)	(0.111)	(0.045)	(0.054)	(0.173)	(0.140)
Households	322	322	322	322	322	322
Observations	570	570	570	570	570	570
Panel B: Community Fixed Effects with Demographic Controls						
Sponsored	0.295***	0.016	0.105**	0.097*	0.313**	0.455***
	(0.109)	(0.116)	(0.043)	(0.053)	(0.156)	(0.131)
Households	322	322	322	322	322	322
Observations	570	570	570	570	570	570
Panel C: Household Fixed Effects, No Demographic Controls						
Sponsored	0.254***	-0.055	0.123***	0.109**	0.405***	0.443***
	(0.091)	(0.106)	(0.040)	(0.052)	(0.155)	(0.127)
Households	207	207	207	207	207	207
Observations	455	455	455	455	455	455
Panel D: Household Fixed Effects with Demographic Controls						
Sponsored	0.336***	-0.001	0.114***	0.091*	0.267*	0.368***
	(0.105)	(0.120)	(0.038)	(0.053)	(0.149)	(0.122)
Households	207	207	207	207	207	207
Observations	455	455	455	455	455	455

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Demographic controls includes age, gender, and birth order in panels B and D. Panel B additionally controls for family size and parent's education. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education. Excluded instruments for sponsorship in first stage of two stage least squares estimations are dummy variables for age at sponsorship program introduction. *F*-statistic for the excluded instruments are the following: panel A: 315.6, panel B: 118.7, panel C: 110.0, panel D: 80.1.

Table A5. Summary Statistics for Indonesia

	Mean, All (std. dev.)	Mean, Sponsored (std. dev.)	Mean, Non-Sponsored (std. dev.)	Difference *t*-test (std. error)
Self Esteem Index	-0.001	0.016	-0.022	0.038
	(1.088)	(1.078)	(1.101)	(0.090)
Optimism index	0.000	0.095	-0.114	0.210**
	(1.026)	(0.992)	(1.056)	(0.089)
Hope for White Collar Job (%)	0.552	0.544	0.561	-0.018
	(0.498)	(0.499)	(0.497)	(0.046)
Expect White Collar Job (%)	0.557	0.521	0.601	-0.080*
	(0.497)	(0.500)	(0.491)	(0.043)
Years of Education Expected	14.992	15.275	14.650	0.625***
	(2.200)	(1.923)	(2.456)	(0.183)
Aspirations Index	0.009	0.055	-0.049	0.105
	(0.992)	(0.990)	(0.993)	(0.090)
Age	10.798	11.045	10.500	0.545*
	(3.428)	(2.547)	(4.244)	(0.303)
Male	0.466	0.458	0.475	-0.016
	(0.499)	(0.499)	(0.500)	(0.043)
Birth Order	2.225	2.184	2.274	-0.090
	(1.251)	(1.290)	(1.202)	(0.113)
Family Size	3.528	3.490	3.574	-0.084
	(1.326)	(1.349)	(1.299)	(0.116)
Mother's Job	0.880	0.885	0.874	0.011
	(0.325)	(0.319)	(0.333)	(0.030)
Father's Job	0.264	0.267	0.261	0.007
	(0.441)	(0.443)	(0.440)	(0.044)
Dwelling Index	0.000	-0.042	0.051	-0.093
	(0.983)	(0.989)	(0.974)	(0.089)

Note: Full sample = 526: 288 sponsored, 79 waitlist, 113 sibling of sponsored, 47 sibling of waitlist. All *t*-tests include robust standard errors clustered at household level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A6. Summary Statistics by Groups in Indonesia

	Sponsored	Non-sponsored, siblings of sponsored kid	Non-sponsored in waitlist household	Total
Self Esteem Index	0.016	0.112	-0.143	-0.001
	(1.078)	(1.164)	(1.031)	(1.088)
Optimism index	0.095	0.076	-0.287	0.000
	(0.992)	(1.086)	(1.001)	(1.026)
Hope for White Collar Job (%)	0.544	0.539	0.582	0.552
	(0.499)	(0.501)	(0.496)	(0.498)
Expect White Collar Job (%)	0.521	0.624	0.581	0.557
	(0.500)	(0.487)	(0.495)	(0.497)
Years of Education Expected	15.275	14.857	14.464	14.992
	(1.923)	(2.258)	(2.617)	(2.200)
Aspirations Index	0.055	0.006	-0.100	0.009
	(0.990)	(0.863)	(1.099)	(0.992)
Age	11.045	11.973	9.168	10.798
	(2.547)	(4.925)	(2.959)	(3.428)
Male	0.458	0.460	0.488	0.466
	(0.499)	(0.501)	(0.502)	(0.499)
Birth Order	2.184	2.283	2.266	2.225
	(1.290)	(1.271)	(1.141)	(1.251)
Family Size	3.490	3.655	3.500	3.528
	(1.349)	(1.406)	(1.193)	(1.326)
Mother's Job	0.885	0.876	0.872	0.880
	(0.319)	(0.331)	(0.335)	(0.325)
Father's Job	0.267	0.195	0.320	0.264
	(0.443)	(0.398)	(0.468)	(0.441)
Dwelling Index	-0.042	-0.001	0.099	0.000
	(0.989)	(1.009)	(0.942)	(0.983)
Observations	288	113	125	526

Note: Means with standard deviations in parentheses.

Table A7. OLS Estimations for Indonesia Survey

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope for White Collar Job	(4) Expect White Collar Job	(5) Years of Education Expected	(6) Aspirations Index
Panel A: Community Fixed Effects, No Demographic Controls						
Sponsored (γ)	-0.098	0.020	0.014	-0.079	0.326	0.048
	(0.119)	(0.115)	(0.056)	(0.056)	(0.229)	(0.105)
Sponsored Household (π)	0.257*	0.364***	-0.038	0.032	0.430	0.106
	(0.141)	(0.134)	(0.071)	(0.064)	(0.303)	(0.138)
γ + π	0.159	0.385***	-0.024	-0.047	0.756***	0.154
	(0.108)	(0.105)	(0.060)	(0.053)	(0.239)	(0.122)
Households	266	266	263	265	266	261
Observations	525	525	475	515	524	467
Panel B: Community Fixed Effects with Demographic Controls						
Sponsored (γ)	-0.053	0.109	-0.001	-0.084*	0.389	0.038
	(0.116)	(0.114)	(0.043)	(0.051)	(0.241)	(0.097)
Sponsored Household (π)	0.129	0.143	-0.055	0.001	0.151	0.011
	(0.133)	(0.132)	(0.056)	(0.060)	(0.317)	(0.123)
γ + π	0.076	0.252**	-0.056	-0.083*	0.540**	0.050
	(0.106)	(0.104)	(0.049)	(0.047)	(0.236)	(0.104)
Households	266	266	263	265	266	261
Observations	525	525	475	515	524	467
Panel C: Household Fixed Effects, No Demographic Controls						
Sponsored	-0.107	0.037	0.065	-0.047	0.250	0.142
	(0.131)	(0.126)	(0.066)	(0.066)	(0.272)	(0.136)
Households	198	198	198	197	198	196
Observations	395	395	361	386	394	354
Panel D: Household Fixed Effects with Demographic Controls						
Sponsored	-0.086	0.055	0.033	-0.057	0.232	0.066
	(0.129)	(0.126)	(0.049)	(0.058)	(0.281)	(0.123)
Households	198	198	198	197	198	196
Observations	395	395	361	386	394	354

*Note: *** p<0.01, ** p<0.05, * p<0.1, Robust standard errors clustered at the household level in parentheses. Demographic controls includes age, gender, and birth order in panels B and D. Panel B additionally controls for family size. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education.*

Table A8. 2SLS Estimations for Indonesia Survey

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope for White Collar Job	(4) Expect White Collar Job	(5) Years of Education Expected	(6) Aspirations Index
Panel A: Community Fixed Effects, No Demographic Controls						
Sponsored (γ)	-0.266	0.127	0.050	-0.082	0.211	0.180
	(0.223)	(0.211)	(0.104)	(0.098)	(0.367)	(0.211)
Sponsored Household (π)	0.378*	0.288	-0.064	0.034	0.513	0.011
	(0.203)	(0.183)	(0.095)	(0.087)	(0.364)	(0.198)
γ + π	0.111	0.415***	-0.014	-0.048	0.724***	0.191
	(0.115)	(0.117)	(0.065)	(0.056)	(0.251)	(0.127)
Households	266	266	263	265	266	261
Observations	525	525	475	515	524	467
Panel B: Community Fixed Effects with Demographic Controls						
Sponsored (γ)	-0.122	0.360*	0.043	-0.078	0.446	0.206
	(0.217)	(0.205)	(0.090)	(0.092)	(0.380)	(0.193)
Sponsored Household (π)	0.180	-0.046	-0.088	-0.004	0.108	-0.113
	(0.199)	(0.181)	(0.081)	(0.083)	(0.381)	(0.183)
γ + π	0.058	0.314***	-0.044	-0.082	0.554**	0.093
	(0.109)	(0.112)	(0.052)	(0.050)	(0.246)	(0.106)
Households	266	266	263	265	266	261
Observations	525	525	475	515	524	467
Panel C: Household Fixed Effects, No Demographic Controls						
Sponsored	0.043	0.407**	0.144	0.033	0.498	0.363
	(0.212)	(0.201)	(0.104)	(0.097)	(0.396)	(0.233)
Households	259	259	212	250	258	206
Observations	518	518	424	500	516	412
Panel D: Household Fixed Effects with Demographic Controls						
Sponsored	0.138	0.512***	0.057	0.005	0.529	0.225
	(0.205)	(0.196)	(0.083)	(0.087)	(0.414)	(0.214)
Households	259	259	212	250	258	206
Observations	518	518	424	500	516	412

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Demographic controls includes age, gender, and birth order in panels B and D. Panel B additionally controls for family size. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education. Excluded instruments for sponsorship in first stage of two stage least squares estimations are dummy variables for age at sponsorship program introduction. *F*-statistic for the excluded instruments range from the following: panel A: 19.2 to 25.4, panel B: 16.7 to 20.7, panel C: 26.5 to 44.9, panel D: 17.5 to 28.5.

	Mean, All (std. dev.)	Mean, Sponsored (std. dev.)	Mean, Non-Sponsored (std. dev.)	Difference, *t*-test (std. error)
Self Esteem Index	-0.003	-0.042	0.020	-0.062
	(0.995)	(0.982)	(1.003)	(0.065)
Optimism index	-0.002	0.100	-0.059	0.159**
	(0.962)	(0.965)	(0.957)	(0.066)
Hope for White Collar Job (%)	0.677	0.707	0.660	0.047
	(0.468)	(0.456)	(0.474)	(0.032)
Expect White Collar Job (%)	0.648	0.681	0.629	0.052
	(0.478)	(0.467)	(0.483)	(0.034)
Years of Education Expected	14.306	14.179	14.378	-0.200
	(2.455)	(2.558)	(2.393)	(0.173)
Aspirations Index	-0.010	0.027	-0.030	0.057
	(0.983)	(0.909)	(1.023)	(0.065)
Age	13.343	11.931	14.146	-2.215***
	(2.414)	(1.500)	(2.467)	(0.122)
Male	0.470	0.463	0.474	-0.011
	(0.499)	(0.499)	(0.500)	(0.034)
Birth Order	2.519	2.503	2.528	-0.025
	(1.801)	(1.723)	(1.845)	(0.137)
Family Size	3.894	3.805	3.945	-0.139
	(2.024)	(1.999)	(2.039)	(0.150)
Mother's Job	0.847	0.821	0.861	-0.040
	(0.361)	(0.384)	(0.346)	(0.028)
Father's Job	0.093	0.104	0.086	0.018
	(0.290)	(0.306)	(0.281)	(0.023)
Dwelling Index	-0.000	-0.098	0.055	-0.153**
	(1.000)	(0.973)	(1.011)	(0.073)

Note: Full sample = 926: 334 sponsored children, 102 non-sponsored siblings of sponsored children, 490 non-sponsored children in non-sponsored households household All *t*-tests include robust standard errors clustered at household level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A10. Summary Statistics by Groups for Mexico

	Site with sponsorship			Site without sponsorship	
	Sponsored	Non-sponsored, siblings of sponsored kid	Non-sponsored in non-sponsored HH	Non-sponsored in non-sponsored HH	Total
Self Esteem Index	-0.041	0.196	0.011	-0.053	-0.003
	(0.983)	(1.001)	(1.028)	(0.966)	(0.995)
Optimism index	0.103	-0.002	-0.012	-0.148	-0.002
	(0.964)	(0.893)	(0.975)	(0.961)	(0.962)
Hope for White Collar Job (%)	0.709	0.714	0.664	0.628	0.677
	(0.455)	(0.454)	(0.473)	(0.484)	(0.468)
Expect White Collar Job (%)	0.683	0.673	0.629	0.606	0.648
	(0.466)	(0.471)	(0.484)	(0.490)	(0.478)
Years of Education Expected	14.185	14.354	14.458	14.280	14.306
	(2.559)	(2.451)	(2.418)	(2.343)	(2.455)
Aspirations Index	0.031	0.059	-0.035	-0.071	-0.010
	(0.907)	(1.006)	(1.060)	(0.987)	(0.983)
Age	11.928	15.333	13.941	13.839	13.343
	(1.501)	(1.916)	(2.489)	(2.510)	(2.414)
Male	0.464	0.500	0.473	0.461	0.470
	(0.499)	(0.502)	(0.500)	(0.500)	(0.499)
Birth Order	2.502	2.141	2.663	2.540	2.519
	(1.726)	(1.485)	(1.931)	(1.864)	(1.801)
Family Size	3.796	4.525	3.880	3.764	3.894
	(1.994)	(2.096)	(2.083)	(1.918)	(2.024)
Mother's Job	0.820	0.853	0.861	0.866	0.847
	(0.384)	(0.356)	(0.347)	(0.341)	(0.361)
Father's Job	0.105	0.059	0.103	0.078	0.093
	(0.307)	(0.236)	(0.304)	(0.269)	(0.290)
Dwelling Index	-0.096	-0.339	0.064	0.226	-0.000
	(0.974)	(1.097)	(0.957)	(0.990)	(1.000)
Observations	334	102	273	217	926

Note: Means with standard deviations in parentheses

Table A11. OLS Estimations for Mexico Survey

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope White Collar Job	(4) Expect White Collar Job	(5) Education Expected	(6) Aspirations Index
Panel A: Community Pair Fixed Effects, No Demographic Controls						
Sponsored (γ)	-0.238**	0.102	-0.012	0.004	-0.197	-0.032
	(0.102)	(0.104)	(0.048)	(0.053)	(0.264)	(0.106)
Sponsored Household (π)	0.184	0.005	0.053	0.046	-0.069	0.090
	(0.118)	(0.112)	(0.054)	(0.056)	(0.299)	(0.125)
Sponsored Site (θ)	0.065	0.142	0.039	0.025	0.165	0.040
	(0.092)	(0.088)	(0.044)	(0.046)	(0.233)	(0.099)
γ + π	-0.054	0.108	0.041	0.050	-0.267	0.057
	(0.083)	(0.081)	(0.038)	(0.041)	(0.223)	(0.089)
γ + π+ θ	0.010	0.249***	0.080**	0.075*	-0.102	0.097
	(0.086)	(0.085)	(0.040)	(0.042)	(0.202)	(0.082)
Households	627	627	623	624	620	627
Observations	915	915	908	909	906	915
Panel B: Community Pair Fixed Effects with Demographic Controls						
Sponsored (γ)	0.014	0.279**	-0.042	-0.054	-0.461	-0.189
	(0.118)	(0.113)	(0.055)	(0.059)	(0.290)	(0.117)
Sponsored Household (π)	0.074	-0.081	0.071	0.091	0.272	0.232*
	(0.124)	(0.112)	(0.057)	(0.059)	(0.303)	(0.130)
Sponsored Site (θ)	0.071	0.139	0.047	0.028	0.188	0.056
	(0.088)	(0.087)	(0.042)	(0.045)	(0.235)	(0.097)
γ + π	0.089	0.197**	0.028	0.038	-0.188	0.043
	(0.087)	(0.085)	(0.040)	(0.042)	(0.228)	(0.091)
γ + π+ θ	0.160	0.337***	0.075*	0.066	-0.001	0.099
	(0.091)	(0.090)	(0.041)	(0.043)	(0.210)	(0.083)
Households	627	627	623	624	620	627
Observations	915	915	908	909	906	915
Panel C: Household Fixed Effects, No Demographic Controls						
Sponsored	-0.184	-0.032	-0.095	-0.052	-0.349	-0.175
	(0.113)	(0.117)	(0.059)	(0.069)	(0.315)	(0.117)
Households	128	128	128	128	128	128
Observations	290	290	288	289	289	290
Panel D: Household Fixed Effects with Demographic Controls						
Sponsored	0.003	0.171	0.045	-0.015	0.136	0.076
	(0.182)	(0.173)	(0.083)	(0.086)	(0.499)	(0.179)
Households	128	128	128	128	128	128
Observations	288	288	286	287	287	288

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Demographic controls includes age, gender, and birth order in panels B and D. Panel B additionally controls for family size and parent´s education. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education.

Table A12. 2SLS Estimations for Mexico Survey

	(1) Self Esteem Index	(2) Optimism Index	(3) Hope White Collar Job	(4) Expect White Collar Job	(5) Education Expected	(6) Aspirations Index
Panel A: Community Pair Fixed Effects, No Demographic Controls						
Sponsored (γ)	-1.090***	-0.459**	0.035	0.077	-0.565	0.049
	(0.245)	(0.223)	(0.104)	(0.107)	(0.536)	(0.232)
Sponsored Household (π)	0.842***	0.439**	0.017	-0.011	0.215	0.026
	(0.207)	(0.191)	(0.089)	(0.091)	(0.460)	(0.200)
Sponsored Site (θ)	0.061	0.139	0.039	0.025	0.163	0.040
	(0.091)	(0.088)	(0.043)	(0.046)	(0.232)	(0.098)
$\gamma + \pi$	-0.248**	-0.020	0.052	0.066	-0.350	0.076
	(0.099)	(0.092)	(0.043)	(0.046)	(0.251)	(0.102)
$\gamma + \pi + \theta$	-0.187*	0.120	0.091**	0.092*	-0.187	0.116
	(0.098)	(0.096)	(0.046)	(0.047)	(0.228)	(0.095)
Households	627	627	623	624	620	627
Observations	915	915	908	909	906	915
Panel B: Community Pair Fixed Effects with Demographic Controls						
Sponsored (γ)	-0.608	-0.032	-0.061	-0.042	-1.597*	-0.462
	(0.374)	(0.368)	(0.182)	(0.183)	(0.937)	(0.376)
Sponsored Household (π)	0.530*	0.146	0.084	0.082	1.107	0.432
	(0.281)	(0.283)	(0.139)	(0.139)	(0.710)	(0.291)
Sponsored Site (θ)	0.071	0.139	0.047	0.028	0.186	0.056
	(0.089)	(0.086)	(0.042)	(0.045)	(0.232)	(0.096)
$\gamma + \pi$	-0.078	0.115	0.023	0.041	-0.490	-0.030
	(0.134)	(0.124)	(0.061)	(0.063)	(0.336)	(0.132)
$\gamma + \pi + \theta$	-0.007	0.254**	0.070	0.069	-0.304	0.026
	(0.131)	(0.126)	(0.060)	(0.060)	(0.297)	(0.121)
Households	627	627	623	624	620	627
Observations	915	915	908	909	906	915
Panel C: Household Fixed Effects, No Demographic Controls						
Sponsored	-0.349*	-0.389*	-0.150	-0.016	-0.223	-0.135
	(0.208)	(0.203)	(0.099)	(0.105)	(0.480)	(0.197)
Households	231	231	229	228	230	231
Observations	519	519	514	513	516	519
Panel D: Household Fixed Effects with Demographic Controls						
Sponsored	-0.004	-0.280	-0.102	0.052	1.539	0.402
	(0.381)	(0.387)	(0.199)	(0.192)	(1.035)	(0.413)
Households	231	231	229	228	230	231
Observations	519	519	514	513	516	519

*Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$, Robust standard errors clustered at the household level in parentheses. Demographic controls includes age, gender, and birth order in panels B and D. Panel B additionally controls for family size and parent´s education. Summary indices in columns 1, 2, and 6 are measured in standard deviations. Columns 3 and 4 are measured in percentage points, and column 5 is in years of education. Excluded instruments for sponsorship in first stage of two stage least squares estimations are dummy variables for age at sponsorship program introduction. F-statistic for the excluded instruments range from the following: panel A: 25.0 to 25.5, panel B: 13.5 to 13.8, panel C: 20.4 to 21.1, panel D: 8.1 to 9.0.*